

Noise and Vibration

Table 6-1 presents the cumulative increase in future traffic noise levels at intersections (i.e., 2016 “No Project “conditions plus proposed project traffic). The maximum cumulative roadway noise increase would be 2.6 dBA CNEL and would occur along Santa Fe Avenue between Firestone Boulevard and Ardmore Avenue. The 2.6 dBA CNEL noise level increase would be less than the 3 dBA threshold increment for a perceptible change in noise level. Cumulative noise would result in a less-than-significant impact.

| TABLE 6-1: CUMULATIVE COMMUNITY NOISE EQUIVALENT LEVEL –/a/ | | | |
|--|----------------------------|----------------|--------------------------|
| Roadway Segment | Estimated dBA, CNEL | | |
| | Existing | Project | Cumulative Impact |
| Alameda Street between 92 nd Street and 88 th Street | 70.4 | 71.0 | 0.6 |
| Santa Fe Avenue between Southern Avenue and Firestone Boulevard | 62.1 | 63.0 | 0.9 |
| Santa Fe Avenue between Firestone Boulevard and Ardmore Avenue | 63.5 | 66.1 | 2.6 |
| Long Beach Boulevard between Southern Avenue and Firestone Boulevard | 68.4 | 69.2 | 0.8 |
| Long Beach Boulevard between Firestone Boulevard and Ardmore Avenue | 68.1 | 68.7 | 0.6 |
| Southern Avenue between Alameda Street and Santa Fe Avenue | 62.2 | 63.1 | 0.9 |
| Southern Avenue between Santa Fe Avenue and Stanford Avenue | 62.3 | 62.8 | 0.5 |
| Firestone Boulevard between Fir Avenue and Ivy Street | 68.8 | 69.7 | 0.9 |
| Firestone Boulevard between Alameda Street and Santa Fe Avenue | 68.5 | 69.5 | 1.0 |
| Firestone Boulevard between State Street and Elizabeth Avenue | 69.5 | 70.4 | 0.9 |

/a/ The predicted CNEL were calculated as peak hour L_{eq} and converted into CNEL using the California Department of Transportation *Technical Noise Supplement* (October 1998). The conversion involved making a correction for peak hour traffic volumes as a percentage of average daily traffic and a nighttime penalty correction.
SOURCE: TAHA, 2009.

The predominant vibration source near the project site is heavy trucks traveling on the local roadways. Neither the proposed project nor related projects would substantially increase heavy-duty vehicle traffic near the project site and would not cause a substantial increase in heavy-duty trucks on local roadways. The proposed project would not add to a cumulative vibration impact.

Population, Housing, and Employment

There are no related projects of significant size in the vicinity of the project site that would result in addition of housing units or employment that could result in increased population in the project area or displacement of housing units or employment. Therefore, the proposed project would not contribute cumulatively to population, housing, housing or population growth or displacement.

Public Services

As detailed in Section 4.9 Public Services, the proposed project would place greater demand on public services. When the proposed project is considered cumulatively with the related projects, additional personnel and equipment could become necessary for fire and police services in order to maintain adequate service levels. However, it would remain unlikely that new police or fire facilities would be required. Less-than-significant cumulative impacts are anticipated.