Appendix E1

Traffic Count Methodology

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Traffic counts form the foundation of the CEQA baseline conditions analysis for intersection and freeway analysis. Intersection counts are collected for peak periods in the field and tabulated in 15-minute intervals as summarized in tables presented in the appendix. Peak hour freeway counts were obtained from the Caltrans Traffic Census Program which publishes average daily traffic volumes for the state highway system on an annual basis.

Since the traffic analysis commences after the issuance of the Notice of Intent (NOI)/Notice of Preparation (NOP), the traffic counts used to establish baseline conditions are generally composed of counts taken after the issuance of the NOI/NOP.

For this analysis, some intersection traffic counts were available from the baseline period, while other analysis sites had to be counted once the traffic analysis began. In order to ensure more accurate and reliable existing baseline data for use in this impacts analysis LAHD exercised discretion to adjust counts taken during different time periods for seasonal and annual variation in port operations using port TEU throughput statistics and comparing two study locations that were counted inside and outside of the baseline period (study intersections #13 and #14) to develop factors for auto and truck volumes to adjust the counts taken outside of the baseline period. Port area traffic analyses and the Port's Quicktrip/Trainbuilder model use the average weekday of the peak month of port operations in a given year for the basis of existing and forecasted traffic volumes. Therefore, this methodology ensured a representative, conservative level of background traffic would be used for the traffic analysis of potential significant impacts of the proposed project.

The first five study intersection traffic counts (#1-5) were taken from previous port traffic analyses (from November 2013) and the resulting LOS values were used to reflect baseline conditions. Intersection #13 and #14 were counted in 2013 and 2015, and these were used to adjust the traffic counts for the other study locations for which data was collected outside of the baseline period or during low port operation periods.

Four of the locations (# 9-12) were under construction or closed at the time of preparation, therefore traffic counts from March 2012 were used and adjusted with the same factors as the 2015 counts. The remaining nine study locations (6-8 and 13-18) were counted in 2015, and were adjusted to reflect 2013 conditions.

The adjustment for seasonal and annual variability was derived from comparing two study locations that were counted in both November 2013 and February 2015: Navy Way at Seaside Boulevard and Ferry Street at Terminal Way. The February 2015 truck volumes were approximately 30 percent lower than the November 2013 truck volumes. This directly correlated to a 30 percent lower TEU throughput in February 2015 as compared to the port peak month of July (which was similar to November conditions) in

2013 as shown in the table below. As noted above, February is historically a low throughput month, and this is primarily because shipments from China drop due to the Chinese New Year vacation for shippers from Asia and not reflective of peak month levels of service which are used to develop a conservative traffic analysis.

Year	Month	Total TEUs	TEUs/Day
2013	November	683,849	22,795
2015	July (peak month)	715,640	23,085
2015	February	502,662	17,952
Percent difference from July 2013 to February 2015			29%

In addition, the February 2015 traffic counts had ten percent higher automobile trips as compared to the November 2013 counts. Therefore, the 2015 traffic counts were adjusted to increase truck volumes by 30 percent and decrease auto volumes by ten percent to align with the conditions observed in 2013. The same factor was applied to the 2012 counts for the four intersections that were under construction or closed during the time of preparation.

Because the allowable impact increment is smaller as the LOS worsens (under the LADOT significance thresholds used in this analysis), adjusting the 2015 and 2012 counts upwards to account for seasonal and annual variation has the effect of lowering the allowable impact increment before significance is determined, and is considered a conservative approach from an impact standpoint.

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