Appendix K
Alternatives Transportation Impact Analysis
Hexagon compared the two alternatives with the 300 Airport proposed project. Table 1 shows the project trip generation estimates for the different alternatives based on trip rates published by the Institute of Transportation Engineers (ITE) in *Trip Generation*, Eighth Edition. Trip reductions were applied to both build alternatives to reflect a potential travel demand management (TDM) program that would be similar to the proposed project. Also, similar trip reductions were taken for internal trips for the amenities center, retail, and restaurant uses.

Based on the ITE rates for each proposed land use, the Existing Zoning Alternative would generate 590 trips during the AM peak hour and 573 trips during the PM peak hour, which are both lower compared to the proposed project. The Office/Hotel Alternative would generate 665 trips during the AM peak hour and 667 trips during the PM peak hour, which are also lower than the proposed project.

Assuming that the project trips for the two build alternatives will following the same trip distribution patterns as the 300 Airport Boulevard project, traffic conditions at the study intersections were evaluated under both alternatives based on a qualitative analysis compared to the project level LOS results.

**Existing Plus Project Volumes and Intersection Levels of Service**

Since both build alternatives would generate fewer trips compared to project, most of the study intersections would continue to operate at LOS D or better during both peak hours. The unsignalized intersection of Amphlett Boulevard/Poplar Avenue has operational problems under existing conditions. Either alternative would add traffic to this intersection.

**Existing Plus Project Freeway Ramp Analysis**

With the addition of traffic generated by either build alternative, the freeway ramps would continue to operate at acceptable levels.

**Existing Plus Project Freeway Segment Analysis**

By factoring down the results from the 300 Airport Boulevard project based on the project trip generation, the Existing Zoning Alternative would have a significant impact on three freeway segments, as follows:

- US 101, northbound, between Peninsula Avenue and SR 92 – AM peak hour
- US 101, southbound between Whipple Avenue and the Santa Clara County line – PM peak hour
- SR 92, eastbound between I-280 and US 101 – AM & PM peak hour
The Office/Hotel Alternative would result in impacts to four freeway segments, as follows:

- US 101, southbound between Millbrae Avenue and Broadway – AM peak hour
- US 101, northbound, between Peninsula Avenue and SR 92 – AM peak hour
- US 101, southbound between Whipple Avenue and the Santa Clara County line – PM peak hour
- SR 92, eastbound between I-280 and US 101 – AM & PM peak hour

**Conclusions**

Under either the Existing Zoning Alternative or the Office/Hotel Alternative, the unsignalized intersection of Amphlett Boulevard/Poplar Avenue would continue to operate at LOS F during both AM and PM peak hours. Either alternative would add traffic to the intersection. The City of San Mateo does not have level of service standards or an impact threshold for unsignalized intersections. Therefore, the addition of traffic is not considered a significant impact under CEQA. However, just like the project, the two alternatives would add traffic to an intersection that has operational problems under existing conditions.

With the addition of traffic generated by either build alternative, the freeway ramps would continue to operate at acceptable levels.

The Existing Zoning Alternative would add trips equal to one percent or more of the freeway's capacity to three study segments currently operating at an unacceptable level of service during at least one peak hour.

The Office/Hotel Alternative would add trips equal to one percent or more of the freeway’s capacity to four study segments currently operating at an unacceptable level of service during at least one peak hour.
### Table 1

#### Project Trip Generation Estimates for Different Alternatives

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Size</th>
<th>Daily Rate</th>
<th>Daily Trips</th>
<th>AM Peak Hour</th>
<th>Total Trips</th>
<th>PM Peak Hour</th>
<th>Total Trips</th>
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<tbody>
<tr>
<td></td>
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<td></td>
<td>AM Peak Hour</td>
<td>Total Trips</td>
<td>PM Peak Hour</td>
<td>Total Trips</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>In</td>
<td>Out</td>
<td>In</td>
<td>Out</td>
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<tr>
<td><strong>Office/Hotel Alternative</strong></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Office</td>
<td>428 ksf</td>
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<td>4,089</td>
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<td>529</td>
<td>72</td>
<td>601</td>
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<td>Day Care</td>
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<td>702</td>
<td>12.26</td>
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<td>51</td>
<td>109</td>
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<td>Health Club</td>
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<td>32.93</td>
<td>929</td>
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<td>21</td>
<td>39</td>
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<td>Retail</td>
<td>7 ksf</td>
<td>42.94</td>
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<td>5</td>
<td>3</td>
<td>7</td>
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<td>Restaurant</td>
<td>11 ksf</td>
<td>127.15</td>
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<td>11.52</td>
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<tr>
<td>Hotel</td>
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<td>0.56</td>
<td>146</td>
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<td>238</td>
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<td><strong>Total</strong></td>
<td></td>
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<td>5,476</td>
<td>533</td>
<td>131</td>
<td>665</td>
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