## APPENDIX D
Level of Service Definitions and Figure

<table>
<thead>
<tr>
<th>Level of Service</th>
<th>CLV Summation</th>
<th>Description of Traffic</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1,000 or less</td>
<td>Represents free flow. Individual users are virtually unaffected by the presence of others in the traffic stream. Freedom to select desired speeds and to maneuver within the traffic stream is extremely high. Average signal delay at intersections is less than five seconds.</td>
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<tr>
<td>B</td>
<td>1,001 to 1,150</td>
<td>Is in the range of stable flow, but the presence of other users in the traffic stream begins to be noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver from LOS A. Average signal delay at intersections is less than 15 seconds.</td>
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<tr>
<td>C</td>
<td>1,151 to 1,300</td>
<td>Is in the range of stable flow, but marks the beginning of the range of flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream. The selection of speed is now affected by the presence of others, and maneuvering within the traffic stream requires substantial vigilance on the part of the user. Average signal delay at intersections is less than 25 seconds.</td>
</tr>
<tr>
<td>D</td>
<td>1,301 to 1,450</td>
<td>Represents high density, but stable flow. Speed and freedom to maneuver are severely restricted. Small increases in traffic volume will generally cause operational problems at this level. Average signal delay at intersections is less than 40 seconds.</td>
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<tr>
<td>E</td>
<td>1,451 to 1,600</td>
<td>Represents operating conditions at or near the capacity level. All speeds are reduced to a low, but relatively uniform value. Freedom to maneuver within the traffic stream is extremely difficult, and it is accomplished by forcing a vehicle or pedestrian to “give way” to accommodate such maneuvers. Operations at this level are usually unstable, because small increases in flow or minor perturbations within the traffic stream will cause breakdowns. Average signal delay at intersections is less than 60 seconds.</td>
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<tr>
<td>F</td>
<td>1,601 or more</td>
<td>Is used to define forced or breakdown flow. Queues form; operations within the queue are characterized by stop-and-go waves, and they are extremely unstable. Average signal delay at intersections exceeds 60 seconds.</td>
</tr>
</tbody>
</table>
**Level-of-Service A**
- Free traffic flow
- High level of maneuverability
- Average delay at intersections less than five seconds

**Level-of-Service B**
- Stable traffic flow
- Maneuverability affected by other users within traffic stream
- Average delay at intersections less than 25 seconds

**Level-of-Service C**
- Stable traffic flow
- Maneuverability affected by other users in traffic stream
- Average delay at intersections less than 25 seconds

**Level-of-Service D**
- High density but stable traffic flow
- Speed and freedom to maneuver in traffic stream severely restricted
- Average delay at intersections less than 40 seconds

**Level-of-Service E**
- Breakdown in traffic flow
- Freedom to maneuver in traffic stream very difficult
- Average delay at intersections less than one minute

**Level-of-Service F**
- Breakdown in traffic flow
- Queues form. Operations within traffic stream characterized by stop and go
- Average delay at intersections in excess of one minute