

Attachment C

LOS Definitions for Two-Lane and Multi-Lane Facilities

LOS for Two-Lane facilities is defined as follows:

LOS A: Motorists experience high operating speeds on Class I highways and little difficulty in passing, platoons of three or more vehicles is rare. On Class II highways, speed would be controlled primarily by roadway conditions, with a small amount of platooning expected. On Class III highways, drivers should be able to maintain operating speeds close or equal to the free-flow speed (FFS) of the facility.

LOS B: Passing demand and passing capacity are balanced. On both Class I and II highways, the degree of platooning becomes noticeable. Some speed reductions are present on Class I highways. On Class III highways, it becomes difficult to maintain free-flow speed (FFS) operations, but the speed reduction is still relatively small.

LOS C: Most vehicles are traveling in platoons. Speeds are noticeably curtailed on all three classes of highway.

LOS D: Platooning increases significantly. Passing demand is high on both Class I and Class II facilities, but passing capacity approaches zero. A high percentage of vehicles are now traveling in platoons, with a noticeable percent time spent following (PTSF). On Class III highways, the reduction from free-flow speed is significant.

LOS E: Demand is approaching capacity. Passing on Class I and Class II are virtually impossible. Speeds are curtailed, and the percent time spent following (PTSF) is more than 80%. On Class III highways, speed is less than two-thirds the FFS. The lower limit of this LOS represents capacity.

LOS F exists whenever demand flow in one or both directions exceeds the capacity of the segment. Operating conditions are unstable, and heavy congestion exists on all classes of two-lane highways.

LOS for Multi-Lane facilities is defined as follows:

LOS for a Multi-lane facility addresses capacity and LOS for uninterrupted-flow segments, and is defined on the basis of density, which is a measure of the proximity of vehicles to each other in the traffic stream. LOS A through D criteria is the same as that for basic freeway segments.

LOS A: Free-flow operations. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream. The effects of incidents or point breakdowns are easily absorbed.

LOS B: Reasonably free-flow operations. The ability to maneuver within the traffic stream is only slightly restricted, and the general level of physical and psychological comfort provided to drivers is still high. The effects of minor incidents and point breakdowns are still easily absorbed.

LOS C: Provides for flow with speeds near free-flow levels. Freedom to maneuver within the traffic stream is noticeably restricted, and lane changes require more care and vigilance on the part of the driver. Minor incidents may still be absorbed, queues may be expected to form behind any significant blockages.

LOS D: Speeds begin to decline with increasing flows, with density increasing more quickly. Freedom to maneuver within the traffic stream is seriously limited and drivers experience reduced physical and psychological comfort levels. Even minor incidents can be expected to create queuing, because the traffic stream has little space to absorb disruptions.

LOS E: The lower level represents capacity. There are few usable gaps within the traffic stream to accommodate maneuvers. Minor incidents create queuing and breakdowns.

LOS F: Demand flow exceeds capacity.