9.3 Level of Service Definitions

9.3.1 The Level of Service (LOS) definitions for signalized intersections is given in Table 9-2 below. The LOS is based on delay and v/c ratio. Whichever parameter shows the the worst conditions determines the LOS to be used. If one approach of the intersection operates at LOS F then the overall intersection LOS can not be better than LOS E, exceptions from this rule need to be discussed in detail in the TIS and agreed with the Reviewer.

Table 9-2 Signalized Intersection Level of Service (LOS) Definitions

LOS	Average Control Delay (s)	Volume/ Capacity Ratio	Description
A	0 – 10	< 0.6	Uncongested operations; all queues clear in a single cycle
B	> 10 – 20	0.6 – 0.69	Very light congestion; an occasional approach phase is fully utilized
C	> 20 – 35	0.7 – 0.79	Light congestion; occasional backups on critical approaches
D	> 35 – 55	0.8 – 0.89	Significant congestion on critical approaches, but intersection functional; cars required to wait through more than one cycle during short peaks; no long-standing queues formed
E	> 55 – 80	0.9 – 0.99	Severe congestion with some long-standing queues on critical approaches; traffic queue may block nearby intersection(s) upstream of critical approach
F	> 80	≥ 1	Total breakdown, stop-and-go operation

Rates based on: „Highway Capacity Manual 2000, TRB“, „TRB Circular 212“ and „Traffic Level of Service Calculations, CCAGSMC“

LOS on Intersections

An intersection with one movement failing (LOS F or v/c ratio ≥ 1) does not operate satisfactorily. The overall intersection LOS can therefore not be better then LOS E.

The LOS categorization of intersections in Abu Dhabi is not only based on delay but also considers the v/c ratio. Whichever shows the worst conditions determines the LOS to be used.

9.3.2 The Level of Service (LOS) definitions for non-signalized intersections is given in Table 9-3 below. This includes give-way/ yield and roundabouts. The LOS is solely based on delay.