

# Appendix E

## Level of Service Definitions

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### Signalized Intersections

| Level of Service | Control Delay per Vehicle (seconds) | Interpretation   |
|------------------|-------------------------------------|--|
| A                | $\leq 10$                           | EXCELLENT. Extremely favourable progression with most vehicles arriving during the green phase. Most vehicles do not stop and short cycle lengths may contribute to low delay.                             |
| B                | $> 10$ and $\leq 20$                | VERY GOOD. Very good progression and/or short cycle lengths with slightly more vehicles stopping than LOS "A" causing slightly higher levels of average delay.   |
| C                | $> 20$ and $\leq 35$                | GOOD. Fair progression and longer cycle lengths lead to a greater number of vehicles stopping than LOS "B".  |
| D                | $> 35$ and $\leq 55$                | FAIR. Congestion becomes noticeable with higher average delays resulting from a combination of long cycle lengths, high volume-to-capacity ratios and unfavourable progression.                            |
| E                | $> 55$ and $\leq 80$                | POOR. Lengthy delays values are indicative of poor progression, long cycle lengths and high volume-to-capacity ratios. Individual cycle failures are common with individual movement failures also common. |
| F                | $> 80$                              | UNSATISFACTORY. Indicative of oversaturated conditions with vehicular demand greater than the capacity of the intersection.  |

Adapted from Highway Capacity Manual 2000, Transportation Research Board

## Level of Service Definitions

### Two-Way Stop Controlled Intersections

| Level of Service | Control Delay per Vehicle (seconds) | Interpretation  |
|------------------|-------------------------------------|---|
| A                | $\leq 10$                           | EXCELLENT. Large and frequent gaps in traffic on the main roadway. Queuing on the minor street is rare.                           |
| B                | $> 10$ and $\leq 15$                | VERY GOOD. Many gaps exist in traffic on the main roadway. Queuing on the minor street is minimal.                                |
| C                | $> 15$ and $\leq 25$                | GOOD. Fewer gaps exist in traffic on the main roadway. Delay on minor approach becomes more noticeable.                           |
| D                | $> 25$ and $\leq 35$                | FAIR. Infrequent and shorter gaps in traffic on the main roadway. Queue lengths develop on the minor street.                      |
| E                | $> 35$ and $\leq 50$                | POOR. Very infrequent gaps in traffic on the main roadway. Queue lengths become noticeable.                                       |
| F                | $> 50$                              | UNSATISFACTORY. Very few gaps in traffic on the main roadway. Excessive delay with significant queue lengths on the minor street. |

Adapted from Highway Capacity Manual 2000, Transportation Research Board