Transportation Engineering-1

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- Definition: Traffic Signals are control devices which could alternately direct the traffic to stop and proceed at intersections using red and green traffic light signals automatically.
- Advantages of Signals:
- Signal is provided at intersection to manage the traffic flow.
- Signals provide safety to vehicular traffic and pedestrian. They
 reduce and avoid the accidents.
- Signals are easy to understand compare to traffic police management at intersection.



- Disadvantages of Signals:
- Fast moving vehicles may cause rear end collision at signalised intersection
- Improper design of signal cycle length can cause fixed delay.
- Duration off-peak hour unnecessary delay occur at signalised intersection.

- Fixed Time Signals: are set to repeat regularly a cycle of red, amber and green lights. The timing demand to clear off the intersection with the help of detectors which are installed at the approaches. These are very costly.
- Pedestrian Signals: are meant to give the right of way to pedestrians to cross a road. The vehicular traffic should be stopped by red or stop signal on the traffic signal of the road.
- Traffic actuated Signals: are those in which the timings of the phase and cycle are changed according to traffic demand to clear off the intersection with the help of detectors which are installed at the approaches. They are very costly.