



The Institute of Transportation Engineers  
 Traffic Engineering Council  
 presents TIPS on



## Traffic Signal Warrants

### *What are traffic signal “Warrants?”*

In order to ensure that the advantages outweigh the disadvantages of installing a traffic signal, and to provide some consistency in the application of traffic signals, a series of warrants has been developed to define the *minimum* conditions under which further consideration of a traffic signal is appropriate. Simply meeting the warranting criteria does not mean that a signal is justified at a given location. There are many factors that impact the effectiveness of a signal, and all should be evaluated before a decision to install a signal is made. However, failure to meet any of the warranting criteria indicates that a traffic signal should not be installed, as there should be a better way of addressing the problems or needs at that location. Furthermore, if an existing traffic signal no longer meets any of the warrants, it should be removed. The traffic signal warrants currently contained in the national Manual on Uniform Traffic Control Devices (MUTCD) are summarized below. It is

important to note that your local or state transportation agency may have modified or added additional warrants to the list below.

Number and Title		Basis
1	Minimum Vehicular Volume	8-hour volumes
2	Interruption of Continuous Traffic	8-hour volumes
3	Minimum Pedestrian Volume	4-hour pedestrian volumes and gaps
4	School Crossing	number of school children and gaps
5	Progressive Movement	signal progression
6	Accident Experience	accidents and warrant #1, #2 or #3 volumes
7	Systems Warrant	volumes
8	Combination of Warrants	volumes and pedestrians
9	Four Hour Volume	4-hour volume
10	Peak Hour Delay	volume and delay on minor street
11	Peak Hour Volume	1-hour volume