

## CHANGES IN SPEED LIMITS

Requests to establish or alter speed limits on City-maintained roadways should be directed to the Director of Public Works. Upon receipt of such requests, the City Traffic Engineer shall study the subject area and report his findings to the Director of Public Works. The Director shall then provide a recommendation to the City Manager. The City Manager, or his designee, shall have the responsibility to set speed limits on all City-maintained streets in accordance with Sec. 86-31 of the City Code.

Factors considered in determining reasonable and safe speed limits are categorized into two phases: **the engineering investigation** and **the traffic investigation**.

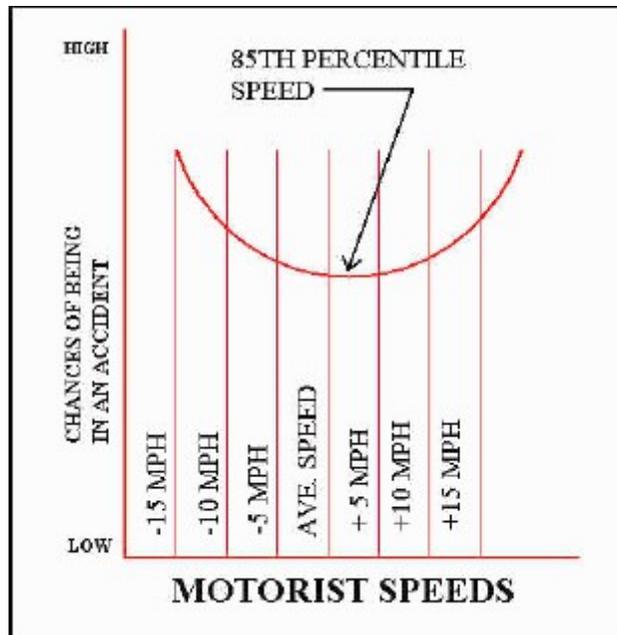
- The **engineering investigation** involves a study of the geometric design of the roadway. Engineers review such items as lane width, pavement type and condition and terrain. In addition, the engineers look at parking conditions, commercial and residential development along the road and the number, width and types of entrances and intersecting streets.
- The **traffic investigation** involves gathering and analyzing traffic-related data. Engineers study the prevailing vehicle speeds, average test runs, traffic volumes, accident experience and traffic control devices that affect or are affected by vehicle speeds.

Upon receiving direction from City Manager or his designee to set or alter the speed limit, the City Traffic Engineer shall install the appropriate signage and other necessary traffic control devices to implement the set speed limit.

### HOW ARE SPEED LIMITS SET?

When establishing a speed limit, the main premise is that most drivers are prudent and will voluntarily comply with a reasonable speed limit. To determine what is reasonable, engineers measure driver speed on a section of roadway, the speed at which 85% of drivers are at or below is the standard for determining a speed limit. A properly set speed limit will be within 3 miles per hour ( $\pm$ ) of this observed speed. The posted speed limit will then be rounded to the nearest 5 miles per hour.

**Research has shown that the 85th PERCENTILE SPEED is the speed where accident involvement is the lowest. Reducing the speed limit below what is warranted can actually be detrimental to safety.**



Measurements to determine the 85th percentile value are made under free flowing and ideal traffic conditions. This means that if speeds are measured on any section of road, 85% of the motorists will be driving at or below the 85th percentile speed.

During the field study, there are several factors that engineers use to determine an acceptable speed limit:

- geometric design of the road,
- public and private access points,
- the number of intersections,
- the number of roadside businesses,
- observed travel speeds of traffic,
- the 85th percentile of the observed speed ranges,
- total accidents in a 3 year time frame,
- accidents just from driveways and intersections within a 3 year period,
- a series of test runs on that section of road driving a certain speed evaluating safety and drivability.

Speed zoning is based upon several fundamental concepts deeply rooted in our American system of government and law:

1. Driving behavior is an extension of social attitude, and the majority of drivers respond in a safe and reasonable manner as demonstrated by their consistently favorable driving records.
2. The normally careful and competent actions of a reasonable person should be considered legal.

3. Laws are established for the protection of the public and the regulation of unreasonable behavior on the part of individuals.
4. Laws cannot be effectively enforced without the consent and voluntary compliance of the public majority.

There are two types of speed limits: one is “regulatory” and the other is “advisory”. A regulatory speed limit is set by the City Manager, or his designee, and printed black on a white background. In accordance with the Manual on Uniform Traffic Control Devices (MUTCD), the minimum size of regulatory speed limit signs is 24 X 30 inches. Also, regulatory speed limit signs shall be in increments of 5 M.P.H. A special regulatory speed sign that drivers need to be aware of is the school speed limit in school zones. The posted speed is in effect when school is in session before school begins, after school, and at recess.

The other type of speed limit is an advisory limit. This black on yellow speed limit sign is used to advise motorists of a comfortable speed at which to travel when different situations lie ahead. It is used with a warning sign like a right or left curve sign. The standard size for these signs is 18 X 18 inches, except in cases where it is 24 X 24 inches because it supplements a 36 inch and larger warning sign. Another type of advisory speed limit sign can be found in work zones. These signs are black on orange. These are used to advise drivers of construction ahead and provide work crews safety.

Except when conditions or other regulations require a lower speed, the following are maximum rates of speed, especially if signs are not posted:

- 25 m.p.h. in a school zone at specific times of the day,
- 25 m.p.h. in a business or residential area or built up portion,
- 55 m.p.h. on all other public ways.