Traffic Operations

Question/Request: WHY DON'T THEY PUT IN MORE STOP SIGNS?

A stop sign is one of our most valuable and effective control devices when used at the right place and under the right conditions. It is intended to help drivers and pedestrians at an intersection decide who has the right-of-way.

One common misuse of stop signs is to arbitrarily interrupt through traffic, either by causing it to stop, or by causing such an inconvenience as to force the traffic to use other routes. Where stop signs are installed as "nuisances" or "speed breakers", there is a high incidence of intentional violation. In those locations where vehicles do stop, the speed reduction is effective only in the immediate vicinity of the stop sign, and frequently speeds are actually higher between intersections. For these reasons, it should not be used as a speed control device.

Well-developed, national and state recognized guidelines help to indicate when such controls become necessary. These guidelines take into consideration, among other things, the probability of vehicles arriving at an intersection at the same time, the length of time traffic must wait to enter, traffic delays, and the availability of safe crossing opportunities.

Speed
An unwarranted STOP sign installation reduces speed only immediately adjacent to the sign. In most cases, drivers accelerate as soon as possible, to a speed faster than they drove before STOP signs were installed. They do this apparently to make up for time lost at the STOP sign. **STOP signs are not effective for speed control.**

Through-Traffic Volumes
In almost all cases, through-traffic volumes stay the same after the installation of unwarranted STOP signs. Occasionally the street experiences a slight volume decrease. However, after a few months, the volume of through-traffic at the test sites where an initial decrease did occur was back to original levels or in some cases it was even higher. STOP signs do not necessarily reduce volume.

Local Neighborhood Traffic Volumes
Local neighborhood traffic generally finds the path of least resistance. If there are alternative routes to get from Point A to Point B and if these alternate routes have fewer traffic controls, local drivers will take them. In many cases, this significantly increases the traffic volume on other local streets - thus relocating the problem. In the very few cases where they have, the problem merely shifted to another location - often times from a collector to a purely local street. STOP signs generally do not reduce volumes on a street. Information collected by the Institute of Transportation Engineers

Compliance
Drivers tend to ignore unwarranted traffic controls or obstacles that, in their view, are unnecessary. If they are frequently required to stop for STOP signs and rarely see any traffic on the opposing street, they may become impatient and tend to disregard STOP signs that have no obvious need.

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Accidents
Unwarranted STOP signs do not reduce accidents and may increase the potential for accidents. There is not enough documentation to determine if there is an actual increase in accidents on local low volume streets, but experience of some cities shows that where unwarranted signs used to stop a high volume street for a local street, cause the accidents to increase drastically.

Vehicle Operating Costs
Unwarranted STOP signs increase vehicle fuel consumption. The unwarranted STOP signs require additional stop/start maneuvers costing the motorists a substantial amount of money, wear and tear, and causing excessive gasoline consumption. This is especially noteworthy in light of the present fuel situation. Wear and tear on vehicles also increases. It should be noted that no detailed mechanical evaluations have been made but obviously increased stopping and starting would increase wear on tires, brakes, transmission, and engine.

Environmental
Although not specifically documented, it is logical to assume that unwarranted STOP signs increase stop/start actions and therefore increase exhaust fumes and associated hydrocarbons.

Noise
Noise pollution increases due to stops and acceleration and the associated engine noises and brakes. Noise tests at the STOP signs and at mid-block locations showed that the stop/start and acceleration resulting from the four-way STOP installations increased the noise levels over the "before" conditions.

Effectiveness
Even the minimal initial compliance and through-traffic diversion wear off over time because the unwarranted signs are not associated with a perceived need by the motorist. Most drivers are reasonable and prudent with no intention of maliciously violating traffic regulations; however, when an unreasonable restriction is imposed, it results in flagrant violations. In such cases, the stop sign can create a false sense of security in a pedestrian and an attitude of contempt in a motorist. These two attitudes can and often do conflict with tragic results.