FIVE WAYS TO CALM TRAFFIC:
WHICH IS RIGHT FOR YOU?

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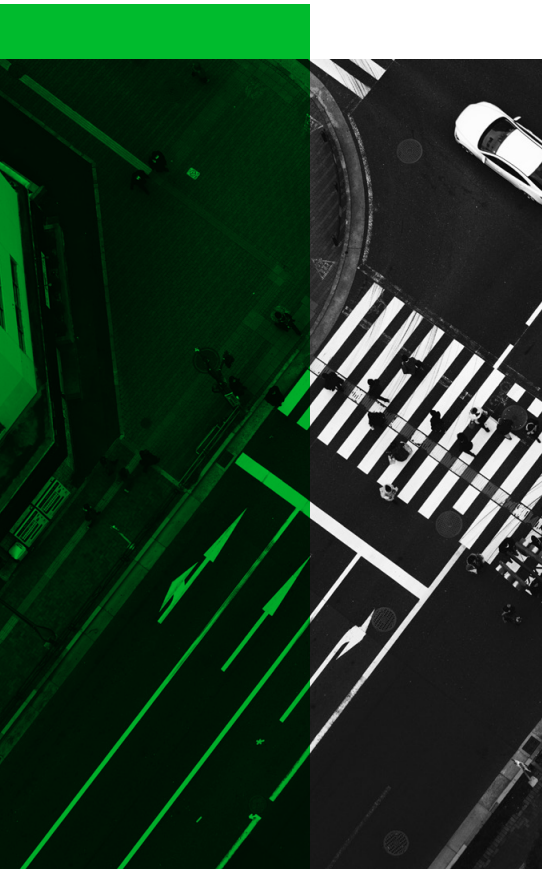SOLUTIONS

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The Sobering Facts About Speeding

According to the National Highway Traffic Safety Administration, the nation lost 35,092 people in crashes on U.S. roadways during 2015, an increase from 32,744 in 2014. This 7.2% increase is the largest percentage increase in nearly 50 years.

Fatalities in speeding-related crashes increased by 3%, from 9,283 to 9,557. What you may find surprising is that the percentage of crash deaths involving speeding was higher on minor roads (32%) than on interstates and freeways (30%) or on other major roads (24%).

The most recent estimate of the annual economic cost of crashes was $242 billion dollars.

When we speak to law enforcement officers, the question we hear most often is, "How can I make my roads safer?" It's a great question but one that's not easily answered because, well, it depends. Factors to consider include road location (rural or municipal), the type of road (arterial or local street), the speed limit, the surrounding environment and a host of other considerations. For example, design decisions related to traffic can have far-reaching consequences. Lives, economic well-being and liveability are directly affected.

Professional engineers, planners, government and the public are all sensitive to proposals for changes in the traffic environment. New design ideas are subjected to rigorous testing and evaluation before they are approved. Some measures actually impede traffic flow by increasing volumes beyond roadway capacity. Increased congestion can lead to higher collision rates, causing even more congestion. Other measures may work to slow traffic on one stretch of road but then shift the problem to an area further on—again, not an ideal solution.

What's needed is a tool that's affordable, flexible, easy to implement and maintain without adding additional resources, and that will work in the long-term. That's a tall order. Let's look at the five most often used methods to calm a busy road, examine the merits and pitfalls of each, and explore how to choose the solution that's best for your municipality.

Five Ways to Calm Traffic: Which is Right for You?

1. PUT AN OFFICER ON THE ROAD

Stationing an officer who is clearly visible from the road is a sure-fire way to get people to slow down.

Drivers are sure to notice an officer holding a Lidar gun out the window of his or her cruiser. And while many drivers do not slow down until after they see the officer, they tend to drive more safely for some time after they pass , both to avoid being stopped and simply because they have been made more aware of their speed.

However, officers can't be present on every busy road all the time, as no police department's budget could sustain this high level of enforcement. That's why this tactic is best used selectively, where the enforcement activity will be most effective in slowing down the most blatant violators and protecting the most people — whether they be other drivers, passengers, pedestrians, bicyclists or school children.

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> "

2. INSTALL AUTOMATED SPEED ENFORCEMENT CAMERAS

In the last decade, law enforcement in some states has relied increasingly on automated speed enforcement cameras to catch speeding drivers because they provide a consistent, unbiased and effective means by which to enforce speed limits. However, using cameras for automated speed enforcement has both positive and negative consequences.

Automated camera systems are extremely costly and generally not favored by citizens. Public perception is that they are revenue generating mechanisms, not tools to save lives. This erroneous perception has put considerable pressure on public officials to remove the equipment permanently.

Many states prohibit automated speed enforcement, so it may not even be an option for your city. Also, the hardware does not come cheap, and eventually drivers learn to obey the speed limit where cameras are installed just to speed up again in other locations. This makes automated speed enforcement a less than ideal long-term solution.

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3. ROAD NARROWING

Wide, open roads encourage drivers to increase their speeds. By narrowing a busy road, sometimes referred to as a "road diet," drivers will instinctively slow down.

This psychological tool is particularly effective in congested urban areas with many pedestrians and other complex driving situations. An added benefit is that in areas where road diets are incorporated, pedestrian traffic generally increases, bringing economic vitality along with increased safety.

Road diets can be accomplished through extensive construction, but can also be as straightforward as reconfiguring the traffic flow by making changes to the striping on the road. The challenge with a road diet is that not only does it take time to implement, but it requires approval from the state or local department of transportation, who wants proof— beyond anecdotal evidence from law enforcement or public works— that narrowing the road is the best solution.

There are several potential issues associated with road diets. First, they restrict the flow of traffic which may increase congestion and gridlock. Also, they may negatively affect the speed and reliability of transit service operating on the roadway, particularly if there are bus stops located in pullouts. Heavy traffic can delay buses attempting to re-enter traffic after a stop.

Not all multi-lane arterials are good candidates for road narrowing because the added congestion can outweigh the benefits if traffic volumes exceed the capacity of the three-lane roadway. Of greater concern, road diets can drastically increase the response time of emergency vehicles like fire trucks, ambulances and police. These delays could adversely impact life-saving efforts.

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4. SPEED HUMPS AND ROUNDABOUTS

Everyone knows the feeling of bracing for an upcoming speed hump—and the uncomfortable jar when you miss the warnings! Speed humps and roundabouts can be instrumental in calming a busy road, but although they immediately slow drivers, neither can be used on every busy road.

Residents often request speed humps in an effort to slow vehicles in their neighborhoods, but speed humps really just shift the problem to another street. This phenomenon, in which drivers circumvent speed-calming devices by "cutting through" adjacent neighborhoods, is known as cut-through traffic.

Plus, residents soon realize that they themselves don't like the ever-present inconvenience; in fact, some localities make residents fund an escrow account for speed hump removal before they will install them.

Emergency vehicles and snow plows can suffer equipment damage due to speed humps. Plus, their response times are slowed by as much as 10 seconds per hump, potentially putting lives at risk. Roundabouts can be a great solution and save lives where they are utilized. While roundabouts have safety and environmental advantages, they require years of planning and budgeting by DOTs and are not a quick solution to traffic speed issues.

5. RADAR SPEED DISPLAYS

The final traffic calming tool we'll discuss is arguably the most effective and practical solution—radar speed displays. These digital signs are ideal in a variety of situations and should be at the top of your list when performing due diligence for your traffic management needs.

Let's take a closer look at why radar displays work so well.

First and foremost, most drivers are unaware that they are speeding. Their attention is focused on their daily lives. With the presence of a radar speed display sign, these drivers voluntarily comply with the posted limit. For them, the radar speed sign is a gentle reminder to focus on driving safely.

Installing the signs is straightforward; they do not generally require a cumbersome approval process or time-consuming DOT studies. One person can handle the quick installation of a single sign, and the roadway will immediately experience the benefit of traffic calming.

The portability of the newer radar signs enables users the flexibility and agility to impact multiple roadways over time. Some would argue that the effectiveness of radar speed signs becomes "stale" when installed permanently; however, incorporating a best practices program that combines the use of permanent and portable signs proves to be highly effective in both the short and long term.

Additionally, portable web-enabled signs can provide timely, report-ready data for traffic mapping over a large geographical area. This data is critical for engineering, enforcement and educational initiatives.

Finally, departments are becoming more and more short-staffed while the scope, and number, of their duties increases. Budgets, grant money and other funding are diminishing annually, and departments are expected to do more with less. Web-enabled radar speed signs are an affordable and efficient solution, allowing staff to focus on their primary duties and technology to generate data-rich information to improve decision-making.

The Game Changer: Web-Enabled Radar Display Signs

What truly sets some radar display signs apart is their web-enabled capability.

With web-enabled signs, data is collected and analyzed, and reports are created from a single computer. No more dispatching personnel to each location to download data, then sort, calculate statistics and enter it all into spreadsheets. Web-enabled radar display signs free up personnel to perform their primary public safety duties, while built-in software performs the data collection, calculation and analysis. User-friendly reports are current, relevant and accurate with data organized any way you need to view it.

YOU CAN USE THIS TRAFFIC DATA TO

- Track traffic volume and speeds in real time, identify areas most in need of remediation, and deploy solutions immediately
- Help your department prioritize targeted enforcement and utilize resources more effectively by precisely identifying issues by hour of day, number of violators and average violator speed
- Use relevant, real-time data to make data-driven enforcement decisions
- Receive real-time alerts for high-speed violators, as well as sign tampering and battery status
- Validate the need for remediation, such as changes to the speed limit, engineering modifications or added enforcement

- Document DOT study requests
- Report on the impact of traffic safety initiatives and quickly clear complaints
- Gather traffic data over time for long-term planning

Web-enabled radar display signs can also alert you to low battery and tampering, saving unnecessary trips for periodic equipment checks. And because you change the sign messages remotely, you don't have to worry about pranksters breaking into the sign and reprogramming it.

Radar speed displays are a cost-effective and expedient solution to traffic calming, which can be a valuable complement to longer-term engineering solutions.

Conclusion

As our cities and towns continue to grow, it's more critical than ever to employ the right methods to calm traffic and keep roads safe. Having the right tools to centrally manage traffic equipment and data in one place helps law enforcement keep a firm handle on traffic while they develop lasting solutions for their municipality. By leveraging web-enabled radar speed displays, your department will be more effective in less time, with fewer resources, and at a lower cost than with other, less impactful alternatives.

Ask us for a personal demo of TraffiCloud™, our traffic management solution that lets you control your traffic equipment and data from any Internet-ready device 24/7, providing a new level of awareness while reducing the amount of time needed to manage your equipment and information. For more information on how a web-enabled radar speed display can help with your traffic calming challenges, talk to an ATS traffic management specialist.

Call 866.366.6602 or email us at sales@alltrafficsolutions.com

TraffiCloud leverages our patented technology (US Patents 8,417,442; 8,755,990; 9,070,287; 9,411,893) to deliver unique cloud-based management, features and functionality.

All Traffic Solutions delivers cloud-based traffic management solutions, including radar speed and variable message displays, imaging products and intelligent transportation systems for law enforcement, transportation and communities.

Our innovative TraffiCloud™ traffic management platform is changing the way communities solve their most complex traffic, transportation and parking challenges by allowing them to manage all their traffic equipment remotely, as well as leverage data to increase traffic safety, streamline their operations and achieve lasting results.

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