COMMON SENSE TRAFFIC CALMING:
Best Practices Regarding Driver Feedback Signs

Driver feedback radar signs have grown in popularity over the past decade because they are quiet, effective, cost-efficient and well-received by drivers and communities alike. The increasing demand for traffic-calming solutions that offer flexibility in size, location/mobility and power options has caused some confusion for those searching for a solution that fits their needs.

Radarsign™ Managing Partner and Co-Founder, Charlie Robeson, helps to clarify some of the most common misperceptions.

Q: We want to *really* grab the attention of speeding drivers. What are the most effective combinations of attention-grabbing options?

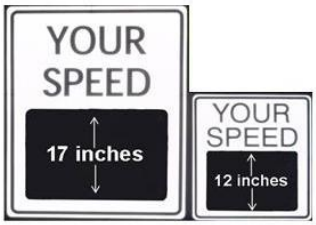
A: Contrary to what you might think, less is more here. Some manufacturers offer signs with multiple alternating messages, blinking lights, changing colors and strobe flashing violation alerts; however, there are **no** studies that support this approach. Even more importantly, MUTCD guidelines do NOT recommend these multiple messages to the driver.

Many traffic engineers agree that this type of "visual noise" may actually serve as a dangerous distraction to drivers, drawing their attention away from the road. In trying to process multiple messages, drivers can become overwhelmed with information, taking their eyes away from the road for an extended period of time, which introduces concerns of potential liability.

The most effective traffic-calming solutions consider how drivers operate and respond to visual stimulus. A directed, single message allows drivers to quickly and safely read, process and respond to the fact that they are speeding.

Q: Looking at sizes of signs, it seems that bigger must be better. Is this correct?

A: This is a common misperception. MUTCD sign size guidelines are based on scientific data using driver speeds, sight lines, and distance. Many manufacturers offer oversized signs with LED displays of 15" tall or larger AND insist that the large display is required to ensure effectiveness. Tests show that a well-designed 12" LED display is viewable up to 500 feet, providing plenty of response time for speeding drivers to safely react on roads where the speed limit is 40 mph or less. (see chart below)



Radarsign Models	Display Height in Inches	Maximum. Readable Distance in Feet	Maximum Viewing Time in Seconds at Drive by Speeds					
			25 mph	35 mph	45 mph	55mph	65 mph	75 mph
	10"	300'	8.2	5.8	4.5	3.7	3.1	2.7
TC-500	**12"**	**500'**	13.6	9.7	7.5	6.2	5.2	**4.5**
	14"	700'	19	13.6	10.6	8.7	7.3	6.3
TC-1000	**17"**	**1000'**	27.3	19.5	15.1	12.4	10.5	9.1

green	digit height on sign considered ideal for speed indicated
yellow	digit height on sign considered marginally acceptable for speed indicated
red	digit height on sign considered not acceptable for speed indicated

Federal DOT standards further support this: on similar roads, regulatory speed limit signs also use the same size digits. No government mandates to "super size" driver feedback signs for any reason is great news, especially for neighborhoods and planned-community locations: Our **12" display signs are more aesthetically pleasing**—their size, scale and architectural post options blend beautifully with their surroundings—**and they are less expensive**. That's *always* a benefit!

Q: Some solar-powered signs require an additional box to house batteries. Does this "Green" option have to be big and bulky?

A: Batteries provide back-up power for solar-powered signs to run at night and during inclement weather. The design of most solar-powered driver feedback signs require so much battery back up to ensure operation that a large, separate housing is required for the batteries. This results in a more expensive solution: paying for a second housing, larger batteries and a larger solar panel. However, driver feedback signs from Radarsign require only an integrated battery housing and small solar panel to ensure 24x7 operation of a solar-powered sign. Our design is more energy efficient, cost effective and delivers a superior LED display, while providing up to three weeks of battery backup power.

Q: Can a radar speed sign stand up to vandalism?

A: To varying degrees, yes and no. This is one sign feature that is easy to evaluate—just get up close and touch one. When comparing construction quality, prospective buyers often describe some brands as "flimsy" and "cheap" while identifying Radarsign's armored driver feedback signs as "solid" and "rugged." Most customers do not want to invest thousands of dollars in a product that can be disabled or destroyed with a single act of violence.

Radarsign's proprietary armored Bashplate™—engineered from an eight-pound slab of jet-grade aluminum—delivers a driver feedback sign that is vandal resilient, weather tight and bullet-resistant. .

Radarsign driver feedback signs are, quite simply, the most vandal resistant signs on the market. Why pay more for a driver feedback radar sign that is less vandal resistant?

Q: How do we communicate with, monitor, and manage driver feedback signs?

A: For some brands, communication requires climbing up a pole, opening the sign or physically connecting to the sign via cables. Radarsign products offer a more reasonable method: Bluetooth™ technology allows wireless

management and data download to a portable computer. This can be accomplished in the comfort of your vehicle up to 30 feet from the sign.

Q: Some signs are easier to read than others. How do we evaluate viewablity and readablity?

A: Readability is the most important feature of any driver feedback radar sign. What good is a sign that can't be seen?

All driver feedback radar signs utilize LED lights. Radarsign, however, utilizes directional beam technology achieved by precision drilling 288 beveled cone-shaped holes—one for each Super Bright amber LED—into the armored Bashplate. Used exclusively by Radarsign, the cone-shaped reflectors—conceptually similar to those used in flashlights—direct the light forward, making it brighter without the energy demands of similar products. Would you purchase a flashlight with no reflective cone around it?

While one manufacturer offers a choice between high viewability or a longer lasting battery, Radarsign's highly efficient design provides both, and at no additional cost. Today, Radarsign driver feedback signs provide the brightest and most highly-visible display on the market.

---

radarsign™
MAKING ROADS SAFER

Traffic-Calming Trends is brought to you by the traffic-calming experts at Radarsign. For information on how radar driver feedback signs can support community and government traffic-calming initiatives, visit www.radarsign.com or call **678-965-4814.**

About Radarsign: In 2004, Atlanta-based Radarsign™ established new industry standards for traffic-calming solutions with the debut of the world's only armored driver feedback signs, which are vandal, weather and bullet-resistant. The industry's most durable radar signs are also the most ecological. Radarsign's MUTCD-compliant products—the industry's most energy-efficient—are made in the USA and utilize recycled aluminum, innovative LED reflector technology, minimal battery power and solar panels to deliver bright, easy-to-read feedback to drivers. Radarsign has been entrusted to provide safe and effective traffic-calming solutions for: municipalities, treasured national parks, children and families at schools and in neighborhoods, military bases that protect homeland security, and private and public development projects across the U.S., Canada and overseas. www.radarsign.com.