

Traffic Calming in HOAs, Neighborhoods and Residential Areas

Best practices with radar speed signs: An HOA Perspective

A Publication of [Radarsign](#)



The Community Associations Institute estimates that over 25 million American homes are governed by Homeowner Associations (HOAs), which work to protect home values and contribute to the overall quality of life in their neighborhoods. Speeding in residential areas—the most common citizen complaint faced by HOAs, local police and city councils—creates a danger to pedestrians, bicyclists and especially to children. However, as municipal budgets tighten and local law enforcement resources are stretched thin, HOAs are more frequently [assuming responsibility for neighborhood traffic-calming solutions](#).

As HOAs and other community leaders evaluate traffic-calming options, more and more are discovering that radar speed signs are the best solution. Also called driver feedback signs, these devices have grown in popularity over the past decade because they are silent, effective, cost-efficient and well-received by drivers and communities alike.

With the demand for traffic-calming solutions for neighborhoods and HOAs on the rise, Radarsign® Managing Partner and Co-Founder Charlie Robeson addresses some of the most common questions about radar speed signs in general and Radarsign driver feedback signs in particular.

About Radar Speed Signs

Is a neighborhood an appropriate place to use a radar sign?

Because radar speed sign technology directly combats inattention—a primary cause of residential speeding—they are an excellent tool for slowing traffic in neighborhoods. Most residential speeders live near the area of the offense, which means they travel along those streets on a regular basis. On these familiar routes to work, shopping and carpool—known as [“autopilot journeys”](#)—drivers can become inattentive, with 46% of them having no recollection of how they got to their destination. Radar speed signs disrupt the “autopilot” mode, alerting drivers to be more aware.

In 2013, St. Ives Country Club in Johns Creek, Georgia installed a Radarsign driver feedback sign to greet drivers at each of their two entry gates. In the first four months of operation, the neighborhood experienced a remarkable decline in the number of speeding citations issued. A 37% reduction year over year. Furthermore, the security team has documented a significant improvement in driver compliance with other traffic rules, including stop signs. Fewer homeowners are calling to report reckless driving. For the residents of St. Ives, the Radarsign solution has delivered more than they had hoped.



How much does a radar sign cost?

Pricing for driver feedback signs ranges between \$2700 and \$4300, depending on power choice and pole options. Maintenance costs are an important consideration in traffic calming. Unlike vertical traffic calming options, such as speed humps—which must be repaired or replaced due to constant, daily vehicle traffic—the cost to maintain these signs is minimal. Backup battery replacement for solar signs every 4-5 years will run less than \$150.

Do radar speed signs reduce speeding?

Radar speed signs are scientifically proven to [slow traffic](#) and to be effective as a [long-term](#) traffic-calming solution. Studies show that:

- 80% of speeders will slow down when alerted by a radar sign
- Speeds are reduced by 10-20%.
- Overall compliance with the posted speed limit improves by 30-60%.

On the market since the early 1990s, the popularity of radar speed signs has accelerated steadily since 2008 as communities have experienced the benefits first hand.

For five years, residents of Wedgewood, a community that surrounds a golf and country club in Powell, Ohio, hired off-duty sheriff deputies to combat speeding drivers on Fairway Drive, a residential street with a 25 mph speed limit. In 2013, they installed four Radarsign driver feedback signs and speeding dropped dramatically. Deputies had been issuing 3-4 tickets per month with average ticketed speeds of 42.5 mph. In the five-month period after the Radarsign products were installed, only three tickets were issued and the Radarsign data tracking software revealed that 90% of all drivers are now traveling under 33 mph.



How do radar speed signs work?

Driver feedback signs leverage a psychological concept called the [feedback loop](#)—a behavior modification process that is passive, yet effective in changing driver behavior. Basically, the science of a feedback loop is this: By providing people with information about their actions in real time and by giving them an opportunity to change their actions, people are likely to choose better behaviors.

What size sign should we get?

The [size of the sign is determined by the distance required for drivers to see and react to the sign](#). As a general rule, an 11" or 12" sign is sufficient for residential use; supersized signs are unnecessary. Tests show that a well-designed 12" LED display is viewable up to 500 feet away, providing plenty of response time for speeding drivers to safely react on roads where the speed limit is 40 mph or less. Smaller display signs, however, do not provide enough time for speeders to respond, while larger signs do not improve driver response.

What about speed humps?

In the past, when a community faced a speeding problem, residents would routinely request that speed humps be installed to slow traffic and make their neighborhoods safer. Today, speed humps are steeped in controversy and [municipalities are moving away from their use](#). In fact, speed humps have been banned in many cities and communities because they are known to:

- slow response times for emergency vehicles (police, fire, and ambulance)
- require more maintenance, which costs more over time
- be ineffective, as drivers tend to go faster between the humps to make up lost time
- hinder the work of snow plows, which is why they are banned in most northern states
- cause increased noise as vehicles travel over the speed humps day and night
- be unattractive and visually-disruptive, especially in larger master planned communities

Conversely, residents almost universally welcome radar speed signs as they do not disrupt emergency response times or increase noise pollution.

Will the city allow us to install a radar speed sign?

Check with local officials, but—generally—municipalities are supportive of these efforts. Increasingly, cities across the U.S., like [Austin, Texas](#), are approving the residents' requests to install self-funded radar signs within the public right-of-way. And other cities, like [Roswell, Georgia](#), and Houston, TX are proactively establishing guidelines to make it easier for neighborhoods to do so in the future. Keep in mind that the first 6-10 feet of property on public streets is a right-of-way that is controlled by the city or county. Those governing bodies must be involved in the radar speed sign installation process.

How is a radar sign powered?

Radar speed signs have three power options: AC (hardwired), solar, or battery. Examples of these can be seen in this document that compares [power options available through Radarsign](#). A solar solution is the most common choice for a permanently installed sign within a neighborhood, as AC power is usually not readily available and the cost to run power to the sign location can be significant.

If a community experiences speeding issues at multiple locations, an HOA may choose to invest in one battery-powered, portable sign to be used at different sites around the neighborhood. Battery powered signs operate using two battery packs. These signs can operate up to 15 days before the batteries need to be exchanged, or recharged overnight. The Radarsign TC-400 can be installed or relocated, with no special tools, in about a minute.

Can radar speed signs stand up to vandalism?

Not all of them can. In 2004 Radarsign debuted the world's first armored driver feedback sign, establishing new industry standards which have yet to be matched by any other manufacturer.

Radarsign's armored design utilizes a proprietary Bashplate™— a thick aluminum plate that covers the entire display area and protects the sign electronics from the most malicious vandalism, including bullets. The highest grade Lexan cover provides maximum UV protection

and is abrasion, shatter and graffiti resistant. Radarsign products, which are weather and bullet-resistant are—quite simply—the most vandal resistant signs on the market.

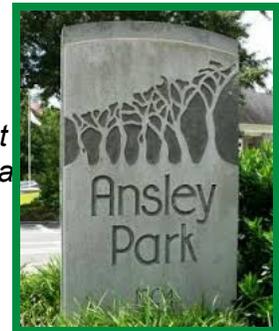
Our HOA requires an aesthetically pleasing solution. Can radar speed signs be beautiful?

Driver feedback signs from Radarsign are beautifully designed and crafted. Their size and scale, when paired with architectural post options, easily meet even the most stringent community design standards. Plus, they don't interrupt the peaceful flow of residential streets.

Can we track the effectiveness?

Yes. Radarsign's StreetSmart data collection software provides traffic analysis for enforcement and planning purposes. Using Bluetooth™ technology, community administrators can wirelessly access and download the data to a portable computer up to 30 feet from the sign.

Ansley Park, an historic residential area in Atlanta, Georgia, experienced increased traffic flow and speeding as the city developed around it. Since 1998, the Ansley Park Traffic Committee has been working to improve traffic safety, eventually drafting a comprehensive traffic-calming plan that included the installation of Radarsign driver feedback signs. After seeing a significant reduction in speeding drivers, community leaders continue to improve traffic safety by sharing data from these signs with the Atlanta Police Department to identify prime times for targeted ticketing programs.



What are some issues to consider when evaluating different radar speed signs?

There are several: company reputation, product source, construction and durability, readability, compliance, aesthetics, and—if you plan to use one sign in multiple locations—portability.

- Company reputation: For more than 10 years, Radarsign has been the preferred provider of radar speed signs for law enforcement agencies and municipalities. In 2013, Radarsign saw an [88% surge in purchases from law enforcement](#). And there has been consistent year-over-year growth in sales from [high volumes of repeat sales](#). This speaks volumes about our products and customer satisfaction.
- Product source: Radarsign products are engineered and manufactured—and when necessary, serviced—in the USA. Signs not manufactured in the U.S. may present unique repair complications—a larger, long-term consideration.
- Construction and durability: Radarsign's armored design and construction—the industry's most durable driver feedback sign—are [bullet proof](#), [blizzard proof](#) and [hurricane proof](#). Coastal communities, for example, must consider performance under conditions of high winds and salt water. Snow-prone areas must also consider performance in sub-freezing temperatures and salt water.
- Readability: While all radar speed signs use LED lights, Radarsign maximizes readability with directional beam technology. This is 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 increased energy demands. They also keep the light on the road and out of a neighbor's home.

- **Compliance:** The Federal Highway Administration (FHWA) has developed Minimum Uniform standards for Traffic Control Devices (MUTCD), including radar speed signs. All Radarsign speed signs are MUTCD compliant.
- **Aesthetics:** While Radarsign speed sign displays are as large as necessary to engage drivers, their size is not obtrusive. Our solar models do not require a dedicated second housing just for batteries, and uses a solar panel with no bigger footprint than the front of the YOUR SPEED faceplate. Radarsign products support the aesthetic of a well-maintained neighborhood, without looking like the Hubble Telescope has landed there.
- **Portability:** Our TC-400 battery-powered sign includes a small universal mounting bracket that can be used on any existing pole. By installing a few extra brackets on poles throughout the neighborhood, the radar sign can be mounted and unmounted in about 30 seconds and will be securely locked onto the pole while in use.

Related Links:

Overview video: [Why Radar Speed Signs Work](#)

Newspaper Article: [Speed Humps Calm Traffic. But Stir Outrage in the Carrollwood Community](#) (Hillsborough County Florida)