

Study Finds Reduction in Reckless Driving and Overall Speeders with Five Stage Escalating Alerts



PRODUCTS

[FAST-18T Radar Speed Trailer](#)

SUMMARY

[TAPCO](#) (Traffic and Parking Control Co., Inc) conducted a four-week study of the efficacy of speed radar trailers utilized to reduce reckless driving behaviors. For this study, reckless driving was defined as vehicle speeds of 20 mph or more posted over the speed limit.

For a two-week period, traffic counts and oncoming vehicle speeds were captured without any speed reduction treatments. Then, for an additional two-week period, a [FAST-18T](#) Radar Speed Trailer was deployed, capturing oncoming traffic counts and vehicle speeds. The study was conducted in the Granville business district with the trailer deployed on 84th Street and Bradley Road in Milwaukee, WI.

SITUATION

Reckless driving isn't unique to Milwaukee, WI. According to the National Highway Traffic Safety Administration (NHTSA), in the year 2020, [29% of all traffic deaths in the U.S. were related to speeding](#). The NHTSA study cited that when vehicles drive above posted speed limits, there is a greater chance of losing control of the vehicle and creating longer stopping distances. These results can cause severe crashes.

With 50,000 residents and another 37,000 workday employees, the Milwaukee Granville district is a bustling manufacturing hub located on the city's Northwest side. The Granville business district is home to Wisconsin's largest concentration of manufacturers and distributors. Bradley Road has a posted speed limit of 35 mph and is a two-lane road with a center turn lane. Residents and commuters alike have observed vehicles using the dedicated turn lane to speed past other drivers.

TREATMENTS

The City of Milwaukee had already taken speed reduction steps. In fact, Bradley Road recently underwent a [road diet](#) reconstruction project. During this project, a dedicated center turn lane was added.

Additionally, at no cost to the city, the Milwaukee Reckless Driving Taskforce worked with locally-based TAPCO to deploy a FAST-18T Speed Radar Trailer with data collection to capture the impact of traffic calming in the area.



The FAST-18T Radar Speed Trailer is a mobile speed trailer. And for this study, the FAST-18T was set up with TAPCO's Five Stage Escalating Alerts, which were developed to increase the effectiveness of the FAST line, including speed radar trailers. The five stages of the alerts displayed on the radar feedback sign are 1) the vehicle's speed 2) flashing of the vehicle's speed 3) a "SLOW DOWN" message 4) red and blue alternating flashing bars and 5) a total blank out of the screen.

The Five Stage Escalating Alerts were tested by TAPCO innovators to prove order of effectiveness on drivers exceeding speed limits. However, the FAST line is equipped with these five alerts that can be programmed in any order and triggered by customizable speeds.

For this study, the FAST-18T was programmed to display a vehicle's speed beginning at 25 mph for stage one. Once a vehicle's speed was detected at 36 mph, the speed display began to flash for stage two. At 41 mph, a red "SLOW DOWN" message was displayed to oncoming vehicles for stage three. Then, for stage four, at 45 mph, red and blue alternating flashing bars appeared. And for the stage five, the trailer display would turn off if speeds above 55 mph were detected. This warning message sequencing is used to dissuade vehicle acceleration during different phases of speeding.



BEFORE RESULTS

For the first two weeks, a pole mounted [traffic data counter](#) was installed to obtain traffic counts and speeds without treatment. In the first two weeks, 57,605 eastbound vehicles were captured. Of the 57,605 vehicles, 790 were reported at 20 mph over the speed limit. Additionally, 28,813 vehicles were speeding.



AFTER RESULTS

After the initial data collection, the FAST-18T Radar Speed Trailer was deployed an additional two weeks. Both the treated and untreated areas were monitored for two weeks.

In the following two weeks, the number of eastbound traveling vehicles was 60,255. Of those 60,255 vehicles that drove by the active FAST-18T, only 364 were reported at 20 mph over the speed limit. Furthermore, 15,152 vehicles were speeding — a decrease of over 13,500 speeding cars.

Overall, a 54% reduction in reckless drivers occurred while the FAST-18T Radar Speed Trailer was deployed. But not only was reckless driving reduced, general speeding saw great results, too. The number of speeders decreased by 48%, which increased normal speeds (under 41 mph) by 57%.

Even just [a few miles over a posted speed limit can have consequential effects](#). Reducing the number of drivers exceeding posted speed limits — both recklessly (20 mph over) and moderately (6+ mph over) can make life-saving impacts on communities.



Learn more about the TAPCO FAST-18T Radar Speed Trailer [here](#).

ABOUT TAPCO

As an industry-leading innovator, TAPCO manufactures, services and distributes a wide portfolio of traffic and parking safety solutions designed to increase safe travels for all. Since 1956, we have set the standard for delivering reliable, cutting-edge traffic safety enhancements. From our world-renowned line of LED-enhanced BlinkerSign® solutions to our pedestrian crossing products and early detection warning systems, safety is at the heart of all TAPCO innovations.

Working alongside traffic professionals for more than 60 years gives our team an exclusive perspective on the past, present and future needs of the traffic and parking safety industry.

