



RIDOT Guidelines for Deployment of Permanent Vehicle Speed Feedback Signs on State Roadways

May 2026

1 Introduction and Purpose

A Vehicle Speed Feedback Sign (VSFS) is a traffic-calming tool designed to reduce speeds by increasing driver awareness. Using integrated radar technology, these units detect approaching speeds and display them on an LED screen alongside a "YOUR SPEED" message. Unlike punitive measures such as speed cameras, VSFS units encourage voluntary behavioral change through real-time feedback. These guidelines establish deployment criteria for state roadways to maximize effectiveness, enhance safety, and ensure compliance with posted speed limits in targeted areas.

2 Jurisdiction and Responsibility

Responsibility for deployment is based on the specific safety requirements of the location.

2.1 RIDOT Responsibility

RIDOT will consider installing and maintaining permanent VSFS units on a state roadway only when engineering judgment and safety data indicate a high-priority need, as defined in Section 3.1.

2.2 Municipal Responsibility

For locations where a municipality requests a VSFS on a state roadway due to complaints or observation, but the location does not meet RIDOT's data-driven guidelines categorizing the need as high-priority, the municipality may install and maintain these devices at its own expense.

Such installations would be subject to the typical RIDOT Physical Alteration Permit Application (PAPA) process and will be required to follow all applicable RIDOT, State, and Federal standards. A Memorandum of Understanding (MOU) is required to indemnify RIDOT of all maintenance responsibilities.

Where they are installed on state roadways, non-RIDOT VSFS devices shall be subject to the same installation and deployment guidelines as RIDOT-installed devices. These requirements can be found in Section 4 of this document,

3 RIDOT Site Selection Guidelines

Site selection shall be based on a data-driven assessment. To justify RIDOT installation, the location must meet specific high-risk criteria. Locations that are not high-risk but still exhibit concerns which are likely to benefit from VSFS deployment may be placed by a municipality on a state roadway with RIDOT approval.

3.1 High-Priority Safety Need Criteria

Using engineering judgement, RIDOT will consider VSFS units if at least TWO of the following conditions are met:

3.1.1 Severe Speeding:

Engineering studies indicate the Average Speed exceeds the posted speed limit by 10 MPH or more.

3.1.2 Crash History:

There is a documented pattern of three or more speed-involved crashes within the past three years. In the absence of speed-related information in police reports, speed involvement may be inferred using engineering judgement if there is a high frequency of nighttime, roadway departure, or high severity crashes.

3.1.3 Vulnerable Land Use

The location is within $\frac{1}{4}$ mile of a "sensitive facility" or high pedestrian trip generator (e.g., school, park, senior center, or library) where increasing driver awareness is desired proactively.

3.1.4 Speed Transition Area

The location features a regulatory speed limit reduction of 15 MPH or greater (e.g., transitioning from a 45 MPH rural corridor to a 30 MPH village zone)

4 Installation or Deployment Guidelines

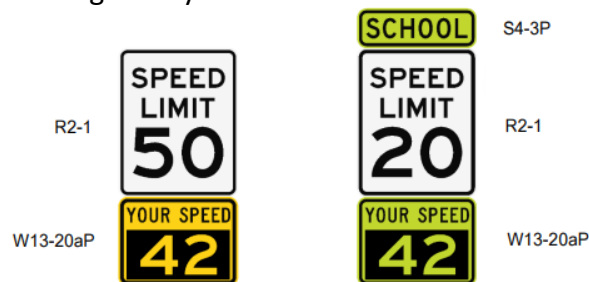
All installations must comply with the latest adopted edition of the Manual on Uniform Traffic Control Devices (MUTCD), the Standard Highway Signs and Markings supplement to the MUTCD, the Public Right-of-Way Accessibility Guidelines (PROWAG), and all other applicable federal and state regulations.

4.1 General Operational and Design Guidelines

Devices shall not feature strobe lights, flashing characters, or aggressive visual alerts. The display must show "SLOW DOWN" or a similar message if a vehicle exceeds a set threshold to discourage motorists from 'racing' the sign.

- The threshold shall be 15 MPH over the limit for posted speeds up to 40 MPH, and 20 MPH over the limit for posted speeds of 45 MPH or greater.
- For school zones, thresholds shall be set at 10 MPH over the active school zone speed limit, or 5 MPH over the standard (non-school) speed limit, whichever is lower.

Although the MUTCD permits standalone Vehicle Speed Feedback (W13-20) signs, RIDOT requires a combination of the Speed Limit (R2-1) sign and the Vehicle Speed Feedback plaque (W13-20aP). This combination is more effective at helping drivers compare their current speed to the actual regulatory limit.



4.2 Operational and Design Guidelines for School Zones

When Speed-Feedback Signs are used to supplement school-zone speed limits the following additional operational constraints must be adhered to:

- Device shall only supplement an MUTCD compliant school speed limit assembly or “School Speed Limit When Flashing” Sign.
- W13-20aP plaque shall be Fluorescent Yellow Green in color
- Devices shall operate only during active school speed limit hours (where applicable)

5 Related Resources

5.1 Federal Standards and Guidance

- **Manual on Uniform Traffic Control Devices (MUTCD)**
U.S. Department of Transportation, Federal Highway Administration (FHWA)
<https://mutcd.fhwa.gov>
- **Public Right-of-Way Accessibility Guidelines (PROWAG)**
The United States Access Board
<https://www.access-board.gov/prowag/>
- **Standard Highway Signs and Markings (SHSM)**
FHWA Supplement to the MUTCD
https://mutcd.fhwa.dot.gov/kno-shs_2024.htm
- **Speed Management ePrimer**
FHWA Office of Safety
<https://highways.dot.gov/safety/speed-management/speed-management-eprimer-rural-transition-zones-and-town-centers>
- **Speeding and Speed Management Countermeasures**
National Highway Traffic Safety Administration
<https://www.nhtsa.gov/book/countermeasures-that-work/speeding-and-speed-management>

5.2 State Standards and Guidance

- **Traffic Design Manual**
Rhode Island Department of Transportation
<https://www.dot.ri.gov/business/documents/trafficdesignmanual.pdf>
- **Physical Alteration Permit Application Manual**
Rhode Island Department of Transportation
https://www.dot.ri.gov/documents/doingbusiness/permits/PAPA_Manual.pdf
- **RIDOT Office of Safety Website**
<https://www.dot.ri.gov/safety/>