

Learn more about this project, where University of Vermont researchers evaluated proven speeding countermeasures for Vermont roadways and created a toolbox to help local agencies make informed decisions when determining their applicability in jurisdictions. Also, read about how the information in this toolbox helped a Vermont town implement a median island and road diet.



Background

Speeding on local and state-maintained town highways is a major contributor to traffic fatalities in Vermont. In fact, in 2018, over half of all fatal crashes on local and collector roadways were speeding-related.

Vermont's towns and villages face a difficult challenge with speeding, especially in transition zones between higher-speed rural highways and their lower-speed streets. Often, these municipalities task local engineers or department of public works superintendents with addressing speeds and improving safety, though they may have limited experience or expertise in the selection and implementation of speeding countermeasures.

What could be done to bridge this knowledge-gap and reduce speeding in these areas?

This project sought a means to provide resources and guidance to these small and rural communities to help them select and implement speeding countermeasures that will be both effective and appropriate for their needs.

Benefits

Districts, towns, and villages across Vermont can use this toolbox to simplify the question of how to effectively reduce speeding and reduce the severity and number of future speeding fatalities in their jurisdictions. The toolbox provides an informational “head-start” and can help municipalities save time during planning. Decision



Figure 1: Example factsheets included in this project. (Credit: AOT)

makers and planners can also directly benefit from the experiences and lessons learned of other municipalities and weigh the pros and cons of possible countermeasures before determining which course of action to take. Once a jurisdiction plans a path forward, they will be able to seek out additional information and support from the Agency of Transportation.

Goals & Methodology

This project sought to:

1. Evaluate speeding countermeasures for their applicability on Vermont roadways.
2. Create profile sheets for proven speeding countermeasures including describing their use and effectiveness in Vermont communities.
3. Create a clear and concise “Traffic Safety Toolbox” to support local decision-makers in villages and towns across Vermont.

The University of Vermont research team conducted an extensive literature review, including resources from the Federal Highway Administration, existing Vermont State and municipal documents, peer states, and Canadian guidance.

Additionally, the team selected four sites across the State to demonstrate the type of real-world speed-data collection that a jurisdiction needs to support implementing speeding countermeasures and provide a site-specific evaluation. The team provided [fact sheets](#) on each of these field tests in the final toolbox.

Key Benefits

- *Multiple countermeasure options presented in comparable formats*
- *Includes Vermont-based applications and guidance*
- *Provides speed-data needs to support implementation*



Figure 2: The median island and bulbouts provide refuge for pedestrians crossing a very wide street. It also narrows the traffic lanes, shortens the crossing distance, and improves conspicuity. (Credit: Rutland Regional Planning Commission)

Finally, to further demonstrate this project's relevance to Vermont towns, the research team conducted a series of [four case studies](#) which provide speeding countermeasure implementation examples as well as lessons learned from each.

Results

Based upon the review, the team [identified 15 speeding countermeasures](#) listed in a chart summarizing similarities and differences and created [fact sheets](#) for each that cover the context where the countermeasure may be appropriate, design considerations, how often each is used across Vermont, and pros and cons.

These speeding countermeasure and field test fact sheets, along with the case studies, are presented together in the project's [toolbox](#). A separate [final report](#) describes the research process and presents the literature review.

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Ethan Pepin

Rutland Regional Planning Commission

Implementation

After this research was completed in June 2023, it served as a useful resource to the Rutland Regional Planning Commission. For this project, the Downtown Rutland Partnership had requested suggestions on speeding countermeasures to address safety, speed, and a lack of driver yielding at a midblock crossing.

The location for this project was on a very wide (~50 feet), two-lane road, which was previously home to a streetcar line. The midblock crossing is adjacent to a children's museum and is a main connection between a parking structure and several large office buildings. This means the crossing is used by many parents with children in addition to those who work in these office buildings.

Ethan Pepin, a transportation planner for the Rutland Regional Planning Commission, used this toolbox as a resource when researching potential solutions.

"While the elected officials were on board with idea of a median island, there were some concerns from other departments within the town," said Pepin. "I developed a short report for both elected leaders and city staff laying out the countermeasure and referenced specific guidance and standards, including the relevant sections of this toolbox."

Pepin notes that the toolbox was a useful resource that took into account the Vermont context.

"Being able to point to guidance specific to Vermont helped the community understand that it could work here," he said. "Other guides I've previously used could have been perceived as only for 'big cities.'"

More Information:

[Project webpage](#)

[Speeding Countermeasure Toolbox link](#)

[Project Final Report](#)

Find these documents and materials for additional AOT projects by searching "*VTrans Research*."

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