



Better Connections for Communities

Connecticut DOT Helps Towns Accommodate Walking and Bicycling through Road Safety Audits

An effective way to address obstacles to bicycle and pedestrian accommodation is to go out and look for them. That was the lesson the Connecticut Department of Transportation (CTDOT) learned in implementing its Community Connectivity Program.

The program was developed as part of Governor Dannel Malloy's Let'sGoCT! transportation initiative. Launched in 2015, the initiative set forth an ambitious 30-year vision for the state, calling for "a best-in-class transportation system" to be achieved by supporting statewide, corridor, and local projects across all transportation modes.

A key element of the initiative was to support **sustainable communities**, including a program to promote pedestrian- and bicycle-friendly urban centers. CTDOT officials decided to take the concept one step further, incorporating rural areas as well.

The initiative supports streamlined project delivery by helping to identify and build community support for needed intermodal connections. The aim of the Community Connectivity program was to improve conditions for walking and bicycling in community centers—defined as places where community members meet for social, educational, employment, or recreational activities. It was intended to support intermodal connections with a focus on bicycle and pedestrian safety, including transit "last mile" connectivity and better, safer access to employers, business districts, and residential areas.

Colleen Kissane, Transportation Assistant Planning Director in CTDOT's Bureau of Policy and Planning, leads the Community Connectivity Program. Kissane said officials decided to follow the lead of a successful **pilot road safety audit** funded by the Federal Highway Administration (FHWA) in 2015. CTDOT would lead by example, working with towns and cities to conduct their own road safety audits at important bicycle and pedestrian corridors and intersections across the state.

CTDOT reached out to all 169 municipalities, offering to conduct one road safety audit for each town. Criteria were established based on a similar effort conducted in Massachusetts, she said.

The agency received 80 responses and moved forward to conduct all 80 audits within an 18-month period, ending in Spring 2017. In all, the program brought together over 500 participants from towns and municipalities and evaluated 117 miles of roadway and 583 intersections. The audit program covered all geographic areas of the state, including downtown areas and town centers as well as urban, suburban, and rural areas. Each of the 80 audits resulted in a formal report, all of which are **posted online**.

What is a Road Safety Audit?

It is a formal assessment of the existing conditions of walking and biking routes that follows FHWA's **road safety audit guidelines**.

Who conducts the Road Safety Audit?

A team of experts in traffic, pedestrian and bicycle operations, design, local officials and other stakeholders.

How is a Road Safety Audit conducted?

The team works together to evaluate the safety of a specific location through on-site visits. The team looks at:

- ▶ Current accommodations for all road users;
- ▶ Ways to improve access; and
- ▶ Ways to reduce crash risk.

What happens next?

The audit team comes up with options for addressing the identified concerns including:

- ▶ Low-cost actions that can be implemented in the short term
- ▶ Higher-cost, longer-term actions that can be taken in the future.

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► What Did They Find?

Patrick Zapatka, who managed the road safety audit program for CTDOT, said the audits identified important safety concerns including:

- inconsistency in sidewalk and crosswalk network, materials, size, and condition;
- lack of maintenance;
- lack of Americans with Disabilities (ADA) accommodations;
- old signage, pavement markings, and signals;
- vehicle conflicts (speed, volume, trucks, parking);
- wide travel lanes for traffic; and
- lack of or incomplete pedestrian connections.

Identifying the problems was just the first step. Each team also came up with long-term, medium-term, and short-term recommendations for addressing the issues.

Proposed solutions included infrastructure improvements—such as maintaining sidewalks, signage, sightlines, and crosswalks; upgrading signal equipment and pavement markings; and narrowing vehicular travel lanes to allow for wider shoulders.

In addition, improving communications was a key theme. The audits showcased ways for communities to develop consensus around proposed plans and improvements and helped to improve relationships between municipalities and state agencies.

► Taking Action to Improve Conditions

After each town identified needed improvements and solutions, the next step was for CTDOT to provide funding to help towns implement the recommendations. In 2017, the agency launched a \$10 million Community Connectivity Grant Program to provide funding for municipalities to perform smaller scale capital improvements. CTDOT again reached out to towns and municipalities with a solicitation and received 80 applications for funding. Although many of the projects proposed for funding stemmed from the road safety audits, applicants were not required to address only those projects. The grants ranged between \$75,000 and \$400,000 and most of the applicants requested amounts ranging from \$200,000 to \$300,000.

CTDOT reviewed the applications and made its project selections. In July 2018, CTDOT announced that the State Bond Commission approved its request to fund the program. All municipalities that submitted applications for grants will be notified about specific funding decisions.

In the meantime, the towns “got a free document they can use to go to their local officials to advance some of these needed



Connecticut DOT's Community Connectivity Program sponsored 80 road safety audits, helping towns such as Portland identify needed improvements. *Photo: CTDOT*

Conducting Road Safety Audits

Under the Community Connectivity Program, each road safety audit team was unique, depending on the needs and challenges of the individual location. Typical team members included CTDOT staff, municipal officials and staff, law enforcement officials, consultant experts, and community leaders.

The teams gathered pertinent information about the chosen location, including maps, crash and traffic data, and pedestrian counts. Each audit, which lasted a single day, included a pre-audit meeting to discuss objectives and review available data as well as a field audit, during which the team visited the location.

For each location, teams evaluated a range of factors that could promote or obstruct safe walking and bicycling routes, including:

- shoulder width;
- sidewalk width and condition;
- pavement markings;
- traffic volume;
- on-road parking locations;
- presence of bicycle lanes;
- traffic signalization;
- topography;
- drainage; and
- sightlines.

Following the field audit, the teams conducted post-audit meetings to identify potential short-term and long-term recommendations.

improvements," Kissane said. And many towns are moving forward without the grant funding.

For example, the town of New London is targeting available funds to address bicycle and pedestrian challenges identified in its [road safety audit](#). The Williams Street Bicycle and Pedestrian Improvements project includes the construction of a sidewalk, a raised crosswalk, a raised intersection, and shared-road markings for bicyclists. It will be funded with 80 percent Federal dollars and a 20 percent match from the town.

CTDOT also has stepped in to address "low-hanging fruit" identified by the various audit teams. CTDOT maintenance staff were invited to participate in the audits and have been able to help towns with tasks such as tree trimming and pavement striping—relatively easy maintenance activities that provide significant safety improvements, according to Kissane.



Improvements to pedestrian crossings, such as painted stamped crosswalks, were among recommendations in the New London Road Safety Audit. Photo: CTDOT

► Challenges and Lessons Learned

Kissane said the audits were a learning process, developing relationships and gathering knowledge from local officials and members of the community.

CTDOT's initial pilot audit brought in a range of stakeholders who "knew the road"—including public works directors, fire fighters, the police chief, and even the mail carrier, in addition to community members and neighborhood groups. In the process, CTDOT learned that taking two days of people's time was too much, and for the statewide program it reduced the audits to a single day.

Kissane said she would highly recommend this type of program to other state DOTs. The most beneficial aspect was the one-on-one interactions with the towns during the audit process.

"That's not something we do in our normal course of business, and we've developed better relationships with the towns because of it," she said.

By reaching out to communities across the state, Kissane said, "it was extraordinary what we learned and what we shared."

For example, Kissane said one audit revealed disconnects between the local officials and the state DOT. "They had misinformation about what we do," she said. Now that new relationships have been forged, local officials have a face and a name at the state agency that they can call and ask questions. "That has been a huge benefit," she said.

As a result of the audits, CTDOT and the 80 towns now have identified issues that need to be addressed and specific ways to streamline needed improvements for bicycle and pedestrian safety and access across Connecticut.

CTDOT officials are hopeful the grant program will continue on an annual basis as a way to continue improving bicycle and pedestrian connections throughout the state.

For more information on the Community Connectivity program, link to the [program website](#) or contact Colleen Kissane by email at CTDOT.CCGP@ct.gov.