streets. Researchers found that in most instances, LED streetlights that meet RP-8 requirements for continuous lighting are more expensive to own and operate over the life cycle than conventional lighting. Intermittent lighting systems and other installations with less stringent requirements may produce different results.

Ben Jordan, Program Director with the Transportation Information Center who also teaches a continuing education course on effective roadway lighting, recommends that local governments look closely at the factors that influence their own situation but then go a bit further.

"Determine the lighting design criteria that apply to a specific project and use lighting design software to get the results that meet the criteria," he suggests. "Even a basic design gives agency officials a foundation for making a clear comparison of their LED and conventional options." Low- or no-cost software from lighting manufacturers can make it easier to look at costs for initial purchase, installation, maintenance and energy consumption.

Lower environmental impact is another reason to consider upgrading to LEDs. Savings in this area are harder to calculate, but worth exploring to better understand the long-term implications.

LED futures

Advances in product design and growing competition in the streetlighting market means LED technology is worth keeping in mind for replacement or redesign projects. The numbers may not "pencil out" this year, but they might make sense in subsequent years. Local governments will benefit by reviewing information about LED streetlights from credible sources and studying the results reported by communities in Wisconsin who are early adopters of the new lighting technology. ■

Community Maps highlight crash data

LOCAL GOVERNMENT officials can view and map crash data on the roads they manage thanks to collaboration between the Wisconsin Transportation Information Center (TIC) and the Traffic Operations and Safety (TOPS) Laboratory at the UW-Madison. The web-based Community Maps program provides local agencies with the facts they need to keep roads safe and traffic moving.

Joni Graves, who directs the project for TIC and works with developer Steven Parker of the TOPS Lab, says it is the aim of Community Maps to give local road officials, law enforcement and county Traffic Safety Commissions (TSCs) a powerful resource to help them identify and prioritize safety improvements. Users can access data on fatal traffic accidents from 2001 to the present.

The site uses the familiar Google Maps to create an online tool available for viewing by the public. General users can search for results in one or more counties and limit their search by date range, crash severity or manner of collision. They also can identify two points on a segment of road or draw a "boundary box" around an area of interest.

How it works

Many local governments will benefit from the advanced search functions of Community Maps, which requires login account access to the WisTransPortal. Advanced users can create spot maps and download data from their search results. The "admin" feature allows registered users to map and manage their crash data.

To maintain the map of fatal crash locations, Graves updates the site with preliminary data from the Daily Fatality Report (DFR). Then she seeks information directly from local law enforcement to augment the report and make the map timelier. "We use a simple, web-based interface to request additional information, an approach I hope builds awareness of Community Maps and piques some interest in using it locally," Graves explains.

Adding users

A number of local officials began mapping crash data during the pilot phase for Community Maps and the project is looking for more local governments to incorporate its benefits into their planning.

One new user is Theresa Burgess, Chief Deputy with the Lafayette County Sheriff's Department, who switched from managing crash data manually to working with Community Maps about six months ago. After creating an up-to-date crash file from a backlog of data with help from TIC, she now produces spot maps on fatal crashes for the county's TSC.

Continues on page 6

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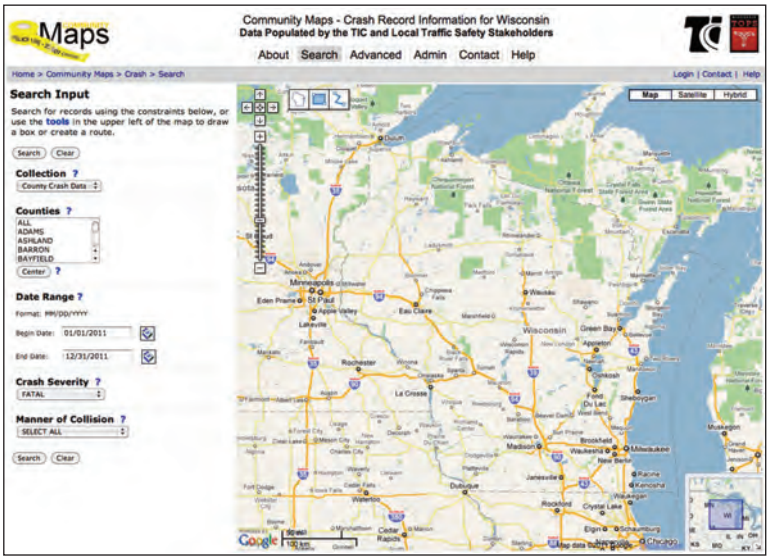

Community Maps main page opens on a map of Wisconsin with tools in the left-hand column to search for data on one or more counties.

Community Maps highlight crash data

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Burgess describes the program as easy to use and a "huge step in a positive direction" for her operation. The online tool allows her to verify details and locations for all local crashes, including car vs. deer incidents, injury accidents and property damage. She expects her department to expand its use of Community Maps, taking advantage of other features for plotting and managing crash data.

Make data available

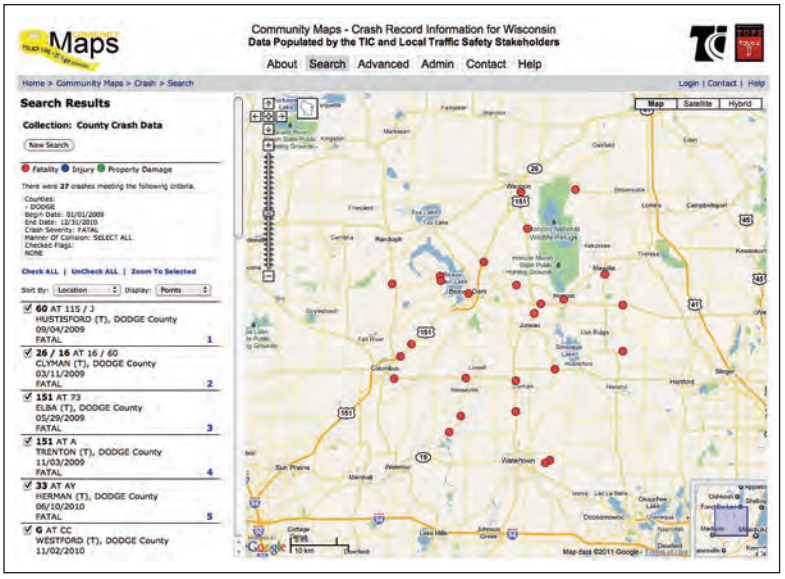
Graves started working on the project six years ago when she was Transportation Planner at the Southwestern Wisconsin Regional Planning Commission. About a year into the pilot, she began collaborating with Parker, who developed the Community Maps software and maintains the WisTransPortal at the TOPS Lab. The TransPortal was introduced in 2006 and is the repository for transportation data from various sources, providing a centralized source for historical crash data.

The Wisconsin Bureau of Transportation Safety (BOTS) supports the Community Maps project and hopes users across the state will participate in mapping local crash data.

According to the recently retired director of BOTS, Major Dan Lonsdorf, the Bureau's goal is to reinforce the TSC network's role as a primary source for unfiltered crash data. Providing local users with a resource for mapping and managing their crash data helps ensure that valuable data is more accessible and timely. Lonsdorf adds, "The information also will be more complete, since local use of local data will lead to improvements in data quality."

Resource for TSCs

The state established TSCs in 1971 to work at the county level on reducing the incidence and severity of traffic crashes. Membership includes the county highway commissioner, chief law enforcement officer and other local



Sample search shows Dodge County map with dots marking fatal crashes from January 2009 to December 2010. Details on each incident appear in the list on the left.

stakeholders. Each commission is responsible for preparing and maintaining spot maps of crash locations in their jurisdiction, monitoring traffic safety problems and recommending corrective action. Community Maps is a resource for TSCs in support of this effort.

"The maps project provides TSCs with crash facts they can use to guide their search for strategies to improve safety generally or implement counter measures in a specific location," says TIC Director Steve Pudloski. "The historical data is especially important for seeing trends that indicate a roadway or intersection is prone to crashes."

Expand content and quality

As part of her campaign to expand content and improve data quality, Graves is connecting with potential users. She has attended TSC meetings to provide an overview of the project and seek input. Recently, she surveyed members attending the annual Wisconsin Traffic Safety Officers Association (WTSOA) conference to learn more about local crash mapping and gauge their interest in using Community Maps.

She also considers it important to make Community Maps easy for law enforcement officials to use, noting, "No one goes into that field because they want to do paperwork." TIC is collaborating with a sheriff's department in southern Wisconsin to develop and document a more efficient and timely process for incorporating local crash data. Graves hopes this will be a model other departments in Wisconsin can replicate.

Data-based decisions

Graves says she appreciates the commitment of all Community Maps partners to making the concept work—from having an accessible online tool with 10 years of statewide crash data to the growing number of local users who contribute to its value. "After years of development, it is energizing now to see local decision makers using the program to spot trends and take action."

Community Maps is part of TIC's ROaDS (resources, outreach, and data support) initiative to support TSCs and local law enforcement. Pudloski observes that as the scope and quality of available crash data improves, it will help focus local efforts to manage and maintain safer roads. ■

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Resources

http://tic.engr.wisc.edu/Community_Maps
Page with link to Community Maps search request screen on the TIC website.

http://transportal.cee.wisc.edu/help/
WisTransPortal landing page with information about creating a login account for access to advanced map searches.