WISLR-based update produces better crash data

FOR LOCAL ROAD AGENCIES in Wisconsin, activities like identifying high crash locations, prioritizing improvement projects and evaluating safety outcomes from an operational change require access to complete and reliable crash data.

A source many of them turn to is WisTransPortal (*http://transportal. cee.wisc.edu)*. There, local road officials can review state and local crash data from 2005 to the present on computerized maps and extract a range of valuable safety information. A recent update based on WISLR, the web-accessible, GIS map-based local roads inventory system, promises to make WisTransPortal a better resource than ever.

The update makes it possible to combine information on road features and pavement conditions local governments enter in WISLR with detailed statewide crash data from the Wisconsin Department of Transportation database that supplies WisTransPortal. The Wisconsin Traffic Operations and Safety (TOPS) Laboratory on the UW-Madison campus created the recent enhancement with funding from the WisDOT Highway Safety Improvement Program (HSIP) in collaboration with WisDOT's Bureau of State Highway Programs and Bureau of Traffic Operations, the FHWA and other research partners.

Points on a map

TOPS Information Technology Program Manager Steven Parker says the result is a resource that merges state and local crashes on a single map linked to the state's roadway inventory system and GIS network. The change brings road attributes and crash history together for the kind of analysis local governments need to prioritize improvement projects and apply for transportation aids.

"Our goal was to display crash data that are more than just points on a map," he notes. "The content and how it's organized gives analysts something they can examine according to a range of details, like functional class and traffic volumes, along with crash incidents."
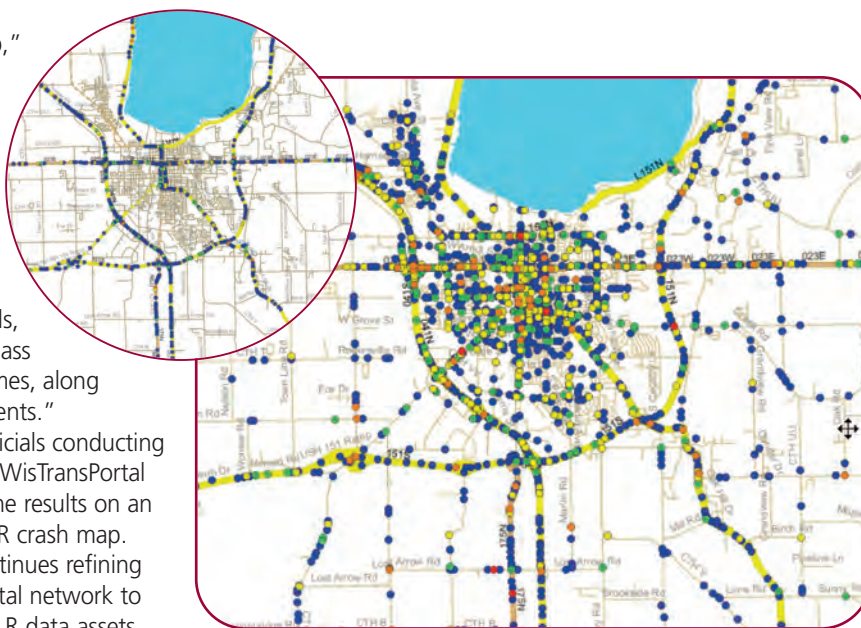
Local road officials conducting a search on the WisTransPortal now can view the results on an interactive WISLR crash map.

TOPS Lab continues refining the WisTransPortal network to bring more WISLR data assets together with the data on all crashes statewide. Future improvements include greater coordination between WISLR and Community Maps, an online tool that currently enables local law enforcement and Traffic Safety Commissions to visualize and map crashes. The Wisconsin Transportation Information Center has mapped fatal crashes in Community Maps from 2001 to the present. Some local governments also map injury crashes in their jurisdictions.

Data-driven decision-making

Parker says improving WISLR crash-mapping capabilities helps prepare Wisconsin to adopt the requirements for data-driven decision-making outlined in MAP-21, the federal highway bill signed into law last summer. He adds that it associates WISLR with safety improvements that are an intended role of the inventory tool, "because we know the surface condition of a road really does have an impact on safety."

Access to this kind of information also benefits TOPS Lab research and the group's efforts to improve safety by identifying crash trends on both state and

WISLR crash maps now combine information on road features and pavement condition with detailed crash data.

local roads, information they can share with road agencies across the state.

Local input

Local road agencies keep WISLR condition data up to date by entering details on their road assets every year and information on pavement condition every other year. Their contributions ensure the online inventory is a useful part of the combined data resource of the WISLR enhancement.

Parker encourages local road officials to access web applications at WisTransPortal, sample this new source for quality data and provide the TOPS Lab with feedback. ∎

The change brings road attributes and crash history together for the kind of analysis local governments need to prioritize improvement projects and apply for trans - portation aids.

Resources

crash-data@topslab.wisc.edu
General TOPS Lab crash data resources.

http://transportal.cee.wisc.edu/ services/crash-data/
Information on WisTrans-Portal crash data resources, including information on how to request user account access and/or crash history from TOPS Lab.

Contact

Steven Parker
TOPS Laboratory
608-265-4921
sparker@engr.wisc.edu

CROSSROADS
Wisconsin TIC
UW–Madison

WINTER
2013

http://tic.engr.wisc.edu   7