Wisconsin Crash Report Form Redesign
By Andrea Bill, Steven Parker, Randy Romanski

The Wisconsin Department of Transportation (WisDOT), in collaboration with local law enforcement representatives and other stakeholders, has embarked on an agency wide initiative to improve crash data collection and safety analysis capabilities by updating the existing Wisconsin MV4000 crash report form. The redesigned form will be rolled out on January 1, 2017 and will serve as the basis for a new crash database management system that will be deployed at the same time. Several important changes will accompany the rollout of the new crash report form including a requirement for all law enforcement agencies to submit crash reports electronically through the Wisconsin Badger TraCS system and an internal WisDOT reorganization that will transfer stewardship of the crash data from the Division of Motor Vehicles to the Division of State Patrol. This article provides a summary of important information about the crash report redesign and what it means for analysts and other end users of Wisconsin crash data.

What is it?

A new crash report form (MV4000) and a new crash database will be developed to more fully capture the conditions at the crash scene. The new form and database will be developed using national standards from US DOT (http://www.mmucc.us) to improve safety from a national perspective. Additionally, the new form will allow for more direct safety comparisons from state to state. The Badger TraCS online help manual and training will be updated to ease the transition by law enforcement to the new crash report form.

The new form will include several new fields, including 77 at the crash level, 36 at the vehicle level, and 35 at the person level. At the same time 14 existing fields will be deleted from the crash level, and four will be deleted from the vehicle level. Additionally, at the crash level 11 fields will have additions to the existing fields, 15 existing fields will have additions at the vehicle level, and 18 fields will have additions at the person level.

An example of an existing field with additional choices being added is the location of a pedestrian at a crash. On the existing form there are 5 choices for an officer at the scene of a crash to select. The new MV4000 will include 15 choices. A comparison is shown below.
Wisconsin News

Why is it important?

The updates to the MV4000 and crash database will be used to improve safety on Wisconsin roadways. Currently, $12 million is granted to law enforcement to improve safety on the roads. Crash history is also a critical input for state and local safety engineering project planning and is an increasingly important requirement for MAP 21 performance measures. With more complete information about traffic crashes and a more complete crash database, unsafe roadways can be more easily and accurately identified, and the problems can be rectified with the ultimate goal of achieving zero deaths on Wisconsin roadways: Zero In Wisconsin.

Examples:

EMS Run Number: The EMS run number is an important addition to the newly revised MV4000 because it allows for easier linkage between the crash information completed by the law enforcement officers on the MV4000, and hospital data from medical practitioners. The hospital data contains the health outcome of the patient and can provide more accurate and complete understanding of injury severity and the costs of traffic crashes.

What are the problems and how to address?

The current MV4000 crash report form does not contain specific fields for some common crash characteristics that would be beneficial to improving the safety of roadways in Wisconsin. Some of these characteristics not specifically on the current MV4000 include guardrail crashes, roundabout crashes, and cell phone use during a crash. Currently to determine whether one of these attributes is involved in a crash, report forms need to be evaluated carefully and thoroughly, specifically the narrative written by the officer at the scene of the crash.

The newly designed MV4000 and crash database will contain additional fields and choices for an officer to select from. These new fields will make a more complete picture of the crash scene, both from the roadway characteristics (if a guardrail was involved, if the crash was at a roundabout) and from a human factors perspective (what the crash victims were doing at the time of the crash/ what caused the crash).
The addition of guardrails, and more intersection control choices (roundabouts, signals, stop signs) allows for safety analyses to be completed more easily, and ensures that all crashes, or crash types, at a particular location are accounted for.

Additionally, several fields were slightly changed to add more information allowing for a more complete picture of what happened before the crash (such as where the driver was located on the roadway and whether they were distracted, intoxicated, etc.), during the crash (such as the manner of collision, and the belt usage or safety equipment used by the crash victim, if any), and a more complete picture of what happened to the crash victim(s) after a crash occurred (such as their injury severity, the EMS run number, and health outcomes assessed by medical practitioners).

What are the potential impacts to existing analysis processes?

The new crash report form and database will provide more complete and descriptive information about the crash scene, but will also introduce several challenges for existing processes. Applications that incorporate crash data from the Wisconsin Department of Transportation and/or the Traffic Operations and Safety (TOPS) Laboratory will need to be modified to accommodate the new set of elements. In addition, multiyear analyses that span the new and old forms will need to account for changes to crash report form field definitions and field choices. WisDOT will provide guidance on how to best align new and old data elements with the rollout of the new crash report form.

What it’s not? The new crash report form and database were created for a more complete understanding of every crash to benefit the safety of the roadway. The new form is not created for insurance purposes.

For more information, please contact the following individuals:

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Once again the summer is going by fast! It has been another busy summer for the Wisconsin Section and we thank you for your continued support and participation in ITE events.

Here are a few of the summer’s highlights so far:

• The summer started with our annual Fox Valley meeting in Green Bay. Tammy Rabe from WisDOT gave an interesting presentation on the Interstate Conversion and Tri County Expansion. It’s always great to see some new faces and connect with our Fox Valley members.

• The ITE Midwestern District Conference in Branson, Missouri had a host of interesting presentations and topics. It was also good to meet ITE members, and hear about the events going on in the other Midwestern states.

• The July section meeting was held at Villa Palermo in Milwaukee. This was our annual ITS/ITE joint meeting. Terry Haukom gave a very interesting presentation on the ITS projects at MNDOT. The Ken Voigt Young Member Award was presented to Tristan Hickman of Ayres Associates. Please see Tristan’s article in the newsletter about his trip to Hollywood, Florida to attend the ITE Annual Meeting!

• We had two summer social events again this year. The first event was held on June 4 at a Madison Mallards game. The good weather and great attendance made for a very enjoyable evening. The second event was held on Thursday, August 13 at the Lakefront Brewery. We appreciate seeing and getting to know our fellow ITE members at these events!

The Section Board plans to continue the summer’s momentum through the fall with several events planned in the next few months.

• Our next meeting will be on Wednesday, September 9th in Milwaukee. This will be our joint breakfast meeting with the Women’s Transportation Seminar (WTS). We hope you can join us for this popular event.

• As we move towards fall, it is time once again to think about our annual board elections. The Section will be electing individuals for the Affiliate Director and Member Director positions. As always, in order to be eligible to vote, your annual Section dues must be current. Please contact me if you are interested in running for one of these positions. Be sure to check your inbox or itewisconsin.org for election notices.

If you have questions or comments, please feel free to contact me at dawn.krahn@dot.wi.gov.
Recent Meetings, Events & Awards

Fox Valley Section Meeting
May 13, 2015
By Doug Senso

On May 13, the ITE Wisconsin Section Meeting was held in the Fox Valley Area at St.Brendan’s Inn in Green Bay. It provided a nice opportunity for the ITE Wisconsin Section officers to visit with members located in northeastern Wisconsin.

Tammy Rabe, Wisconsin Department of Transportation Northeast Region Supervisor, discussed two important projects: the Tri County (WIS 441) Expansion Project and Interstate Conversion of US 41 to I-41.

On the Tri County Expansion Project, Tammy enlightened the group on some lessons learned, the Department’s design flexibility to address public concerns, and the use of an unmanned aerial vehicle (UAV) to view construction progress on the project.

She also discussed the Interstate Conversion taking place to change US 41 to I-41 from the Illinois State Line to its northern terminus at I-43 on the north side of Green Bay. This project mainly consists of signing changes. Interestingly, Tammy noted that the conversion is expected to encourage more commercial growth along the corridor as businesses look to locate near Interstates more readily than US Highways. Business’ perceptions of Interstate Highways are more favorable than a US Highways in regards to mobility and access.
The first ITE Wisconsin Summer Social event of the season was held on June 4 as the Madison Mallards took on the Green Bay Bullfrogs. Although the Mallards were defeated, 7-3, it was a beautiful evening for baseball and socializing. We had great seats right behind home plate, but we also enjoyed the atmosphere in the Tricor/West Bend Club area and the unlimited ballpark food. It happened to be Star Wars night, which added to the general festivity of the night. Darth Vader and assorted Stormtroopers were on patrol in the park, and the Mallards wore R2D2 jerseys that were auctioned off that night. Gift card door prizes were awarded to five lucky folks.

Thank you to our corporate sponsors who help keep these events affordable!
Joint Lunch Meeting with ITS Wisconsin
July 15, 2015
Article by Allan Pacada, Photos by Ashley Vesperman

On July 15, 62 members of both the Wisconsin Section of ITE and ITS–Wisconsin attended a joint lunch meeting at the Villa Palermo, located in Milwaukee’s Menomonee Valley.

To start the meeting, Richard Coakley presented the Ken Voigt award recipient to Tristan Hickman of Ayres Associates. The Ken Voigt Award recognizes achievement in transportation by younger transportation professionals and ITE members. The applicants submit a paper describing their involvement in a transportation related project. Tristan received a plaque, as well as reimbursement to attend the ITE Annual Meeting in Hollywood, FL for his efforts.

The featured guest speaker, Terry Haukom, the Minnesota ITS President, gave a presentation on the ITS projects at MnDOT and the latest Minnesota ITS events. Terry talked about how Minnesota Guidestar and ITS Minnesota are working to: conduct ITS research, perform operational testing, deploy projects, and their efforts for outreach to the general public. He also shared with the group about MNDOT’s high occupancy toll (HOT) lanes, MnPass express lanes and dynamic message signs, which are on strides to improve travel on Minnesota’s highways.

Special thanks to ITS Wisconsin for another great meeting. It is nice to be able to bring together our organizations to discuss transportation issues that affect all of us.

Have you visited our new website lately? Do you have any comments or suggestions that you would like to share with us? Do you have any photos that you would like posted on our website? If so, please contact John Bruggeman, Website Administrator, at (262) 317-3353 or John.Bruggeman@rasmithnational.com for more details.
ITE 2015 Annual Meeting & Exhibit in Hollywood, FL
August 2-5, 2015
Article by Tristan Hickman, 2015 Ken Voigt Younger Member Award recipient

The opportunity to attend the 2015 ITE International Annual Meeting Hollywood, FL as the winner of this year’s Ken Voigt Younger Member Award has widened my understanding of ITE. The vast amount of content provided by the workshops and the opportunity to meet so many members of the organization from across the country showed me the span of ITE’s reach on topics such as complete streets, cyber security, and signal intervals.

During the opening plenary session, Manny Diaz, former mayor of the City of Miami, told of how he guided the transformation of Miami from a depressed area into one that is revitalized and surging economically. Diaz highlighted his various traffic engineering achievements in persuading local legislators to embrace slower speeds and one-way to two-way street conversions as a means of bringing his constituents back into the unique neighborhoods that give Miami its image. After the opening session I had the opportunity to attend the Designing Urban Streets workshop, where presenters covered the NATCO guidelines and led attendees in a discussion on how bringing a data-driven, holistic approach to design would lead to better outcomes. Presenters provided attendees with a look at how communities have embraced the concept of complete streets by creating guidelines to provide a framing and identity for their streets. Another interesting session was the Cyber Security Challenges workshop, which challenged traffic engineers to assume a security mindset. Universities are better preparing students to understand that ITS signs, traffic signal systems, and the not-far-off autonomous vehicles all have computer systems with vulnerabilities to hackers. Yikes!

As the day continued, I attended other workshops, stopped into the marketplace, and caught some of the Collegiate Traffic Bowl. My trip to the marketplace gave me the opportunity to speak with vendors at PTV VISION, McTrans, and many other businesses to ask very specific questions about the software packages I use every day. During the Collegiate Traffic Bowl, the crowd was almost as excited as the students to guess the answers to questions about ITE and the field of traffic engineering and planning. Unfortunately, no schools from Wisconsin attended this year. Let’s hope that next year in Anaheim one of our four state student chapters has the chance to travel and compete!
The next day, one of the sessions I was very excited to hear was the Traffic Signal Interval workshop. It proved to be a lively discussion of the effects of adjusting the critical stopping distance within an intersection. Though the viewpoints given by the workshop moderators and presenters weren’t necessarily all in agreement, the level of professionalism that dominated the discussion was refreshing. Being a millennial, I was also curious about the Transportation Revolution workshop. The discussion covered the recent shift in what the public wants from its roads as there has been a stark increase in advocacy for bicycle and pedestrian accommodations. The panel of presenters acknowledged that with the difficulties the country faces in transportation funding, it is also important to look at the dynamic mode shifts such as transit, the rise of Uber, increased debt, and the current economy as reasons the discussions are more complex than they seem. Though there was no single answer to tomorrow’s problems, the discussion proved that people are engaged and ready to give meaningful thought to those questions.

That evening ITE and the Young Professionals in Transportation (YPT) hosted a gathering that allowed members to come together and network in a relaxed, informal atmosphere. I had the opportunity to catch up with conference attendees from Wisconsin and throughout the organization.

During the closing session, a panel of presenters, including John Kennedy, the current International President of ITE, and Paula Flores Benway, next year’s President, spoke of our role in the future of transportation and took questions from the audience. A lot of the questions reaffirmed the conversations that transportation professionals across the nation are facing as we deal with alternate modes of transportation.

But outside of all of the workshops and presentations, it was nice to meet so many ITE members who are embracing traffic engineering as their chosen career. I had the opportunity to meet a few LeadershipITE members who spoke of the program’s value for their professional careers. LeadershipITE identifies, develops, and engages leaders to ensure that ITE and its members are positioned to engage and shape the future of transportation. The members are at various stages of their careers, which I expect brings a great mix of thoughtfulness to their class.

For anyone looking to attend a future meeting, I definitely recommended it. I found the information provided and the opportunity to build new connections invaluable. The workshops afforded members the chance to not only learn from the presenters, but to engage in important conversations that potentially will influence the future of traffic engineering.

2015 Burton W. Marsh Distinguished Service Award

Congratulations to Wisconsin Section’s, John Davis of Ayres Associates, for receiving the 2015 Burton W. Marsh Distinguished Service Award at the ITE 2015 Annual Meeting & Exhibit in Hollywood, FL. The award recognizes an individual who, in the judgment of a committee of judges, has contributed to the advancement of ITE over the periods of years in an outstanding fashion. Currently, John serves as chair for both the ITE Traffic Engineering Council and the Collegiate Traffic Bowl Committee, as well as co-chair for the 2017 MWITE Annual Conference.
The second social event was held at Lakefront Brewery, located in the vibrant Riverwest district of Milwaukee. Wisconsin section members and their guests were treated to a delightful tour of the microbrewery’s facility, which used to house an old coal-fired power plant. The evening’s tour guide was nothing short of entertaining as he provided history of the brewery accompanied by his own beer humor. The evening was filled with a great opportunity to network, have fun and enjoy some good food and beverage! Thank you to the social event committee for organizing a wonderful event!
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Midwestern District Update

Wisconsin Section in the 2015 Midwestern ITE District Annual Conference - June 29-July 1, 2015
By Dawn Krahn

The 2015 ITE District conference was held in Branson, Missouri from June 29th to July 1st. There were many very interesting presentations over the two-day conference. For example, Carl Anderson gave an in-depth presentation about the connected vehicle technology and testing that is going on within the public and private sector. Carl serves as the Connected Vehicle Program Coordinator for the Federal Highway Administration and provides overall coordination and facilitation of FHWA efforts in support of the Research and Innovative Technology Administration’s Connected Vehicle Program.

Presentations and activities by Wisconsin Section members included:

- Rebecca Szymkowski presented on “Wisconsin Intersection Safety”, and was part of a panel discussion on “Transportation Revolution”
- Rich Coakley presented on “Integration of Safety in a Project Development Process and Beyond: A context Sensitive Approach”
- Mark Johnson presented on “A Synthesis of Roundabout Design Optimization for Safety and Operations”
- Dawn Krahn and Todd Polum presented on “Travel Reliability and Benefit-Cost Evaluation”
- John Davis helped to organize and run the Student Traffic Bowl Competition
- Mike McCarthy and Rebecca Szymkowski participated in the Midwestern District Board
meetings for a full day before the technical meeting began.

In addition to the technical conference, attendees enjoyed some of the many attractions in the city of Branson. On Tuesday evening, the group enjoyed a very entertaining dinner cruise on the Showboat Branson Belle.

John Davis presents the 2015 Student Chapter Award to Mike Phan, president of ITE Illinois Section, who receives it on behalf of the University of Illinois-Urbana Champaign

Are you interested in advertising in our quarterly newsletter or the ITE Wisconsin Section website? Advertising is a great way to sponsor the Wisconsin Section and promote your firm/agency to hundreds of fellow Wisconsin Section members! Contact Ashley Vesperman, Affiliate Director, at (608) 836-9800 or Ashley.vesperman@aecom.com for more details.
Iowa State Regains Midwestern District Traffic Bowl Title!
By John Davis, MWITE Traffic Bowl Chair

Congratulations to the Iowa State University student chapter in their winning of the 2015 Midwestern District Traffic Bowl at the recent annual conference of the Midwestern District (MWITE) in Branson, Missouri. This was the 7th appearance for Iowa State in the District’s Traffic Bowl, having participated in every district traffic bowl since its inception in 2009. They along with the University of Kansas are the only schools to have participated in every Midwestern District Traffic Bowl! A total of 15 of the 23 student chapters in the District have fielded a team for at least one of the seven annual competitions.

In the semi-final round of games, top-seeded Iowa State advanced to the championship game by defeating Saint Louis University; the University of Illinois-Urbana/Champaign upset second seed North Dakota State University in the second game; and defending champion Kansas returned to the final game with a win over Southern Illinois University at Edwardsville.

In the championship Iowa State was victorious over Illinois and Kansas to win their second district traffic bowl and earned a spot to make their second appearance in the ITE Traffic Bowl Grand Championship held in Hollywood, Florida, USA.

In addition to Iowa State and Kansas returning to their 7th MWITE Traffic Bowl, Illinois and Southern Illinois each made their sixth appearance at the district’s traffic bowl. North Dakota State and Saint Louis University each made their second straight appearances in the annual competition.

Thank you to all the students and members who supported and made this event a success! Special recognitions to the volunteers - Kristi Sebastian, Carrie Falkenrath, Mike Phan, Rebecca Szymkowski, Danielle Vachal, Jennifer Pangborn-Dolde, Nick Erpelding, Ken Voigt, Steve Manhart, Jeff Young, and John Michael Davis for their efforts prior to and at the event.

Students start planning now to attend the 2016 District Traffic Bowl that will be held during the Midwestern District Conference from June 26 to 28 in Chicago.
Save the date of June 26 through June 28 for the ITE Midwestern and Great Lakes Joint District Meeting in the heart of Chicago. This meeting will represent 14 states, providing an opportunity for attendees to network with a diverse group of transportation professionals and to experience a robust technical program focusing on the latest trends in transportation. It will be located at the Holiday Inn Chicago-Mart Plaza River North, steps from downtown Chicago’s famous restaurants, shops and attractions.

For more information, visit www.chicago2016mwglite.com

2016 Midwestern District Election Results

Congratulations to Mike Bittner (NCITE) as the 2016 MWITE Secretary/Treasurer and Wisconsin Section’s own, John Davis, as the 2016-2018 MWITE District Director.
In Memory of Marty Hawley  
April 13, 1968 – August 15, 2015

After nearly a two-year, courageous battle against cancer, Marty Hawley passed on Saturday, August 15, 2015. The Traffic Engineering Community lost a dear friend and highly skilled professional in Marty. She inspired all those who had the pleasure of working with her. Marty’s always positive, “can-do” attitude and strong work ethic was the foundation of her extraordinary personality and helped define the truly special person she was. Her sound judgment, calm leadership and expertise strongly contributed to the success of each of the complex and challenging projects that she worked on, including the Zoo Interchange reconstruction, the Traffic Incident Management Enhancement (TIME) Program and the Milwaukee Streetcar project to name just a few. She was a talented and insightful engineer whose influence on these and many other southeastern Wisconsin projects will last for generations.

The Women’s Transportation Seminar awarded Marty the Woman of the Year Award in 2014, and the ITE Wisconsin Section awarded her the Young Professional Award in 1999. Marty also served on the Institute’s Traffic Engineering Council for a number of years. An eloquent speaker, Marty frequently gave presentations on the projects she was involved in; she was always happy to share her experience and knowledge with our community.

Marty’s full obituary can be found here:  

Marty’s infectious spirit and reassuring smile will be deeply missed by all those who knew and worked with her. Please keep her husband Pat and children Camille and Jack in your thoughts and prayers during this difficult time.
Upcoming Events

September 9  WTS/ITE Joint Breakfast Meeting
              Waukesha, WI

Please join us at 7:30AM at the WisDOT Southeast Region office in Waukesha. Peter Rafferty and Liz Schneider will give a presentation on using free travel time probe data for applications in Wisconsin and other midwestern states.

September 23  21st Annual ITS Forum
              Pewaukee, WI

October 14   UW-Platteville/UW-Madison Student Night
              Location - TBD

December 2   Annual Section Meeting, Distinguished Service Award, Harvey Shebesta Award,
              and Young Professionals Award
              Delafield, WI

Do you have some information or great ideas to share? The ITE Newsletter is an excellent medium for reaching section members. If you would like something published in the upcoming newsletter, please contact the 2015 Wisconsin Section Member Director, Allan Pacada at (414) 347-1607 or apacada@emcsinc.com.
ITE/WTS Joint Breakfast Meeting

**Date:** Wednesday, September 9, 2015

**Time:**
- 7:30 Registration/Social Time
- 8:00 Breakfast
- 8:30 Program/Speakers

**Place:** WisDOT – Southeast Region Office
Room 314 (new building)
141 NW Barstow Street
Waukesha, WI

**Topic:** Measuring System Performance with (Free) Probe Data

**Speakers:**
- Peter Rafferty, TOPS LAB
- Elizabeth Schneider, WisDOT

**PDH:** 0.5 PDH is offered for this presentation

**Menu:** The Farmer’s Feast
Meal includes bacon, scrambled eggs, hash brown cheddar casserole, bagels, cinnamon rolls, fresh cut fruit, coffee, and juice.

**Cost:** $15 – per person / $8 – students

Register and pay online at itewisconsin.org by Friday, September 4. WTS members or non-members can also register using the same site (register as guest). If you prefer to sign up via email or phone (and pay at the door), please RSVP by Friday, September 4 with Jenny Kobryn of Strand Associates, Inc. Jennifer.kobryn@strand.com (608-251-4843). No shows will be charged and no refunds will be made after the event.

**Directions:**
- **From East (Milwaukee):** Head west on I-94 W. Take exit 295 toward Wisconsin 74/Waukesha F/Waukesha/Sussex. Use the left 2 lanes to turn left onto Redford Blvd (signs for Waukesha F S). Redford Blvd turns slightly right and becomes E North Street. Turn left onto NW Barstow Street.
- **From West (Madison):** Head east on I-94 E. Take exit 294 for WI-164 N toward Waukesha J S/Waukesha/Pewaukee. Turn right onto Pewaukee Road. Slight right onto E North Street. Turn left onto NW Barstow Street.

**Next ITE Meeting:** October 14, 2015 – UW Madison and UW Platteville Student Night (Madison)

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