Improving Mobility in Downtown Appleton
By Amy Canfield

City centers across the nation are experiencing revival and renaissance. The downtown area in Appleton, WI is no different. Demographic and market studies consistently show that in a 21st century economy, people want livable, walkable neighborhoods. To meet these desires, the City of Appleton commissioned a mobility study of the transportation network in their downtown to evaluate strategies to improve traffic circulation and multi-modal mobility. The study included an evaluation and analysis of existing and projected conditions, an evaluation of alternative transportation modes (bicycle, pedestrian) and recommendations for future projects.

Mobility is about more than just vehicular traffic. One-third of the population does not drive and every trip, whether by personal vehicle, public transit, or bicycle, begins and ends with walking.

Existing conditions in downtown Appleton present several opportunities. Unlike many cities, traffic flows well, even during peak hours. Congestion is minimal and vehicles typically experience less than 20 seconds of delay (Level of Service B) at signalized intersections during the PM peak hour. Traffic forecasts predict manageable growth, with overall signalized intersection LOS operating at LOS C or better through 2036.

The downtown area is also already generally a pleasant place to bike and walk. The majority of the streets include continuous sidewalks on both sides; therefore the most significant pedestrian safety problems are at intersections. Many streets in the study area are good for bicycling. However, they rarely have destinations people want to go to. Many destinations are located on College Avenue, a busy arterial with an average annual daily traffic (AADT) volume above 13,800, a 4-lane undivided typical section and parking on both sides of the street. These characteristics make College Avenue suitable only for enthusiastic and confident bicyclists. Bicyclists are frequently observed riding on the sidewalk in downtown Appleton, even when it is not allowed, such as on College Avenue.

Figure 1: Northbound Route
The route northbound traffic coming from the Oneida Street bridge takes to / through downtown Appleton is indirect and confusing.
Transportation Issues and Opportunities

The main transportation issue in the downtown area is confusing northbound routing. Instead of a grid of two-way streets, northbound and southbound traffic through the middle of downtown Appleton uses one-way streets a few blocks apart. Appleton Street carries southbound traffic and northbound traffic uses several streets including Morrison Street and Oneida Street before eventually returning to Appleton Street north of the downtown area. This route is confusing for locals and especially for visitors. It is also difficult for bicyclists because it requires misdirection. In addition, the existing northbound route contains six confusing and/or unconventional intersections as identified by city staff.

Secondary issues and opportunities in the downtown area include:

- Lack of access to the Fox River – Elevation differences make it difficult for vehicles, bicyclists, and pedestrians to access the river.
- Unwarranted traffic signals – At least two traffic signals do not meet signal warrants. This results in unnecessary delay and frustration for drivers and bicyclists.
- Underutilized on-street parking – An independent parking study noted an oversupply of parking downtown, even with a new expo center, library, organic growth and the removal of two parking ramps.
- Bicycle access to destinations and parking at those destinations – Improved access to College Avenue destinations is needed. Bicycle parking is almost non-existent in the downtown area.
- Pedestrian safety – The study area has many unmarked crosswalks. For the marked crosswalks that do exist, many are between six and ten feet in width. Wider crosswalks of ten to fifteen feet are more easily seen by drivers. Further, where marked crosswalks do exist, most consist of two parallel lines rather than high visibility crosswalks with transverse stripes.

Alternatives Evaluated

Alternative 1: Maintain Northbound Routing

- Does not include any changes to northbound routing through downtown Appleton. Unwarranted traffic signals would be removed, signal timing updated and College Avenue designated a truck route. New bicycle facilities and pedestrian safety improvements would be included. This alternative would provide minimal traffic benefits to downtown Appleton.

Alternative 2: Two-way Appleton Street

- This alternative would convert Appleton Street to two-way traffic throughout the study area and make it the main north/south route into and through downtown. The majority of the one-way streets in the downtown area would be converted to two-way streets. The northbound Oneida Street bridge over Jones Park would be replaced and the land currently occupied by Oneida Street south of Lawrence Street would be vacated and available for redevelopment. This alternative would also include removing unwarranted traffic signals, designating College Avenue a truck route and removing on-street parking in several areas to accommodate bicycle facilities.

Figure 2: Two-way Appleton Street

This rendering depicts the 100 block of Appleton Street between College Avenue and Lawrence Street (looking south towards Lawrence Street) after conversion from one-way southbound traffic to two-way traffic.
**Alternative 3: College Avenue Road Diet**

- This alternative would not make any changes to northbound routing through downtown Appleton, but would convert College Avenue from a 4-lane undivided roadway with parking on both sides to a 2-lane roadway with a center two-way left turn lane and parking on both sides. This alternative was dropped from further consideration due to unacceptable traffic operations on College Avenue. Significant queuing occurred at the signalized intersections along College Avenue resulting in very poor LOS and near-gridlock conditions during the PM peak hour.

**Stakeholder / Public Involvement**

The study team used a combination of traditional public involvement methods (stakeholders group, public involvement meeting (PIM)) and social media to gain input on the study. The PIM was advertised solely using social media via the Appleton City Hall Facebook page. Prior to the meeting, four separate posts about the study were added to the page. Each post contained a link to a different article about the study. The outreach via Facebook was very successful. Four days of posts reached approximately 20,400 people and resulted in 2,246 clicks to the website stories from Facebook. The posts received 589 likes/shares. Sixty people attended the meeting in person, a standing-room only crowd. In addition, three news media outlets, FOX, CBS and ABC, featured stories about the study on their newscasts.

**Recommendations**

Alternative 2: Two-way Appleton Street is the recommended alternative. This alternative is recommended because it:

- Creates a direct northbound route to/through downtown Appleton by converting Appleton Street south of Washington Street from one-way to two-way traffic. To do this, the existing northbound Oneida Street bridge over Jones Park would need to be reconstructed.
- Improves several confusing intersections by eliminating almost all one-way streets in the downtown area.
- Provides an opportunity for additional economic development by creating a redevelopment parcel west of Trinity Church through the removal of Oneida Street south of Lawrence Street.
- Removes unwarranted traffic signals to reduce delay.
- Best utilizes the existing right of way to improve mobility for all modes of transportation by including numerous bicycle facilities such as standard bike lanes, buffered bike lanes, climbing lanes, shared use paths and shared lanes.
- Includes pedestrian improvements such as sidewalks where none exist, pedestrian lighting, access to the river and more visible and wider crosswalks.
- Creates direct truck routes through the study area. College Avenue and Appleton Street would become truck routes.

The recommended alternative will make getting around downtown Appleton much more intuitive, safer and convenient for vehicles, bicycles and pedestrians. It will, however, increase delay and queuing on Appleton Street and intersecting streets, but not beyond acceptable operations.

In August 2016 the Appleton Common Council voted 15-0 to approve the Downtown Appleton Mobility Study recommendations. In November 2016 the City took the first step towards implementing the recommendations by issuing a Request for Proposals to complete design for the new northbound Oneida Street bridge over Jones Park. Once the bridge is complete, Appleton Street can be converted to two-way traffic.
The President’s Message
By Stephan Hoffmann

It has been an honor to serve as the 2016 Wisconsin Section President. Thank you the Wisconsin Section Executive Board members and committee’s that made my job so much easier! Special thanks to Ashley Vesperman and Dawn Krahn for their years of service on the Executive Board as their elected terms end. I also extend a sincere welcome to our newly elected board members: Jeff Held/Member Director, and Justin Schueler/Affiliate Director (first year), and I encourage you to congratulate them when you get a chance. Finally, I wish Brian Porter all the best in the year ahead as he takes the driver’s wheel as ITE Wisconsin Section President for 2017!

We held our annual meeting at the Delafield Brewhaus on December 7th. The 2017 Wisconsin Section officers were sworn in, and we presented several awards including the Distinguished Service Award, Harvey Shebesta Award and the Young Professional Award. We had the distinct honor of receiving an update about ITE International from ITE President Elect Shawn Leight, as well as, an update from the Midwest District International Director John Davis. The evening was capped off with a fun round of Professional Traffic Bowl competition. As always, this meeting was a great time to reflect back on the past year, reconnect with fellow ITE members, and welcome our newly elected officers.

Please consider the following in the year ahead:

- I trust that you have each found value in your ITE membership this past year and I encourage you to renew your membership. If you are currently a Wisconsin Section Affiliate member, please consider the added benefits of upgrading to an ITE International membership.

- Encourage your peer engineers, staff engineers and coworkers to join ITE, especially the younger professionals that you work with. I still remember the invitations to attend Wisconsin Section meetings that I received from coworkers as a coop engineer many years ago. That was the beginning of many great experiences that I have had with ITE.

- Get involved in ITE! Join us for a section meeting and get reconnected with your fellow ITE members if it has been a while since you have attended. Join a committee if you would like to volunteer some of your time. Attend a workshop or training session to improve your transportation knowledge and pick up a few PDHs along the way.

Our next Section meeting will be held on January 18th. This will be our annual public service appreciation luncheon in Madison. I also would like to note that there are plans being made to offer VISSIM training in early 2017. Watch your email for more information about these upcoming events.

If you have questions or comments regarding any upcoming events or about the Wisconsin Section, please feel free to contact me at Stephan.hoffmann@rasmithnational.com. Also, be sure to check out the latest news, and announcements on our website (www.itewisconsin.org).

Merry Christmas and Happy Holidays to you all!

Stephan
Recent Meetings and Events

WTS/ITE Joint Breakfast Meeting – September 14, 2016
By Kelly Greuel

This year’s annual joint breakfast meeting was held at the WisDOT Southeast Region (Barstow) office in Waukesha, Wisconsin. The meeting was well attended by both ITE and WTS members and it was a great opportunity for both parties to network with one another and discuss current topics affecting our industry. Carrie Cooper of AECOM and Brendan Conway of Milwaukee County Transit System presented on the East-West Bus Rapid Transit (BRT) Feasibility Study. Carrie spoke about benefits and features of the BRT system and why the east-west corridor was chosen as the preferred route for the system. Brendan spoke about the extensive public engagement that has been part of the effort. Part of the goal of the new system is to increase the number of people using the bus system. The Milwaukee BRT system will be constructed in 2018-2019 and will be open as early as 2020.

Thank you Carrie and Brendan! ITE Wisconsin and WTS appreciate the great and informative presentation.
UW-Platteville / UW-Madison Student Night – October 12, 2016
By Kelly Greuel

On Wednesday, October 12th, 2016, the student chapter from UW-Platteville hosted this year’s UW-Platteville / UW-Madison student appreciation night at the Hop’s House in Mount Horeb, WI. This event provided a great opportunity for students to network with professionals.

The meeting began with presentations from the two student chapters. David Nowicki discussed UW-Platteville’s student chapter upcoming and past student activities and Paige Martz presented for the UW-Madison student chapter.

Following the student chapter updates, we enjoyed a presentation from Ahnaray Bizjak from the City of Fitchburg. She presented on the Lacy Road Reconstruction Project. Lacy Road is the only east-west street to extend across the entire City. The road needs to be reconstructed due to the growth and development in the area that is expected to double traffic volumes. In addition, the City got awarded funding from the MPO to complete the work. Since the City received Federal Funding, certain requirements have to be followed for the roadway reconstruction. This included following FHWA’s standards and guidelines and the project needed to be Trans75 compliant.

Public involvement for this project has been one of the biggest challenges. There has been a lot of controversy over the recommended improvements. Many of the residents along Lacy Road do not want the road to change or any of the upgrades implemented. Specifically, many of the people that live along the road do not want sidewalk installed. As a result of the comments the City has received, the City has done a significant amount of public involvement for the project and worked to come up with a balanced design that works for the community and creates a roadway that meets the standards and safety requirements needed for the corridor.
Annual Section Meeting – December 7, 2016
By Kelly Greuel

This year’s annual meeting was held at the Delafield Brewhaus. John Davis, the ITE International Director and Shawn Leight, the incoming ITE International President presented on behalf of ITE. Several awards were presented and the annual election results were announced and new officer inductions occurred with John Davis swearing in the new officers. The night ended with the 3rd Annual Professional Traffic Bowl, led by John Davis.

Awards were presented for the Harvey Shebesta Award, the Young Professionals Award, and the Distinguished Service Award.

Harvey Shebesta Scholarship Award

Jeff Merten received the Harvey Shebesta Award. Jeff is a student at UW-Platteville. Jeff serves as the UW-Platteville ITE Student Chapter Project Coordinator where he assists with the development of transportation engineering projects in southwestern Wisconsin. Jeff has worked in the transportation sector with the Wisconsin Department of Transportation and the Highway Technical Certification Program. He will graduate in May of 2017 and hopes to continue using his engineering skills to help solve some of the complex problems in the transportation industry.

The $1,500 Harvey Shebesta Scholarship Award is presented annually by the Wisconsin Section of ITE to encourage students to consider Transportation Engineering in their studies and career aspirations, and to provide partial financial support to students who have demonstrated an interest and are likely to work in the transportation field. Applicants were evaluated on the basis of past academic performance, education plans, career goals, activities and record of leadership.
**Young Professional Award**

**Ben Rouleau** received the **Young Professionals Award**. Ben is a traffic operations and analysis engineer at WisDOT. He works in the Bureau of Traffic Operations in Central Office. He assists the Region offices with traffic analysis, modeling and data management. He has also reviewed Paramics microsimulation models for some of the larger study projects, including the Beltline PEL and the Stoughton Road EIS.

Ben wrote an excellent essay about some critical issues that should be considered as we plan for connected and automated vehicle technologies, which could help guide the state’s investments as adoptions of the CVs and AVs increase.

Ben was unfortunately unable to attend the ITE Wisconsin Section Annual Meeting to receive his award. The award will be presented to Ben at an upcoming section meeting in early 2017.

The Young Professionals Award recognizes the achievements of transportation professionals who are under the age of 35. Each prospective applicant must be actively involved in transportation engineering and draft a short essay on the challenges facing the industry.

**Distinguished Service Award**

**John Davis** received the **Distinguished Service Award**. John is the manager of Traffic Engineering Services for Ayres Associates and has more than 30 years of traffic engineering experience in both the public and private sector. Besides his recent private sector experience, John spent more than 11 years serving as the chief traffic engineer for Lee County, Florida, and 10 years as a traffic engineering manager with the City of Indianapolis.

John has also been extremely active within the ITE community for much of his career. His leadership roles began with being editor of the Hoosier ITE Journal for the Indiana Section in 1989. Many of us know John because he has been so valuable to the Wisconsin ITE Section. He is currently serving as the co-leader of the MWITE meeting that will be held in Madison this June. He is also very active in getting students involved in the ITE community, and of course he is the guru of the ITE Traffic Bowl.

John made outstanding contributions to our profession, is a tremendous leader, and are a true treasure to the ITE community.

Congratulations John! The Wisconsin ITE Section thanks you for your support and contributions to the transportation community.

**Other Recognitions**

Special recognition was given to 2014 Past President, **Dawn Krahn**, in appreciation of her work the past 5 years on the ITE Wisconsin Section Executive Board. Dawn was also given a gift in appreciation for the time he volunteered this past year serving as the Chairman for both the Distinguished Service Award and Young Professional Award for 2016.

Thank you Dawn for your years of dedicated service!
Midwestern District Update

2017 ITE Midwestern District Annual Conference
June 18 - June 20, 2017
The Concourse Hotel, Madison, WI

Save the date of June 18 through June 20 for the ITE Midwestern District Annual Conference in downtown Madison. This meeting will represent 11 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.

The Wisconsin Section will play host for this meeting and conference. The Section’s Local Arrangement Committee is starting to plan in detail the technical program and social events that will be a part of the 2017 meeting. If you would like to join the fun and excitement of planning this event, there are several committee’s available to join! Committee’s available to join include: Publicity, Venue/Hotel Arrangements, Finance, Registration, Corporate Sponsorship & Industry Exhibitor, Social Activities, Hospitality and Family Program, and Technical. If you don’t have time to volunteer before the event, there are plenty of micro volunteer opportunities available during the event. Please contact John Davis (DavisJ@AyresAssociates.com, (262) 522-4905) or Jess Billmeyer (Jess.Billmeyer@aecom.com, (608) 828-8157) if you are interested in helping out in some way. No experience is necessary!

Upcoming Awards

Martin Bruening Award

Mr. Martin Bruening worked from 1924 until 1972 for the City of Milwaukee in the area of Traffic Engineering. He was not only a leader in Milwaukee but was recognized as a national leader. During his illustrious career, he was an advocate and supporter of the three "E's" of traffic safety: Engineering, Education and Enforcement, and his sound geometric design principles and early attention to good traffic signal design and operation were partly responsible for Milwaukee's consistent first place ranking in traffic safety for cities in its population class. Although Bruening believed in and was professionally involved in the planning and design of Milwaukee's freeway system to ensure the coordination and design for traffic operations on the local street system, he consistently warned of the necessity for a balanced transportation system. He authored several reports on the financially favored

Photo of Martin Bruening from www.ite.org
position of the automobile over mass transit, and advocated a metropolitan transit authority and mass transit subsidy.

The Wisconsin Section of ITE, in recognition of Martin Bruening, has an annual award for papers by its members. The Martin Bruening Award Committee is again calling for technical papers to be submitted to compete for this annual award.

**ELIGIBILITY REQUIREMENTS:**

Any member of the Wisconsin Section of the Institute of Transportation Engineers or its student chapters may submit a candidate technical paper. The paper must result from a study or design project in the field of transportation or traffic engineering in which the author served as a principal participant. The paper:

a) Must have been completed within two years of the deadline date for the award  
b) May have been previously submitted to another group or publicized in another media  
c) May be an expansion or revision of a paper previously submitted  
d) May be a work related study, a design project, or a research investigation  
e) May be co-authored

Papers submitted for the student category may be completed by full time or part time students. Papers submitted for the student award shall be the culmination of a research or design project completed by the student as part of their academic studies. Papers co-authored by university professors, or professionals that are not actively enrolled in a graduate or undergraduate program are not eligible for the Martin Bruening Student Award, but their paper can be submitted for the Martin Bruening Professional Award.

**EVALUATION CRITERIA**

Papers will be evaluated on the basis of organization, clarity and usefulness of tables and figures, adequacy and conciseness in covering the subject, simplicity and effectiveness of language, proper support of conclusions, completeness of credits and references, and relevancy of transportation engineering.

The principal author of the winning student paper and the winning professional paper will each receive a check for $500. All winning authors and co-authors will receive a Certificate of Award. The winning authors and/or co-authors will be invited to the March Wisconsin Section dinner meeting as a guest of the ITE Wisconsin Section free of charge. The student and professional awards will be presented at this meeting. The winning papers will also be posted on the section website. Papers are due by January 31, 2017. Please email papers in Adobe pdf format to Richard Coakley at richard.coakley@ch2m.com.
Upcoming Events

**January 8-12** Transportation Research Board 96th Annual Meeting
Washington, D.C.

**January 18** January Section Meeting - Public Service Appreciation Luncheon
Madison, WI

**January 31** Martin Bruening Award submittals are due

**March 8** UW-Milwaukee / Marquette Student Night and Martin Bruening Award

**April 12** Lunch Meeting – TEW/TPF, Pewaukee, WI

**April 12** Traffic Engineering Workshop / Transportation Planning Forum
Country Springs Hotel, Pewaukee

**May 10** Fox Valley Dinner Meeting

**June 18-20** ITE Midwestern District Annual Conference
Madison, 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 2016 Wisconsin Section Member Director, Kelly Greuel at (608) 828-8132 or kelly.greuel@aecom.com.
ITE Wisconsin Section
Public Service Appreciation Luncheon

Date: Wednesday, January 18, 2017
Time: 11:30 Registration/Social
      12:00 Lunch
      12:30 Speaker

Place: The Great Dane Pub (Eastside)
       876 Jupiter Drive
       Madison, WI

Topic: I-39/90/94 Madison – Portage Study

Speaker: Colleen Hoesly
         Urban and Regional Planner, WisDOT
         SW Region Major Studies

PDH: The Wisconsin Section is offering 0.5 PDH for this presentation.

Menu: Choice of the following entrees:
      - Pub Burger w/ fries
      - Mayan Chicken Wrap w/ fries
      - Irish Road Ruben w/ fries
      - Wisconsin Style Cheddar Mac

Meal includes soda, coffee or tea

Cost: $16 per person
      (Public agency employees and students are half price)

Directions:
From Milwaukee: Take I-94 westbound. Take exit 244 toward Cottage Grove/Sun Prairie. Turn left onto CTH N. Turn right on CTH Bb/Cottage Grove Rd. Turn right onto N. Star Drive. Destination will be on left.

Next Meeting: March 8, 2016 – UWM / Marquette
Student Night and Martin Bruening Award (Milwaukee)

Register and pay online at itewisconsin.org by NOON Wednesday, January 11, 2016. WI ITE 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 to Kait Sanford, EMCS, Inc. by email at: ksanford@emcsinc.com or by phone at 414-347-1607. No shows will be charged and no refunds will be made after the event. Space is limited. Register early. Late registration is not guaranteed.
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