

ON THE MOVE

Vol. 24, No. 3

Summer (July) 2011

Sharing Knowledge. Improving Communities.



Crosswalks: To Mark or Not to Mark...

That is the Question...Here are Some Answers

by Nicholas R. Jones, P.E., Director, with excerpts and photos courtesy of Federal Highway Administration

Pedestrians are legitimate users of the transportation system. However, many of our roads are designed to accommodate vehicular traffic only. It is important to design for pedestrians on all facilities, particularly in high pedestrian activity areas. Knowing where marked crosswalks should and should not be located in our system, especially within city and town boundaries, is important.

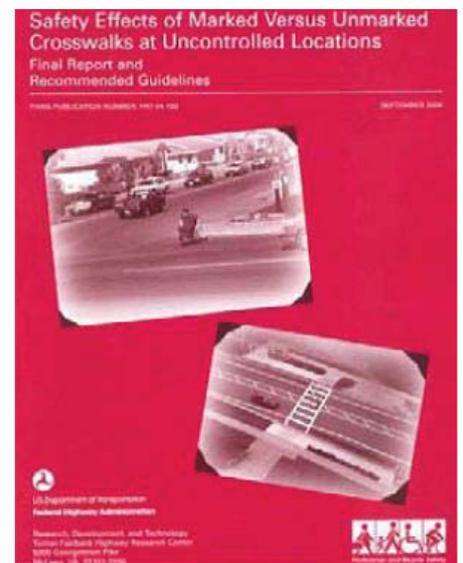
Here are some guidelines in locating marked crosswalks that should be considered when deciding whether or not to mark a crosswalk at any location. Research data from FHWA in a study by Zegeer,

et al. indicates when marked crosswalks should be used.

Key Quotes from the Study Conclusion

“When considering marked crosswalks at uncontrolled locations, the question should not be simply, “Should I provide a marked crosswalk or not?”...”

“Regardless of whether marked crosswalks are used, there remains the fundamental obligation to get pedestrians safely across the street. In most cases, marked crosswalks are best used in combination with other treatments (e.g., curb exten-



sions, raised crossing islands, traffic signals, roadway narrowing, enhanced overhead lighting, traffic calming measures)....”

“In all cases, the final design must accomplish the goal of getting pedestrians across the road safely....”

“The design question is, “How can this task [getting pedestrians across the road safely] best be accomplished?”

(continued on page 2)

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Marked vs. Unmarked Analysis

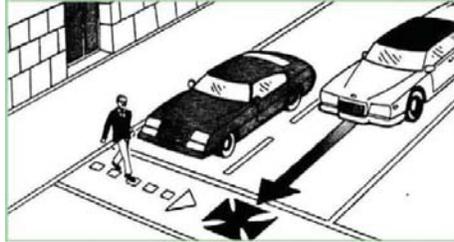
- Two-lane roads have no significant difference in crashes whether crosswalks are marked or unmarked.
- Multilane roads (3 or more lanes) under 12,000 ADT had no significant difference in crashes in marked or unmarked crosswalks.
- On roads with over 12,000 ADT with no median, the crashes for marked crosswalks were greater than crashes for unmarked crosswalks.
- On roads over 15,000 ADT with a raised median, crashes for marked crosswalks were greater than crashes for unmarked crosswalks.

The 2009 MUTCD has been changed to read as follows:

“New marked crosswalks alone, without other measures designed to reduce traffic speeds, shorten crossing distances, enhance driver awareness of the crossing, and/or provide active warning of pedestrian presence, should not be installed across uncontrolled roadways where the speed limit exceeds 40 mph and either: A. The roadway has four or more lanes of travel without a raised median or pedestrian refuge island and an ADT of 12,000 vehicles per day or greater; or B. The roadway has four or more lanes of travel with a raised median or pedestrian refuge island and an ADT of 15,000 vehicles per day or greater.”

Here are some additional observations of the study.

One explanation of higher crash rates at marked crosswalks is the multiple-threat crash.



Seen here (above), the first car stops too close and masks visibility for the driver in the second lane.

The study recommends that it is OK to mark crosswalks on 2-lane roadways (see below).



On multi-lane roadways, marked crosswalks without a raised median are NOT recommended on roadways with greater than 12,000 ADT (see example below).



On multi-lane roadways with an ADT of greater than 15,000 ADT, marked crosswalks even with a raised median are NOT recom-

mended IF the posted speed is over 40 mph (see example, below).



Raised median reduce crashes by 40% (see example, below).

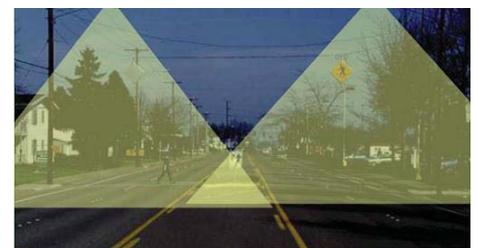


Crosswalk safety can be enhanced by proper location, high visibility markings, illumination, signing, advance stop bars, median islands, curb extensions, and signals.

High visibility markings increase safety as shown below.



Lighting reduces the odds of pedestrian fatalities, by 42% at mid-block locations and by 54% at intersections (see illustration, below).



Advanced signing, can include signs like these, shown below.

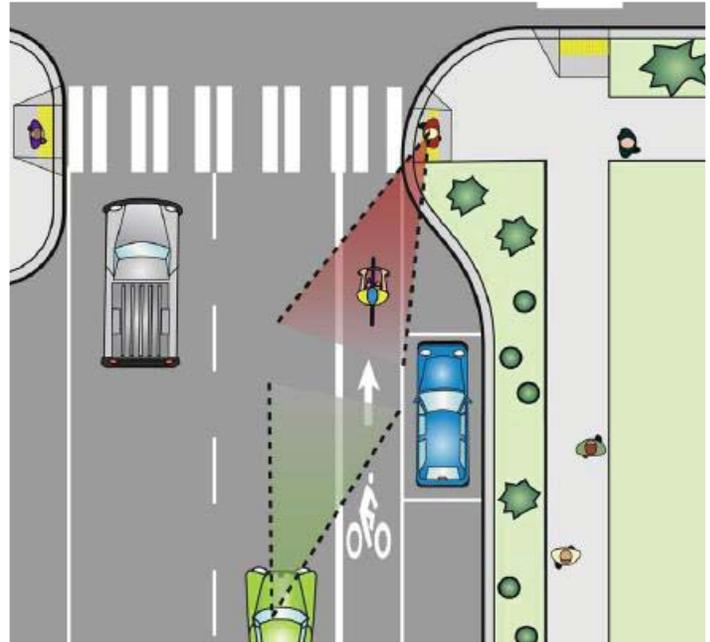


The addition of **Advanced Stop Bars** can also increase crosswalk safety, as seen below.



Curb extensions are another way to increase visibility and therefore crosswalk safety (see illustration, right).

With more attention to the recommendations for placement of marked crosswalks and their design, pedestrians can be better protected as a legitimate user of our roadway systems. The presence of pedestrians in the transportation corridors should not be an irritation to the roadway designer or traffic engi-



neer, but recognized as a legitimate user of these facilities. By incorporating them into the design of our systems it, makes our communities more livable and more interesting places to be.

Highway Safety Manual: A Brief Introduction

by Tim Colling, PhD., P.E., Director for the Center for Technology and Training,
Michigan Tech Transportation Institute, Michigan Technological University

In 1999, internationally recognized highway safety expert Dr. Ezra Hauer published a paper titled "Safety in Geometric Design Standards." In the paper, Hauer raised a question that helped change the way we think about highway safety: Must a road simply adhere to established design standards to be considered safe, or does it require something more?

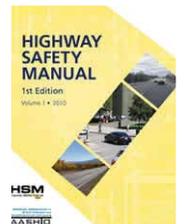
In 2009, the first edition of the AASHTO Highway Safety Manual (HSM) was published. The manual provides the "more" that Dr. Hauer identified as missing 10 years earlier. Basically, the HSM provides

a scientific means for identifying, analyzing, and solving safety problems on roadways. The HSM will definitively change how transportation safety is dealt with on our road system, both at the state and local level. Local implementation of the tools and techniques in HSM are vital to improving overall traffic safety, but will take time as all big changes do.

At three volumes and over 1000 pages, it's easy to become overwhelmed with what the HSM represents. To help increase understanding of this resource, you will find a very useful article on pages

4 through 7 in this newsletter.

You can also learn more through the official website for the HSM which can be found at <http://www.highwaysafetymanual.org>. This website contains the latest updates and resources most helpful for implementation, along with links to additional resources for state and local agencies. You can also learn more at <http://safety.fhwa.dot.gov/hsm/>.



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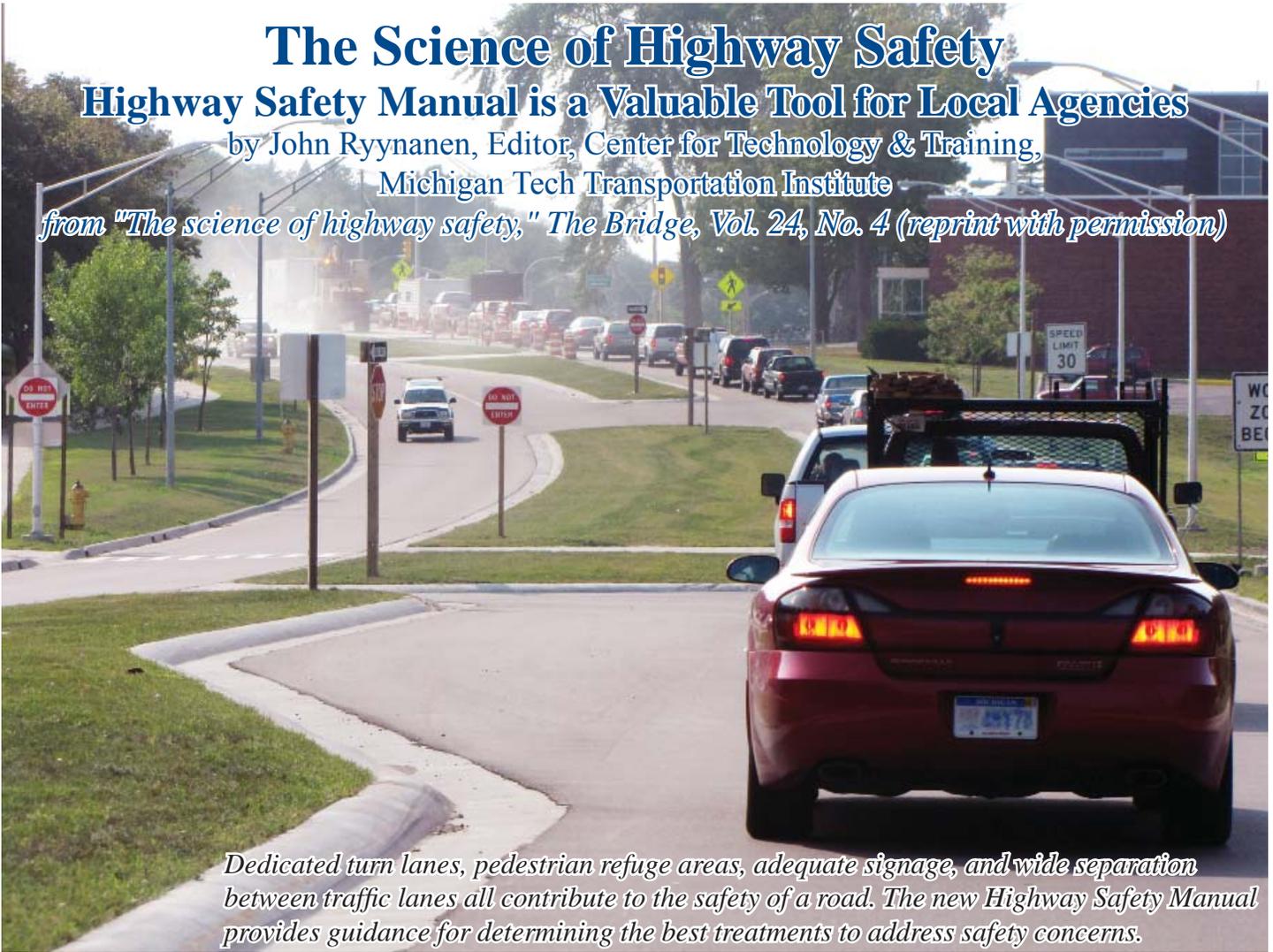
<http://www.highwaysafetymanual.org>

The Science of Highway Safety

Highway Safety Manual is a Valuable Tool for Local Agencies

by John Ryyanen, Editor, Center for Technology & Training,
Michigan Tech Transportation Institute

from "The science of highway safety," *The Bridge*, Vol. 24, No. 4 (reprint with permission)



Dedicated turn lanes, pedestrian refuge areas, adequate signage, and wide separation between traffic lanes all contribute to the safety of a road. The new Highway Safety Manual provides guidance for determining the best treatments to address safety concerns.

As a civil engineer (or one who works closely with civil engineers) you know that when you're designing an intersection and you have a question about sight distance, you can look in the American Association of State Highway Transportation Officials (AASHTO) A Policy on Geometric Design of Highways and Streets, also known as the AASHTO Green Book, for an answer. Similarly, when you have a question about signs, pavement markings and signals for the same intersection, you know you will find all the answers in your copy of the Manual on Uniform Traffic Control

Devices, or MUTCD.

But where do you look when you have a question about traffic safety? For example, what is the safest method for handling left turn movements at a four-way signalized intersection? Until recently, you would have had to sift through multiple sources of information (including, probably, the AASHTO Green Book, the MUTCD, and published research reports) to find an answer to such a question. But there was no guarantee that you would find a definitive answer. The question about left turn movements exposes a dilemma that safety professionals have grappled with for years: What constitutes safety on a road? Must a road simply adhere to established

design standards to be considered safe, or does it require something more?

Standards Not Enough

Dr. Ezra Hauer, Professor Emeritus in the Department of Civil Engineering at the University of Toronto and internationally-recognized highway safety expert, introduced the adjectives "nominal" and "substantive" to help shed more light on the topic of roadway safety. In a 1999 paper titled, "Safety in Geometric Design Standards," Hauer wrote, "Nominal safety is judged by compliance with standards, warrants, policies and sanctioned procedures ... substantive safety is measured by expected crash frequency and severity." (Hauer 1999a)



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The problem with defining safety as a function of compliance with standards, Hauer asserted, is that, “Limit standards do not tell the designer what the safest design is. Rather, they specify the limit of what is permissible.” (Hauer 1999b)

Today the Highway Safety Manual (HSM), which is available through AASHTO, is the definitive source of substantive answers to roadway safety questions. The manual was developed and refined by a diverse team of roadway safety stakeholders over the past ten years to provide a single source for safety information and tools in a form that facilitates data-based decision-making.

Major Effort

Creation of the HSM began in May 2000 under the direction of a group of volunteers from eight different subcommittees of the Transportation Research Board (TRB) in Washington DC. Research and development for the effort was funded in large part by the National Cooperative Highway Research Program (NCHRP). The Federal Highway Administration (FHWA) provided supplementary funding and research support.

In 2006, a decision was made to publish the HSM as an AASHTO document, at which point a Joint

Task Force was formed with representatives from the AASHTO subcommittees on Design, Traffic Engineering and Safety Management. Over the next three years, the task force examined the HSM to ensure that it would meet the needs of State Departments of Transportation and local agencies. During that time, members of the task force also worked to promote the HSM within their respective subcommittees.

In 2009, after nine years of intensive development and careful refinement, the AASHTO board of directors approved the HSM for distribution.

Valuable Resource, But Not a Standard

Priscilla Tobias, Bureau Chief of Safety Engineering for the Illinois Department of Transportation (IDOT) serves as Chair of the task

Lead States Initiative

for implementing the Highway Safety Manual



Thirteen states are participating in the Lead States Initiative, which is sponsored by the National Cooperative Highway Research Program (NCHRP). Objectives of the project are to:

- Provide the participating states with access to experts who are familiar with HSM development and implementation
- Facilitate the exchange of HSM implementation experiences among the lead states
- Develop an HSM user guide to assist other state and local road agencies in implementing the HSM.

For more information on the Web, go to: www.MichiganLTAP.org/pubs, and then select “NCHRP Lead States Initiative” from the list.

force that oversees the maintenance and on-going development of the HSM. She is extremely pleased that such a powerful tool is available for road owning agencies. “This manual represents the best safety-related science of our day,” she said. “And it has been thoroughly vetted by safety experts and representatives from all groups involved with roadway safety to make sure it’s accurate and relevant for all stakeholders. This is the first time we have had such a resource.”

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“The problem with defining safety as a function of compliance with standards is that limit standards do not tell the designer what the safest design is. Rather, they specify the limit of what is permissible.”

Dr. Ezra Hauer—Professor Emeritus, University of Toronto

Tobias is careful to stress that the HSM is not a standard, like the MUTCD. “The manual is intended as a guide; nothing about it constitutes a legal standard, nor does it mandate responsibilities,” she said. “It’s simply a great tool for making informed decisions about how to allocate resources to address safety issues most effectively.”

New Direction in Highway Safety

The key to the manual’s usefulness lies in its thorough, scientific approach to identifying, analyzing and solving safety problems. First, by accounting for the statistical phenomenon of regression to the mean, many methods of site selection in the HSM help road agencies zero in on the most relevant sites by eliminating from consideration sites that are at a randomly high or low fluctuation in crashes. After a site is identified, the HSM provides a means for analyzing the safety impact of decisions at all stages of the project development process, which enables practitioners to quantify the effectiveness of safety improvements along with other transportation performance measures. Finally, the HSM includes an extensive catalog of proven crash modification factors (CMFs) for a variety of geometric and operational treatment types. Using CMFs, practitioners can predict the safety impact that a potential treatment or design may have on their road system.

Highway safety expert Dr. Hauer is pleased that the manual is available. “Publication of the

Highway Safety Manual indicates wide recognition of the need for approaching safety in some evidence-based manner. With procedures that examine safety quantitatively rather than subjectively, the document is an important first step in the right direction.”

Early Adopters Lead the Way

At three volumes and nearly one thousand pages, the HSM contains a formidable amount of information, especially for those who are not experienced in the practice of analyzing and improving roadway safety. To help disseminate new informa-

tion to solicit participants from among State Departments of Transportation (DOTs). He was encouraged by the response. “Thirty DOTs initially expressed interest,” Niessner said. “That was encouraging. We didn’t expect that kind of response from the states because launching something like this is not a simple thing—it’s a major effort.” Niessner thinks the willingness to get involved is thanks to the requirement in the transportation bill of 2005 (Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, or SAFETEA-LU), that required each state DOT to establish a strategic highway safety plan by October 1, 2007. “Requiring strategic high-

“Nothing about the HSM constitutes a legal standard, nor does it mandate responsibilities. It’s simply a great tool for making informed decisions about how to allocate resources to address safety issues most effectively.”

Priscilla Tobias—Illinois Department of Transportation

tion in the manual and to encourage road-owning agencies to use it, the NCHRP is sponsoring an effort that involves showcasing different states’ experiences with the HSM. The effort, officially titled the Lead States Initiative for Implementing the Highway Safety Manual, involves state and local transportation officials in thirteen states (see “Lead States Initiative” on page 5).

The project manager for the Lead States Initiative is Charles Niessner, senior program officer at NCHRP. To kick the project off, Niessner worked with Tobias’ AASHTO task force on the HSM

way safety plans really elevated the importance of roadway safety and helped everyone move more purposefully in that direction. I think the response to our invitation shows that our State DOTs see the HSM as another great tool to help refine our collective approach to improving the safety of our roads.”

Utah is a Lead State

The Utah Department of Transportation (UDOT) has been instrumental in advancing the HSM. In fact, Robert Hull, Director of Traffic and Safety, was one of the original members of the AASHTO Joint Task Force on the HSM and Utah



continues to be a driving force with the HSM as a member of the current AASHTO Task Force on the HSM. Utah is also one of the lead states in the implementation of the HSM, including the NCHRP Lead State Initiative and a similar FHWA project. (See sidebar on page 5.)

UDOT has developed a Utah specific HSM training course. The course focuses on the existing UDOT design process and the methodologies of the HSM. The initial training for UDOT personnel will be held in July. After the pilot training course, it is planned for the training course to be modified for use at local government agencies.

The intent of the UDOT HSM implementation is to integrate the methodologies into the design process so there is no fundamental change in the current way of doing business, yet strengthen the existing process with a scientific approach. The design decisions made using the HSM principles will have a science-based foundation and the impact on crashes can be measured.

To strengthen the Utah base for HSM implementation, UDOT teamed with BYU to develop calibration figures that refine the HSM models to better fit Utah conditions. Also, this team produced a framework for a safety management process centered around the HSM. You can find out more at these links:

- [Calibration of the HSM and Development of New Safety Performance Functions](#). The Utah Department of Transportation has released a report that documents the calibration of the Highway Safety Manual safety performance function for rural

two-lane, two-way roadway segments in Utah and the development of new models using negative binomial and hierarchical Bayesian modeling techniques. This can be found at: http://www.trb.org/Main/Blurbs/Calibration_of_the_Highway_Safety_Manual_and_Devel_165514.aspx

- [Framework for Highway Safety Mitigation and Workforce Development](#). The Utah Department of Transportation has released a report that outlines a framework for highway safety mitigation that is designed to provide a logical and comprehensive context within which efforts to improve highway safety can be made. This can be found at: http://www.trb.org/Main/Blurbs/Framework_for_Highway_Safety_Mitigation_and_Workfo_165513.aspx

Not Just for State DOTs

Tony Giancola, Executive Director of the National Association of County Engineers (NACE) is also excited about the availability and relevance of the HSM for road-owning agencies across the country. “This is a very useful tool,” he said. “It will be a big help for road agencies at state and local levels as they evaluate, design, plan for and implement safety improvements in their respective communities.”

Everyone familiar with the HSM agrees that it will be a great tool for improving roadway safety, but some are expecting more—especially those who have experience with implementing safety improvements at the local level. Wayne Schoonover, P.E., County Highway Engineer for Ionia County Road

Commission in Michigan, says the HSM could help local road agencies pay for road projects. He has been an enthusiastic participant in the Michigan Department of Transportation’s (MDOT) Local Safety Initiative program since it was created in 2004. “The success we’ve had in securing federal safety funding for Ionia County road improvements is a great example of the value of a data-driven approach to safety,” Schoonover said. “If not for the quantifiable solutions that MDOT’s Local Safety Initiative group helped us define, we would not have qualified. The Highway Safety Manual can help any agency define quantifiable solutions to their safety problems, which could help them secure similar funding.”

For more information about the Highway Safety Manual, including how to order it, please visit www.highwaysafetymanual.org.

References

Hauer, E. (1999a). Safety in Geometric Design Standards, p19. Retrieved December 9, 2010, From https://ceprofs.civil.tamu.edu/dlord/CVEN_635_Course_Material/Safety_in_Geometric_Design_Standards.pdf.

Hauer, E. (1999b). Safety in Geometric Design Standards, p2. Retrieved December 9, 2010, From https://ceprofs.civil.tamu.edu/dlord/CVEN_635_Course_Material/Safety_in_Geometric_Design_Standards.pdf.

With thanks to Robert Hull, UDOT Director of Traffic & Safety, for his assistance with this article.

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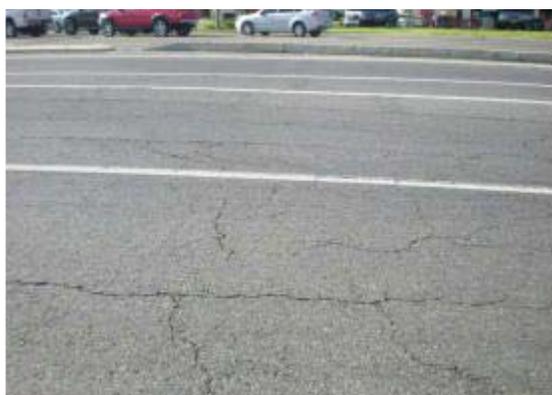
New Report Released on Methods to Control Cold Temperature & Fatigue Cracking for Asphalt Mixes

excerpt from an Executive Summary by Dr. Pedro Romero, P.E., Dr. Chun Hsing Ho, & Kevin VanFrank, P.E.

A recently released report, prepared for the Utah Department of Transportation by Pedro Romero, Ph.D., P.E., Chun Hsing Ho, Ph.D., and Kevin VanFrank, P.E., describes a testing method for asphalt mixes that could significantly reduce low temperature fatigue cracking that occurs routinely in the Utah environment. Below is an excerpt from the Executive Summary for that report.

For several years, the Utah Department of Transportation (UDOT) has been implementing the use of mechanical tests such as the Hamburg Wheel Tracking Device (WTD) and the Asphalt Mixture Performance Tests (AMPT) to screen asphalt mixtures that might not have adequate high temperature performance due to either mixture instability (i.e., not able to carry its loads) or incompatibility between components. The implementation of the Hamburg WTD as a screening test and the AMPT as a performance test has significantly benefited the high temperature performance of asphalt pavements; however, it has not addressed the low and intermediate temperature performance reflected as thermal and fatigue cracking. Throughout the State of Utah there are cases of premature pavement failures caused by inadequate intermediate and low temperature properties of the asphalt mixture.

Pavement distresses caused by low and intermediate temperatures are a significant source of problems for highway agencies. While there are several tests that have been developed to address this type of distress, few of them are considered practical for day to day operations.



In fact no low temperature test has been adopted by any highway agency.

This research was initiated to address this issue. A methodology was developed for controlling low temperature failures of asphalt mixtures using the Bending Beam Rheometer (BBR), a device currently used to characterize asphalt binders. The familiarity and availability of this equipment at many construction materials laboratories make implementation and use of the proposed tests more likely.

A series of experiments using the BBR were undertaken to evaluate the low temperature properties of asphalt mixture beams. Through statistical analysis, the number of sample replicates was determined

to give UDOT and other highway agencies an informative guidance of how to prepare samples for quality control/quality assurance (QC/QA) during asphalt construction. Viscoelastic modeling was employed to evaluate the effect of aggregate size on the thermal properties of asphalt mixtures. The prediction of pavement temperatures using numerical analysis methods was performed to calculate temperature gradients in an asphalt pavement system. The conclusion of this work is that the BBR is a viable tool that can be used to control pavement performance at low temperatures. Finally, a draft specification is presented along with examples to demonstrate how this work can be easily adopted to facilitate QC/QA operations in asphalt construction.

While the validity of the proposed approach was demonstrated, it is recommended that data be obtained from field projects so that actual limits can be placed on the low temperature properties of asphalt mixtures. Such an approach can help establish a balance between the high and low temperature properties of asphalt mixtures thus ensuring longer lasting pavements.

Full text of the Report No. UT-10.08: Development of Methods to Control Cold Temperature and Fatigue Cracking for Asphalt Mixtures (1.87 MB) can be found at <http://www.udot.utah.gov/main//uconowner.gf?n=4493029359845211>.



Upcoming Summer/Fall LTAP Center Training

Full course descriptions and on-line registration can be found at our website: www.utahltap.org or by calling: **1-800-822-8878**

Dates	Course Title	Cost	RS*	Location
July				
July 6-7	Designing for Pedestrian Safety	\$10	E	SLC
August				
Aug. 24-25	Sweeper and Vactor Workshop	TBA	E	SLC
Aug. (TBA)	MUTCD Training	TBA	E	TBA
Aug. (TBA)	Sign Retroreflectivity	TBA	E	TBA
September				
Sept. 19	ATSSA Flagger Training	\$45●	1	SLC
Sept. 20	ATSSA Traffic Control Technician Workshop	\$100/125●●	E	SLC
Sept. 21-22	ATSSA Traffic Control Supervisor Workshop	\$250/275●●●	E	SLC

* Road Scholar Level - 1, 2 or E (Elective)

- 2009 MUTCD Part 1,5,6 available. Cost for manual=\$20 extra (for total fee of \$65/person)
- Cost per person: State & Local=\$100. Out of State or Private sector personnel=\$125.
- Cost per person: State & Local=\$250. Out of State or Private sector personnel=\$275.

Please check our website [www.utahltap.org] for additional training dates and opportunities that are added as they become available. You can also request a specific workshop in your area by calling 1-800-822-8878 or e-mail us at utahltap@usu.edu.



Something to think about...

This photo was taken over north central South Dakota, a semi-arid region with no natural lakes in the area. The flooding is breaking all records in the entire upper Missouri River basin. The bigger problem is what this is doing to the local road system. How has the record water year affected your road systems?

Photo and information shared by Ken Skorseth, NLTAPA President and SDLTAP Program Manager

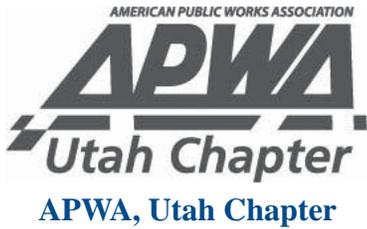
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Partner Happenings

What You Should Know...



Registrations, RSVPs and resources can be found at the APWA website [<http://utah.apwa.net>]. Chapter meetings will be held on the 4th Thursday of each month (with the exception of holiday months and Chapter conferences) at The Gathering Place in West Jordan at Gardner Village (1100 West 7800 South) or Ruby River in Provo. Branch meetings are held as follows:

- The [Southern Utah Branch](#) meets the 1st Tuesday of each month at the Holiday Inn in St. George.
- The [Central Utah Branch](#) meets are held monthly (with the exception of holiday months and Chapter conference months) on the 3rd Thursday at locations to be determined.

APWA Fall Conference & Stormwater Expo

October 4-5, 2011

More information in upcoming issues and on-line!



Blue Stakes of Utah

For more information on the

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services and activities of Blue Stakes of Utah, please visit their website [www.bluestakes.org] or contact their notification center at 1-800-662-4111. Remember, it's free and it's the law!



ITE, Utah Chapter

For information on ITE activities, please contact Peter Tang by e-mail at [ptang@utah.gov]. ITE, Utah Chapter monthly luncheons are generally held on the third Tuesday of each month starting at 12 noon at the Chinese Gourmet Restaurant in Murray (4500 South State Street).



Utah Association of Counties

For more information on UAC activities, or to register for a UAC sponsored event, please call them directly at (801) 265-1331 or go to their website [www.uacnet.org].

Annual Conference

November 16-18, 2011

St. George, Utah (Dixie Center)



Utah League of Cities & Towns

If you desire more information on

League activities, or to register for a League sponsored event, please call the Utah League of Cities & Towns directly at (801) 328-1601 or 1-800-852-8528 or go to their website [www.ulct.org].

Annual Conference

September 14-16, 2011

Salt Lake City, Utah



Utah Local Governments Insurance Trust

For information on training and other Trust activities, please call 1-800-748-4440. You can also check out the Trust website at [www.ulgt.org].



Utah Risk Management Mutual Association

For more information or to register for URMMA training activities, please call Joanne Glantz at (801) 225-6692. You can also check out their website at [www.urmma.org]. URMMA members can call to schedule free, in-house training in the following areas: Supervisors Training on TOP 10 Personnel Issues; Risk Management Review for Supervisors; Supervisors Risk Management 100 and 200 and Customer Service Training.



Utah Safety Council

For more information, scholarship applications (covering up to 50% of select courses) or to register

for Utah Safety Council training activities, please call (801) 478-7878 or (800) 933-5943, e-mail safety@utahsafetycouncil.org, or visit their website at [www.utahsafetycouncil.org]. All workshops are offered at their location (1574 W 1700 S, Suite 2A, Salt Lake City) and some are even offered on-line. On-site classes are also available.

Highway Safety Manual (HSM) Lite: Common Sense Safety Measures Online Webinar

WHEN

July 14th @ 1:00 pm EDT

Please note the webinar itself will be 90 minutes long followed by 25 minutes for questions

DESCRIPTION

This HSM Lite webinar has been designed for local transportation agencies. The material will provide a snapshot of highway safety statistics, a brief introduction to the AASHTO Highway Safety Manual, and show how safety can be incorporated into practice through proven safety countermeasures and low cost safety improvements.

REGISTRATION

To register please e-mail your name, organization, and e-mail address to ltap.rsvp@artba.org. Once you register you will receive the link to the web portion and the call-in info for the audio.

For questions please call Susan Monahan at (202) 289-4434.

ABOUT OUR WEBINAR SYSTEM

The LTAP/TTAP Seminar Room is a web-based conferencing tool used for live online committee meetings, sharing documents, training and team collaboration among LTAP/TTAP staff members and partners. To participate you will need a touch-tone phone and an internet connection.

If you have never attended an Adobe Connect meeting before:

- Test your connection: http://fhwa.adobeconnect.com/common/help/en/support/meeting_test.htm
- Get a quick overview: http://www.adobe.com/go/connectpro_overview

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The Utah LTAP Center Advisory Board meets at least twice annually to make recommendations and evaluate the effectiveness of the program.

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The Last Laugh...

A woman thought she could talk her way out of a speeding ticket... until the officer looked in the back seat of her car and saw her dog.

courtesy of the Vermont LTAP Center



We're part of...
Utah State University



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About the Utah LTAP Center

The Utah LTAP Center is an integral part of a nationwide Local Technical Assistance Program (LTAP) financed by the Federal Highway Administration, state departments of transportation and local transportation agencies. The Center bridges the gap between research and practice by translating the latest state-of-the-art technology in transportation into implementable products and information for the special use of local transportation agencies and personnel. Located at Utah State University, the Utah LTAP Center is also part of the Utah Transportation Center (UTC), a Tier II University Transportation Center of the U.S. Department of Transportation.

About *On the Move*

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