

# Westernite

Official Publication of District 6 of the Institute of Transportation Engineers

July-August 2008 Vol. 62 No. 4

## President's Message

### Adieu

This is my last President's message before the ITE Annual Meeting in Anaheim and I am getting excited to see everyone again.



Jennifer Rosales,  
President

I had several goals that I'd set out to accomplish as President and as an officer of the Western District. Over the past year, we've made great strides. I'll highlight just a few of our accomplishments in this message.

It has been one of my priorities to reach out to young professionals and potential new members. An ITE Group on Facebook has been created to reach out to young professionals and students, and to encourage any interested member to join. We have received new young professional members joining ITE as a result of the

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## Proposed Amendments to the Next MUTCD Edition

On January 2<sup>nd</sup>, 2008, the Federal Highway Administration (FHWA) published the Notice of Proposed Amendment (NPA) to the Manual on Uniform Traffic Control Devices (MUTCD) 2003 Edition in the Federal Register for public review. It contains several significant revisions and additions, many of which will require public agencies to replace existing signs, and modify traffic signal or other traffic control devices. Other changes will require jurisdictions to change the way their existing devices currently operate such as pedestrian signal timings. Advanced planning for these changes is recommended to minimize the impact to agencies staff and resources. Noncompliance with the MUTCD (based on federal law) can increase

agency liability and jeopardize federal funding. As a result, agencies should review the proposed changes closely and provide comments to the docket before **Thursday, July 31, 2008**.

These changes can be reviewed in detail at <http://mutcd.fhwa.dot.gov/>. FHWA's slide show provides an overview of changes and additions. The significant changes anticipated are highlighted below to help agency's review the proposed changes, deletions and additions to the manual:

### General Revisions

1. Federal law, i.e. 23 CFR (Code of Federal Regulations) 655.603, adopts the MUTCD as the national standard for all traffic control devices installed on any street,

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## International Director's Report

The Spring Board Meeting was held on March 28-29, 2008 in Miami, Florida. The District was well represented with your three International Directors (Randy McCourt, Zaki Mustafa, and Julia Townsend). While college students headed to the beaches for Spring Break, members of the International Board of Directors (IBD) headed into the Board room for two days of meetings. The first day of the board meeting was spent participating in a collaborative workshop to update ITE's Strategic Plan. Glenn H. Trecker, President of Trecker Consultants, led the Board in updating this document which will define the focus and direction of the

Institute in the future.

### Finances

The second day of meetings was led by President Alf Guebert and focused on the business of the Institute. Ken Voight discussed the Institute's finances. In 2007, the Institute's revenue totaled \$7,531,444 with expenses totaling \$7,011,225, which equates to a total of \$520,219 in excess



Julie Townsend,  
International Director

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# DISTRICT 6 STUDENT ENDOWMENT FUND

Visit the new District 6  
Student Endowment Fund  
website at  
[www.westernite.org/endowment](http://www.westernite.org/endowment).

Learn more about the Endowment  
Fund and support the District's  
Student Initiatives Program by  
making a contribution online!

## President's Message

*(Continued from page 1)*

ITE Group. Also, a new Employer Recognition Award has been developed by the District Career Guidance Committee Chair, to recognize employers for support of young professional involvement in ITE Activities (young professional defined as an ITE member, 35 years of age or younger). In addition, our mentoring program has grown significantly and more than doubled in size since its inception.

The District Endowment Fund has grown, and is close to \$100,000. A January workshop was planned and organized for the Endowment Fund Committee to focus on fundraising and strategic planning. The committee has been busy fundraising and preparing for the Annual Meeting. During the meeting in Anaheim, ITE shirts, teddy bears, and temporary ITE tattoos will be for sale to fundraise for the Endowment Fund. In addition, an Endowment Fund website with online donation abilities will be launched. I have no doubt that the Fund will continue to grow and we will meet our goal of \$500,000. I want to thank the membership, individuals, Sections and Chapters, and corporate sponsors for your generous donations to the District Endowment Fund.

All of our accomplishments could not have been possible without the efforts of the District officers, committee chairs, and membership support. I want thank all of you for both your time and support.

At this time, I would like to welcome our new WesternITE Web Manager, France Campbell, who brings past experience as a webmaster for the Georgia Section. France has taken the position with a running start. He is looking at ways to improve the speed and storage of our website while lowering internet provider costs.

Over the past year, I have been traveling to several Section and Chapter meetings. It's been a great experience to meet ITE members throughout the District and build relationships. In May, I had the opportunity to give a report on District Activities and swear in the new officers at the Oregon Section meeting. Also in May, I participated in the Intermountain Section meeting in Jackson Hole, Wyoming. During the meeting, I had the opportunity to give a brief presentation on District activities and celebrated my birthday during the meeting.

In June, I found my travels taking me to California, and I

had an opportunity to visit the Southern California Section, the Riverside-San Bernardino Section, and the San Francisco Bay Area Section. At each of these Section meetings, I was given the honor of swearing in their new officers and providing an update on the District's activities. During the Southern California Section meeting, I gave a technical presentation on Contextually Complete Streets. I would like to thank these sections for inviting and hosting me at their section meetings.

It was my pleasure to recognize Wes Pringle with a Presidential Proclamation at the Southern California Section meeting for his distinguished service to ITE and the industry. Wes has been a member of ITE since 1963 and served ITE in virtually all leadership positions, including Section President, District President, International Director, and District Administrator. Wes has truly dedicated his life to service to ITE and the betterment of the profession and always placed engineering ethics and principals in highest regard.

At the San Francisco Bay Area Section meeting, I had the honor of recognizing Tom Clausen with a Presidential Proclamation. Tom has been a member of ITE for 33 years and has served ITE as Section President, District President, International Director, and Chair of numerous committees, and has contributed over the years to advancing ITE in an outstanding fashion. In addition, Tom has served as an instructor for the Institute of Transportation Studies at his alma mater, the University of California, Berkeley, contributing to the career development of engineering professionals.

I encourage all of you to take the time to get to know each of the candidates and please remember to vote. I would like to wish the best of luck to our candidates for International Director and Secretary-Treasurer and thank them for their continued commitment and participation in the District. Again, please take the time to vote!

The 2008 ITE District Annual Meeting (joint with International) in Anaheim is from August 17-20, 2008. Early registration expires on July 18<sup>th</sup>, so plan to register early for the savings. I am looking forward to seeing everyone in Anaheim in August!

## Legislative News

As District 6 moves into the summer months, most state legislatures have recessed for the year, while both California and the Federal Government work towards legislatively-imposed deadlines to achieve final budget approval. In California, the Governor's first budget proposal (January 10), updated by the 'May Revise', continues to cause alarm for transportation agencies as funds will again be diverted into the General Fund. Especially hard hit are transit agencies, which benefit from gas tax 'spillover' revenues which are subject to diversion. Even though the state transit association won a lawsuit recovering some of the FY08 diverted funds, the legislature then revised the funding rules and effectively nullified the court. In Riverside County, a state bill (AB1954) would create six additional lanes on I-15 between Lake Elsinore

(SR74) and Corona (SR91). One lane in each direction would be free to all, while the other two each way would be toll lanes. The Riverside County Transportation Commission is sponsoring the bill, with project completion planned by 2017/2018, and the toll revenues ultimately funding the work.

At the federal level, during May the Congress sent the SAFETEA-LU corrections bill (HR1195) to the White House for signature with nearly unanimous approval from both chambers. Another bill (HR2881), intended to utilize FAA funds to cover a Highway Trust Fund shortfall, did not win approval in Congress. The bill would have provided approximately \$3.3B in funding, which is close to the amount of Highway Trust Fund monies diverted under emergency authority after

September 2001 and Hurricane Katrina. Congress also continues to review proposals, some from candidates, to enact a federal gas tax 'holiday' for part or all of this summer

to reduce soaring fuel costs. The Climate Security Act (S2191)

continues to receive active lobbying by various interests to increase funding for projects that reduce transportation-related emissions. Finally, passenger and high speed rail would potentially benefit from the PRISM Act, which emerged from the House Transportation and Infrastructure Committee on May 8, with mid-May hearings.



Walt Stringer,  
Legislative Chair

## International Director's Report

*(Continued from page 1)*

revenue as opposed to a projected deficit of \$610,686. The excess revenue was mainly attributed to higher recovery in contracts, staffing positions that are still to be filled and major publications that were scheduled for 2007 which are now planned to be available in 2008. At the end of 2007, the Institute had a total of \$5,511,535 in assets with equates to a total of 78.61% of operating expenses which is a bit above the 75% goal threshold.

With the excess revenue generated in 2007, the Board approved \$445,000 in additional services for the membership. These additional services entailed the hiring of a consultant to develop a public information "101" training, populating the resource library, commissioning

articles for the journal, implementation of programs focused on the top areas that were identified by the Public Information and Public Relations Task Force, SCANs, development of new professional development seminars, hiring of authors for new publications, and support of non-North American technical participation of the technical programs. In addition, an increase of \$4,000 was authorized for the data collection fund as the proposals received this year were outstanding.

### Agency Membership

The Agency Membership thresholds were changed. Previously, Agency Memberships were based on increments of 5 members. The new Agency Membership dues structure will now allow an agency to add a member

individually. The new member will be charged at the same rate as others members in their agency without having to pay for an additional 5 members to move the agency up to the next level.

### Publications

Many new publications are expected to be released this year. The Transportation Planning Handbook, 3<sup>rd</sup> Edition and Urban Geometric Design Handbook are both anticipated to be published and available in the spring of 2008 followed by the Traffic Signal Timing Manual in summer of 2008. In the fall of 2008, Trip Generation is scheduled to be released followed by Traffic Engineering Handbook, 6<sup>th</sup> Edition in the winter of 2008.

**Proposed Amendments to the Next MUTCD Edition**

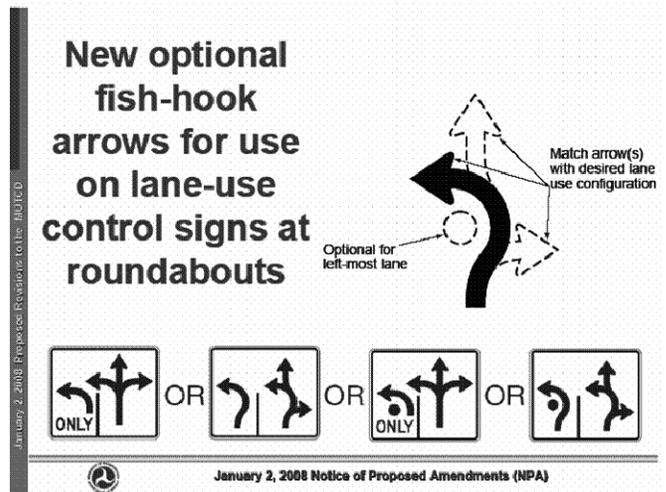
*(Continued from page 1)*

- highway or bicycle trail open to public travel. Additionally, further clarifications are made that the MUTCD applies to private roadways open to the public. This includes shopping centers which can affect planning and development requirements for private property.
- 2. States are required to revise their own MUTCD's within two years of federal adoption and states may clarify compliance dates further in their versions of the manual. (Note, agencies should continue to use their current state's version of the MUTCD until a newer version is adopted by their respective state.)
- 3. Traffic control devices (TCDs) are further defined. Utility locators, blue markers for fire hydrants, traffic calming design features, and snow plow stakes are clarified (and in some cases deleted from sections) since they are not TCDs.
- 4. Interim approval procedures where agencies can request to experiment with new devices continues to go through FHWA. It is advisable to also inform state agencies of any such experimentations typically through the state's established traffic control device committee.

**SIGNS AND ROUNDABOUTS**

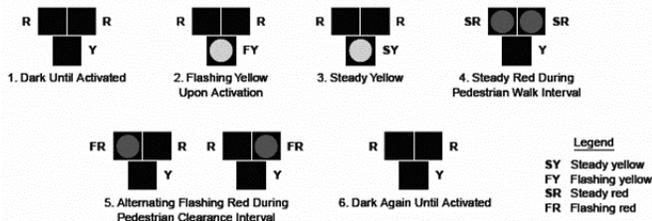
- 1. New electronic toll signings and markings using purple are shown in addition to signing and markings requirements for managed and preferential lanes.
- 2. Changes in the order of markers and barricades and changeable message sign locations in 2L, 2M, and some Part 4 Sections are planned.
- 3. The new "Hybrid Signal," also known as the "Hawk" for pedestrian crossings which has been widely utilized in Tucson, Arizona (contact Richard Nassi), is included. This "Hawk" style vehicle head can also be used for emergency vehicle applications called "Emergency-Vehicle Hybrid Signal."

- 1. New sections on roundabouts are included with new options, recommendations and requirements. Multi-lane channelization and markings are included, some of which may be quite useful, and others which indicate "left-turn only" and "hook" left (both with and without "dots" symbolizing the middle of the roundabout), and other similar pavement legends and markings in the pavement and on signs approaching the roundabout. Some of these closely resemble existing mandatory left-turn pavement legends and signs which could be interpreted by drivers that a left-turn approaching the roundabout is required.



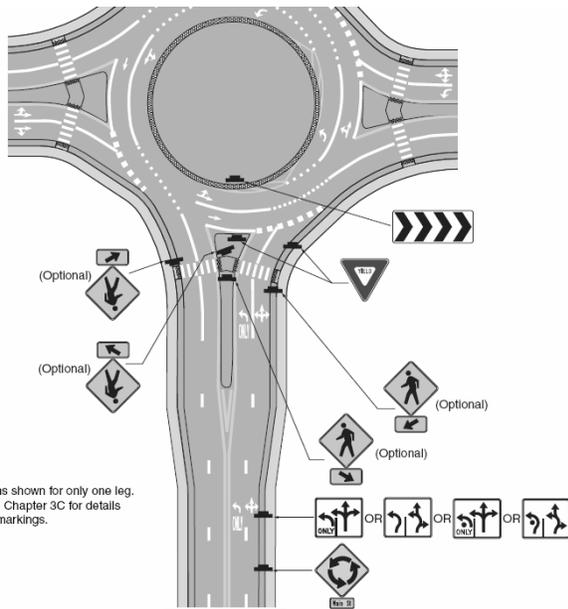
Additionally, the use of "No Left Turn" signs is specifically prohibited at roundabout entries while the "One-Way" (RT) sign remains as an implied, subtle option for posting in the center of the roundabout. Instead, the R6-4 (black/white chevron arrows to the right) sign is listed as a "should" for the central island, see excerpts from new Figure 2B-26.

**New pedestrian hybrid signal**



*(Continued on page 5)*

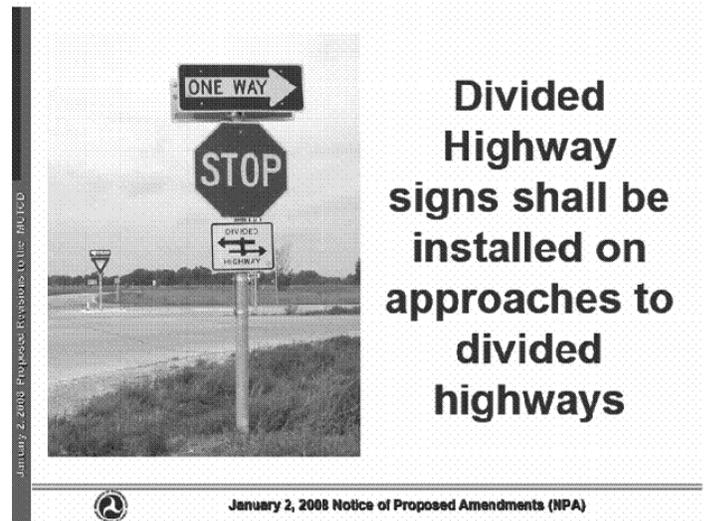
**Proposed Amendments to the Next MUTCD Edition**



From Figure 2B-26

1. Clarifications are made that minor changes in shapes and proportions are acceptable for sign border and layouts. However, symbols may not be modified other than to provide the symbol's mirror-image orientation as appropriate.
2. Changes to overhead sign illumination requirements for conventional roadways are listed.
3. Sign text sizes are increased for signs throughout from the current 1" to 40' to 1" to 33' to improve sign legibility. Additionally, upper/lower case will be required for street name signs.
4. Some smaller than standard sign sizes are allowed for low speed roadways, alleys or where space is constrained.
5. Supplemental plaques are required to increase in size if accompanying sign is enlarged.
6. Criteria are added for determining the need for STOP and YIELD controls and their respective warrants.
7. New recommendations are listed that special needs of sight-impaired pedestrians should be considered where crossings are prohibited.
8. Clarifications are made regarding when to post supplemental YIELD signs on splitter islands.
9. New pay station and other parking signage information and options are shown.
10. A new "Right Turn on Red YIELD to U Turn" sign is provided.
11. The minimum size of 36" by 36" size of diamond shape warning signs is required for multilane conventional roadways.
12. "All-Way" Plaques shall be used if all approaches have to stop but "2-way, 3-way, 4-way" shall not be used.

13. Other Stop sign plaques are recommended, required, or provided as an option to be added to STOP signs to clarify "Traffic From Left Does Not Stop" if "All-way" doesn't apply. In some cases, up to four signs (including an "All-Way" plaque) could be placed with a STOP sign which represents a bit of a change in practice—i.e. potential sign clutter associated with the posting of this important regulatory STOP sign, see graphic example. This seems to contrast with another section requiring that the STOP sign shape not be obscured by another sign installed on the back of it and the STOP sign size can be increased to ensure this does not occur.



14. Proposed changes are made to pedestrian regulatory and warning signs associated with crosswalks. "YIELD (STOP) Here to (for) Pedestrians" (R1-5) signs are required at all yield (shark-tooth) and stop lines, respectively, in advance of uncontrolled crosswalks for multi-lane approaches. Parking removal is recommended between these lines and the crosswalk. Additionally,

*(Continued on page 6)*

**New table for spacing of Chevron signs**

Advisory Speed (mph)	Curve Radius (feet)	Sign Spacing (feet)
15 or less	Less than 200	40
20 to 30	200 to 400	80
35 to 45	401 to 700	120
50 to 60	701 to 1,250	160
More than 60	More than 1,250	200

## Proposed Amendments to the Next MUTCD Edition

Pedestrian Crossing Warning signs (W11-2) signs shall not be post-mounted at crosswalk locations where R1-5 signs have been installed in advance of the crosswalk. However, the W11-2 (with diagonal down arrows) may be mounted overhead at the crosswalk where R1-5 signs have been installed in advance. *Note, this appears to be a change in practice.*

- School signs shall be fluorescent yellow green and other pedestrian, bicycle, and playground signs should be fluorescent yellow green.
- There are proposed changes and new guide signs for multi-lane roadways approaching freeway interchanges. More than one down arrow pointing to the same lane is prohibited. *This may be in conflict with some existing state's practice.*
- Updates are proposed to warning sign placement and distances as shown in Table 2C-4 for various conditions. Also, new tables are added for chevron and horizontal alignment signs.

### New table for selection of horizontal alignment signs

Type of Horizontal Alignment Sign	Difference Between Speed Limit and Advisory Speed				
	5 mph	10 km/h or 10 mph	20 km/h or 15 mph	30 km/h or 20 mph	40 km/h or 25 mph or higher
Turn (W1-1), Curve (W1-2), Reverse Turn (W1-3), Reverse Curve (W1-4), and Warning Road (W1-5) (see Section 2C.07 to determine which sign to use)	Recommended	Required	Required	Required	Required
Advisory Speed Plaque (W13-1P)	Recommended	Required	Required	Required	Required
Chevrons (W1-8) and/or One Direction Large Arrow (W1-6)	Optional	Recommended	Required	Required	Required
Combination Horizontal Alignment/Advisory Speed (W1-1a, W1-2a) at beginning of curve	—	—	Optional	Optional	Recommended
Truck Rollover (W1-13) with Advisory Speed Plaque (W13-1P) on exit ramp	—	Optional	Recommended	Required	Required
Exit Speed (W13-2) and Ramp Speed (W13-3) on exit ramp	—	Optional	Recommended	Required	Required

January 2, 2008 Notice of Proposed Amendments (NPA)

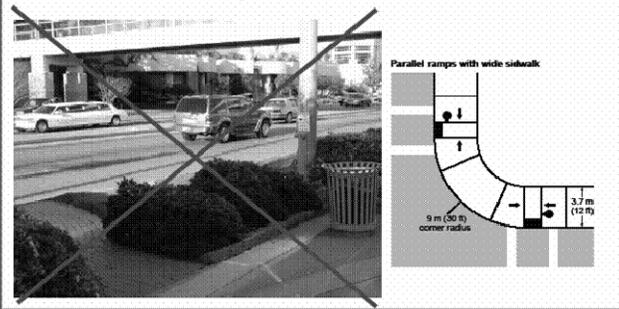
### MARKINGS

- “Dotted lines are required for auxillary lanes up to two miles vs. normal skip lines. *This may be different than some state's existing practice.*
- Gates across roadways will require distinct markings and reflectorization.
- Internally illuminated raised pavement markings used to define curves (not crosswalks) shall not be flashed.
- Stop lines shall not be used at YIELD locations. Must use “shark-tooth” style markings for yield-style line markings. This will impact jurisdictions using advanced lines for crosswalks.
- Guidance is provided regarding crosswalk markings for speeds greater than 40 mph and ADTs greater than 15,000 and 12,000 with and without refuges/medians, respectively.
- ADA requirements specifically cited within MUTCD by reference and curb ramps should be located within crosswalk lines extended. See following figure excerpt. This may impact existing standards at many locations

and will have funding impacts. *It will require advanced planning and programming to implement.*

- Speed reduction transverse marking requirements are listed.

### New figures for locations of pedestrian pushbuttons for a variety of conditions

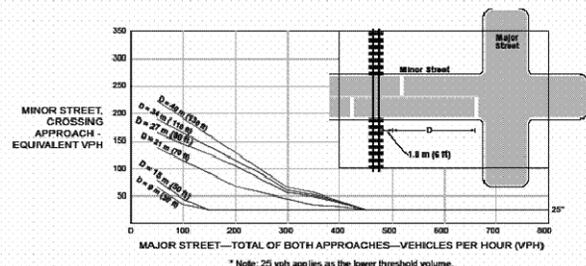


January 2, 2008 Notice of Proposed Amendments (NPA)

### Highway Traffic Signals—Warrants and Design Standards

- There is a new signal Warrant No. 9 for intersections located near railroads. *This will impact many locations in a jurisdiction adjacent to railroad grade crossing.*
- If only the peak hour warrant is met, there is a new requirement that the traffic signal should be actuated and can be operated in flashing mode during other hours.
- Pedestrian Volume Warrant No. 4 now uses a chart approach with new thresholds and school children are clarified to include high school students for the School Area Warrant No. 5.

### Warrant 9 added for intersections near grade crossings



January 2, 2008 Notice of Proposed Amendments (NPA)

- Coordination should be maintained across jurisdictional boundaries for signals within 0.5 miles of each other.
- Pedestrian countdown and 12-inch diameter sized signal sections for vehicle heads\*\* are required for new

(Continued on page 7)

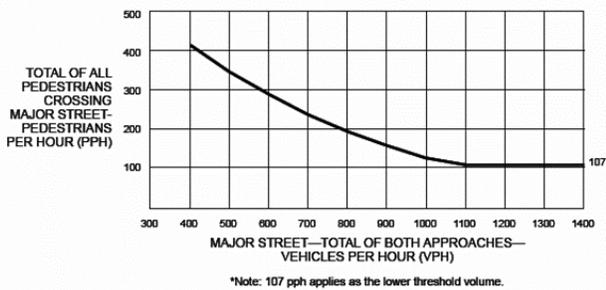
## Proposed Amendments to the Next MUTCD Edition

(Continued from page 6)

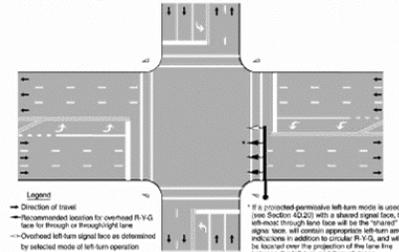
- installations. Compliance for pedestrian countdown is for all new installations and compliance is due within 10 years for existing locations.
3. New “should” language for back-plates and one vehicle head over each through lane for roadways with speeds greater than 40 mph. **\*\*Additional and larger vehicle heads and back-plate requirements may impact vertical clearances. Pole, mast-arm, and wire span load requirements would need to be increased and state and/or local design standards changed, accordingly. This could have a fiscal impact where new and larger poles would be required. Also, larger pole diameters may further challenge the ability to meet ADA where “street furniture” is present and right-of-way space is limited.**

travel at a walking speed of 0.9 m (3 ft) per second from the face of curb at the beginning of the “Walk” symbol to the far side of the traveled way being crossed and if not, additional time should be added to the walk interval to meet this recommendation. See graphics below. **This is likely to impact traffic signal timings in jurisdictions and may increase vehicular delay at heavily used intersections.**

### Revisions to Warrant 4 – pedestrian volume



### Approaches with speeds > 40 mph: recommended number, location, and design of signal faces

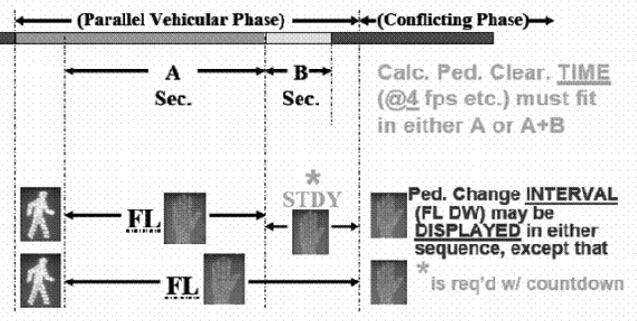


January 2, 2008 Notice of Proposed Amendments (NPA)

4. Push button hold-down options are provided for extending slower pedestrian crossing times to meet accessibility requirements.
5. The “Flashing Yellow Arrow” signal head option is included in new manual for protected-permissive operation as an option to green-ball/green arrow dog-house 5-section vehicle head. The signal head placement for each case is clarified.
6. Yellow and red intervals shall be set using engineering principles and practices in the ITE references offered.
7. Design standards for audible signals are offered.
8. Pedestrian walk rate speeds are reduced from 4 feet per second to 3.5 feet per second as a “should” except as noted in the following option. “A walking speed of up to 1.2 m (4 ft) per second may be used to evaluate the sufficiency of the pedestrian clearance time at locations where equipment such as an extended pushbutton press or passive pedestrian detection has been installed to provide slower pedestrians an opportunity to request and receive a longer pedestrian clearance time.” Under guidance, the walk interval and pedestrian clearance time [together] should be sufficient to allow a pedestrian to

1. If used, leading walk intervals should be at least 3 seconds (or at least allow a pedestrian to cross one lane), and right turns across the crosswalk should be prohibited during this interval and options to achieve this are listed.
2. The In-roadway Lighted Crosswalk walking speed rate is also recommended to be 3.5 feet per second and median actuators are required if timed only to the median. Clarifications are also provided regarding proper and improper usage of such actuators and required signs depending upon the type of actuators used.

### Pedestrian Clearance Time Relationship to Vehicular Intervals – Existing MUTCD

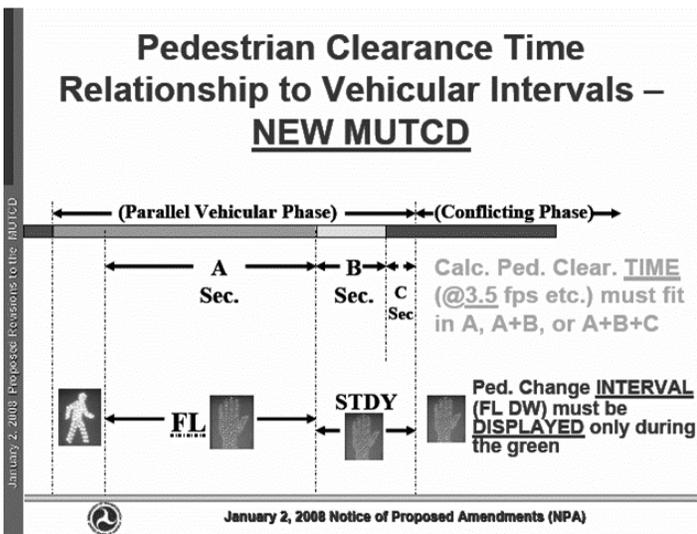


January 2, 2008 Notice of Proposed Amendments (NPA)

(Continued on page 8)

## Proposed Amendments to the Next MUTCD Edition

(Continued from page 7)



### Traffic Control Devices for Low Volume Roads

1. It is clarified that the Low Volume Roads Section only applies to rural not local residential roads and supplemental plaque required for all rural railroad crossings indicating the type of crossing protection present is now required.

### Temporary Traffic Control

1. Intelligent Transportation Systems (ITS) are suggested for construction zones.
2. Policy changes regarding planning for pedestrians in construction zones. *This is likely to impact the cost of traffic control plans.*
3. All workers in public right-of-way are required to wear approved high visibility apparel.
4. Automated Flagger Assistance Devices will be allowed for construction zones.
5. Reverse curve warning signs in construction zones shall indicate the number of lanes being shifted.
6. Guidance for messages and the use of portable changeable message signs is listed.
7. Sequential flashing of warning lights is allowed on merging tapers in construction zones.
8. White/orange reflectorization on portable delineators is required when taller than 42 inches.
9. Temporary lane separators (slurry tabs) are allowed in construction zones and arrow boards are required for all freeway lane closures, and one per each lane is required for multilane closures.
10. Speed reduction warning signs are required where speed limits are reduced by more than 10 mph.

### Traffic Control for School Areas

1. School crossing guard qualifications are expanded and elevated from guidance to standard. The student patrol section deleted.
2. Stronger recommendations regarding the use of supplemental in-roadway signs are included.

### Highway/railroad grade crossings

1. New definitions to be consistent with railroad industry's devices are provided.
2. STOP or YIELD controls are required at all passively controlled crossings on same post as (and below) the crossbuck sign.
3. Supplemental plaques indicating the type of control on advance RR Xing signs—i.e. "Signal Ahead" or "No Signal".
4. Wayside horns are provided;
5. Quiet zone treatments are incorporated by reference;
6. Except for traffic signals interconnected with light rail transit systems, traffic signals with railroad pre-emption or coordinated with flashing-light signal systems should be provided with a back-up power supply.
7. Pathway/rail crossings are also discussed.

### Bicycle facilities

1. Warning sign options that bicycles may use full lane, new combined bicycle/pedestrian signs and shared lane markings ("sharrow") are also provided.
2. Additional conspicuity flag and other options to enhance vehicle head visibility and notice are offered. However, when these are retained for some time after the construction period, perhaps yellow rather than orange would be the more appropriate color (unless used only for construction time period).

### Summary

There are changes discussed in the addition and removal of engineering judgment in traffic studies that occur in several places throughout the document. These may/may not impact agency operating procedures and exposure, and should be reviewed carefully.

Throughout the document there are references to a variety of speeds that can be used for calculations, i.e. posted, statutory, or the 85<sup>th</sup> percentile. The variety of speed options listed could in some cases lead to the transportation professional choosing the higher or lower speed when more than one are known. Different results in required transition and taper lengths for traffic control zones, significant variations in the amount of stopping, passing or sight distance, or yellow times required and provided could occur, and whether or not additional vehicle heads or back plates would be required could vary. *An agency could have exposure if the lower of both available speed values resulting in a less conservative provision is utilized.*

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## The Rush Is On!

Immediately after President Eisenhower signed the Federal-Aid Highway Act of 1956 on June 29, 1956, the Secretary of Commerce signed a Certificate of Apportionment for the first year's (FY 1958) authorization of \$1.125 billion for the new Interstate System. A month later, he issued the apportionment for the FY 1959 authorization of \$2.55 billion. With all of this money in the pipeline, states rushed to get their share and get started building the new highway network. In typical American fashion, the states also rushed to claim credit as being *first*.

Who won? It depends on how you define *first*. Here are the main record setters:

*First out of the gate:* Missouri claims this title on two counts. On August 2, 1956, the Missouri State Highway Commission (MSHC) signed a contract for work on a section of US 66 that became a part of I-44. As soon as the signatures were on paper, the district engineer for the Bureau of Public Roads phoned BPR headquarters in Washington, DC, to make sure this was the first Interstate System contract signed in the country.

That same day, the MSHC signed a second Interstate System contract for construction of the Mark Twain Expressway, a section of US 40 that would become part of I-70. The \$1.87 million project got under way on August 13, with a large sign proclaiming "This is the first project in the United States on which actual construction was started under provisions of the new Federal Aid Highway Act of 1956."

*First to the finish line:* Not to be outdone by its neighboring state, Kansas laid claim to its place in Interstate history by erecting a large roadside sign: "This is the first project in the United States completed under provisions of the new Federal Aid Highway Act of 1956." The 8-mile long section, which had been part of US 40, was incorporated into I-70. The segment had already been under construction before Eisenhower signed

the Interstate System legislation, but the pavement contract was signed August 31, 1956, and paving began on September 26, marking the first paving operation on an Interstate highway. Kansas governor Fred Hall presided at a ribbon-cutting ceremony for the completed project on November 14. Designed to meet the new Interstate standards, the two-lane highway was 24 feet wide, and the concrete pavement was 9 inches thick. A parallel roadway destined to carry opposite-direction traffic was expected to be started within a year. The median would be 60 feet wide, rather than the minimum requirement of 36 feet, to allow room for eventually adding two more lanes.

*First built:* Pennsylvania claims this title with a 160-mile-long portion of the Pennsylvania Turnpike in the eastern part of the state. It officially became part of I-70 on August 21, 1957, when 2,100 miles of toll roads in fifteen states were added to the Interstate System. But by then, it had already been an operational roadway for nearly seventeen years, having been opened to traffic on October 1, 1940.

New York could challenge Pennsylvania's right to this title, though. A section of the Grand Central Parkway completed in 1936 in Queens became part of I-278. Under a reconstruction project begun in 1959, two lanes were added to the road, along with a median, wider shoulders, and acceleration and deceleration lanes, bringing it up to Interstate standards.

*First state border-to-border completion:* Michigan became the first state to complete a border-to-border Interstate route. The 205-mile-long section of I-94 between Detroit and New Buffalo was finished in 1960.

*First state-wide completion:* There is no clear-cut winner in this category.

- Nebraska claims that on October 19, 1974, it became the first to complete its *mainline* Interstate System (481.5 miles).
- Arkansas claims that in 1975 it became the first state to complete

its *original allotment* of Interstate miles (525 miles).

- According to the Federal Highway Administration (FHWA), in June 1975 Rhode Island became the first state to open *all* of its Interstate mileage (70.8 miles).
- North Dakota claims that in 1977 it became the first state in the nation to finish its *assigned* mileage in the "Federal Controlled Access Highway System."

*Nationwide milestone:* On August 22, 1986, the first coast-to-coast Interstate route (I-80) was completed just west of Salt Lake City, Utah. Numerologists will note with interest the connection to the 1869 completion of the first transcontinental railroad at Promontory Point, about 65 miles to the northwest, across the Great Salt Lake.

### The Adobe Tower



#### About the Authors:

Jerry Hall, a professor of Civil Engineering at the University of New Mexico, has served District 6 as president and international director.

Loretta Hall, a member of the Construction Writers Association, is a freelance writer concentrating on engineering and construction.

They can be contacted at [jerome@unm.edu](mailto:jerome@unm.edu) and [lorettahall@constructionwriters.org](mailto:lorettahall@constructionwriters.org), respectively.

This is the ninth in a series of articles tracing the development of the Interstate Highway System.

## Wanted ITE District 6 Newsletter Managing Editor!

ITE District 6 is taking applications for a new District 6 Managing Editor. The role of the District 6 Managing Editor is to insure proper visibility of District 6 and make the District 6 newsletter, called *WesternITE*, a resource for all members of District 6 Sections and Chapters. The tenure of this position is a three-year term to begin December 1, 2008. The duties of the position include:

- The *WesternITE* Managing Editor is responsible for overseeing all aspects of publishing the District's official newsletter. *WesternITE* is currently a 16 or 20-page technical and informational newsletter published six times a year. It generally includes technical articles, announcements, section reports, International Director's reports, meeting announcements and minutes, positions available advertising and a professional services directory.
- The Managing Editor works to solicit, review and edit technical articles for publication in *WesternITE*. The Managing Editor edits the content of all articles, announcements and reports printed in *WesternITE* to ensure veracity of content and language.
- The Managing Editor recruits and reviews article and assembles electronic files (section reports, news, announcements, positions available, changes in PSD's). The Managing Editor reviews the draft, forwards final versions and a camera-ready original is produced. The Managing Editor is responsible for coordinating production with the printer and obtaining and forwarding mailing labels to the bulk mailer.
- Positions available ads are included as they are received from employers by the Advertising Manager. The Managing Editor oversees the Advertising Manager who prepares and e-mails invoices for positions available ads.
- The Advertising Manager is responsible for accepting and invoicing display ads. The Managing Editor coordinates and includes these ads in the newsletter.
- The District 6 Secretary-Treasurer is responsible for maintaining the accounting records associated with *WesternITE*. The Managing Editor sets up accounts with frequently used vendors, such as pre-press, print and bulk mail providers, so that billing is handled directly by the Secretary-Treasurer.
- Each year District 6 presents awards for the best technical paper published in *WesternITE* and to the section scribe who provides the best section reports. The Editorial Award and the Windiest Scribe Award are presented at the Western States Lunch at the Annual Meeting
- The *WesternITE* Managing Editor is an ex-officio member of the District 6 Board. Therefore, s/he is required to attend the Mid-Year Board Meeting and the Annual Board Meeting.

Please send a letter of interest with resume stating your qualifications to perform these responsibilities to Monica Suter, District 6 Vice President at [msuter@santa-ana.org](mailto:msuter@santa-ana.org) by July 31, 2008.

## Proposed Amendments to the Next MUTCD Edition

(Continued from page 8)

The above highlights do not include all proposed amendments. It is recommended that the actual NPA document be reviewed by agency transportation practitioners. Additionally, FHWA adopted Revision 2 of the MUTCD in December of 2007. This includes new retro-reflectivity requirements. Consequently, Revision 2 should also be reviewed by agencies to provide comments and assess anticipated impacts since its changes will be merged with the NPA version of the MUTCD for the next edition. It is recommended that agencies continue to use their current, state-adopted version of the MUTCD while reviewing proposed amendments to provide important

comments and to plan for how compliance will be obtained with limited resources prior to the deadline. Comments may be submitted to the docket by mail or electronically via [www.regulations.gov](http://www.regulations.gov).

### About the Author:

**Monica M. Suter** is the Vice Chair of ITE's Public Agency Council. She is employed by the City of Santa Ana, California. She is currently the Vice President of District 6.



## Section and Chapter Activities

### Colorado/ Wyoming Section



[jhenderson@sehinc.com](mailto:jhenderson@sehinc.com). Also, please visit our Section's website at [www.cowyite.org](http://www.cowyite.org).

Curtis Rowe,  
Scribe



May 2008

A Colorado/Wyoming Section of ITE luncheon was held on Friday, May 9, 2008 at the Embassy Suites Denver Tech Center. Section President, Joe Henderson, presided over the meeting that was attended by 97 members and guests. Prior to the luncheon meeting, a MUTCD Review Session was included that summarized the proposed MUTCD changes to the next edition. The luncheon meeting began with an introduction of those distinguished speakers that presented the various sections of MUTCD changes.

Section Newsletter Editor, Greg MacKinnon, introduced Karl Packer as being the April quiz winner. Joe Henderson introduced candidates for ITE offices. Candidates for Section Secretary/Treasurer, Greg MacKinnon and Dave Baskett, gave speeches regarding their candidacy. Allen Albers gave a speech on behalf of Larry Wymer as a candidate for District 6 Secretary-Treasurer. Gene Wilson gave a speech for International Vice President and reminded the membership that voting opens July 9<sup>th</sup>. Joe Henderson also announced that Alex Ariniello was candidate for District 6 International Director, but was not able to attend.

Scot Lewis introduced Jenna Buddemeyer, University of Wyoming, and Michelle Edwards, University of Wyoming, as winners of the Section Scholarship, and presented them each with a check for \$500.00.

Dave Hattan introduced Rhonda Young as this year's recipient of the Transportation Professional of the Year Award. Rhonda Young made an acceptance speech and thanked her predecessors and the Section members.

Section Vice President, Craig Faessler, then introduced the program speaker, Mr. H. Gene Hawkins, Jr., PhD, P.E., Associate Professor, Texas A&M University. Mr. Hawkins presented *MUTCD: Where it's Been and Where it's Going*.

The Colorado/Wyoming Section contact is Joe Henderson of Short Elliott and Hendrickson, Inc., 303-441-5401;



### Hawaii Section

March 2008

ITE held the March meeting joint with ASCE on 3/20/2008. Mr. Brennon Morioka Interim Director of Hawaii Department of Transportation, briefed the Hawaii Harbors Modernization Plan. The Hawaii Harbors User Group (HHUG), a non-profit maritime industry group comprised of major harbor users, was formed in 2005 to help the state identify and prioritize harbor improvement needs. Working with HHUG, the Department of Transportation, Harbors Division, and other state departments developed a comprehensive and system-wide strategy to address current and future harbor needs within an expedited six-year time-frame. The Harbors Modernization Plan calls for major improvements to six commercial harbors on four islands.

Later Mr. Wayne Yoshioka, Director of Department of Transportation Services, City and County of Honolulu, updated the Honolulu High Capacity Transit Corridor Project. Mr. Yoshioka will discuss recent developments occurring with the alignment, technology selection, and procurement procedure, etc. He will also cover the spikes ahead before the first rail can be laid down, and the importance of this multi-billion dollar project.

April 2008

The Hawaii Section Annual Meeting was held on April 24, 2008, at the Municipal Building. Based upon a tally of the votes received for the 2008 elections, the following were elected as the incoming

officers:

Don Hamada, President  
Steven Yoshida, Vice President  
Honglong Li, Secretary  
Robert Nehmad, Treasurer

Additionally, Cathy Leong informed us that she was appointed District 6 Student Endowment Fund Committee Chair. The committee is asking for contributions to reach the Endowment Fund goal of \$500,000 to be self-sustaining in generating \$40,000 a year to fully fund all the endeavors undertaken by the Student Initiatives Program. If every member pledged \$75, we would reach our goal.

The guest speakers were Abe Wong, Federal Highway Administration (FHWA) Administrator of the Hawaii FHWA Office and Jeff Chang for Brian Sekeguchi, Deputy Director of Hawaii Department of Transportation (HDOT). Mr. Wong presented an Update on Future Federal Highways Funding and Program. He touched upon the TEA-21 and SAFETEA-LU Acts and informed us that Highway Trust Fund is in fact, about to go into the negative. In 2006, when SAFETEA-LU was passed, there was \$16 billion with a plan to sustain, but the estimates were inaccurate in spending amounts and the raise in gas prices. He identified possible short term fixes with the most likely one being borrowing from the transit account, a request that has already been made in the President's budget.

Mr. Chang showed us a video on the HNL (Honolulu International Airport) Modernization Program and identified the changes being made at each of the seven (HNL, OGG, LIH, KOA, ITO, MKK, and LNY) State of Hawaii Airports. HNL is constructing a new parking structure and is working on a new international arrivals corridor with the biggest concern being a replacement for the Wiki Wiki Shuttle. A people mover or automated people mover (APM) and moving walkways are probably the best alternatives for HNL.

Honglong Li,  
Secretary



## WesternITE Welcomes France Campbell as our New Webmaster!

Jennifer Rosales appointed France Campbell as our new Webmaster effective June 2008. France replaces Jon Pascal who served as Webmaster for two 3 year terms and did a tremendous job developing the District 6 website. We all thank Jon for his years of hard work and dedication.

France has worked for DKS Associates as an Assistant Transportation Engineer in Portland, OR since January of 2008. He moved to Portland from Atlanta, GA where he

worked for Gresham Smith and Partners for two years. France received his BS in Civil Engineering in 2004 and an MS in Transportation Systems in 2006 from Clemson University in South Carolina. In April 2009, France will be taking the PE Exam in Oregon. In his spare time, France enjoys backpacking, mountain climbing, snowboarding and bicycling.

While working in Atlanta, France served as the Webmaster for the Georgia Section ITE. He redesigned the website with guidance from the current Section

President and Board Members and also started an online meeting registration system for the Section's monthly meetings. France also arranged a website to help organize and streamline registration for the Section's Annual Meeting. This experience will be a key to his successful term as District 6 Webmaster. The entire WesternITE board welcomes France. He will be a great addition.

## Positions Available



### ASSOCIATE ENGINEER, TRANSPORTATION Costa Mesa, California

\$6,539 - \$8,763 Monthly  
Excellent Benefits Package  
First Application Review Date:  
Monday, June 30, 2008 at 5 pm

The City of Costa Mesa is seeking an Associate Engineer (Transportation) to perform responsible professional and administrative work in the field and office, as well as supervise professional, technical and clerical staff and consultants. The position requires a Bachelor's degree with major coursework in Civil Engineering. Current certification as a registered Civil Engineer and/or Traffic Engineer in the State of California is highly desirable. Candidates must possess responsible and professional engineering work experience in designing and inspecting streets, storm drains, traffic signals, transportation design, grading plans, and other public works related projects, and have a minimum of three years of FT experience in project management and supervision of technical/professional

personnel. For more information or to apply for this position, please visit the City's website at: [www.ci.costa-mesa.ca.us](http://www.ci.costa-mesa.ca.us). EOE.

### TRANSPORTATION ENGINEERING/ PUBLIC WORKS PROJECT MANAGERS Irvine and Ontario, California

RBF is seeking two Project Managers to lead a team of engineers and design staff. This position will guide a team in the development of technical transportation design work associated with Caltrans freeway, highway and local roadway improvement projects. Position requires a BSCE, PE, and 7+ years of progressively responsible experience. A strong background in AutoCAD and/or Microstation is essential.

### BRIDGE DESIGN PROJECT ENGINEER Irvine, California

RBF has an additional need for an experienced Project Engineer to work on newly awarded state highway design projects. Requirements include 5+ years experience, a career focus in bridge design and be experience in bridge project development - initial studies (APS) to final PS&E for Caltrans reviewed projects. Position requires

California PE and proficiency in preparation of design calculations, quantities, estimates and specifications.

RBF offers excellent compensation, benefits packages and relocation assistance.

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EOE M/F/D/V

### Positions Available Ads:

To place your ad, e-mail your ad to [nate\\_larson@urscorp.com](mailto:nate_larson@urscorp.com). The deadline is the 28th of the previous odd-numbered month. The cost is \$1.50 per word, with a minimum cost per ad of \$100.00. Ads are also posted on our web site at [www.westernite.org](http://www.westernite.org). More information is available on our Web site.

## Positions Available

### SENIOR TRAFFIC SAFETY ENGINEER #08004

Montana Department of  
Transportation Helena, Montana  
\$61,843 Annually

The duties and responsibilities of this position consist primarily in the development of the Highway Safety Improvement Program, the management and coordination of data bases and computer programs. The Highway Safety Improvement Program has the goal to reduce the severity and number of highway crashes. Provide technical supervision, training and mentoring of civil engineering specialists. Education and Experience Required: B.S in Civil Engineering or Civil Engineering Technology, Construction Engineering Technology AND 5 or more years of experience in highway design, highway construction, traffic engineering. Requires Professional Engineer License with Montana certification or P.E. from another State with certification in Montana within six months. For a complete listing and to apply, please see us at [www.mdt.mt.gov](http://www.mdt.mt.gov).

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KHA is looking for energetic Traffic Engineers to work in our Woodland Hills office. Successful candidates will be responsible for the production of various traffic engineering and ITS designs including the preparation of traffic signal, signing & striping, interconnect plans, traffic control, CCTV and communication design plans.

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- Knowledge of consulting business practices
- Fundamentals in traffic and transportation engineering
- Familiarity with QA/QC procedures

Software Skills:

- Working knowledge of AutoCAD
- Microstation
- SYNCHRO

Personality Traits:

- Motivated, ambitious, self starter (i.e. desire to do more than expected)
- Good interpersonal skills
- Goal & Team oriented

Education / Credentials:

- BS/MS Civil Engineering
- EIT and/or PE, PTOE

KHA application link: [http://www.kimley-horn.com/kha/disciplines.asp?](http://www.kimley-horn.com/kha/disciplines.asp?RefCode=CA3000)

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[www.cityofnorthlasvegas.com](http://www.cityofnorthlasvegas.com). For more information, please contact City of North Las Vegas Human Resources Department 2225 Civic Center Drive, Ste. 226, North Las Vegas, NV 89030. We are an Equal Opportunity Employer and welcome candidates from diverse backgrounds.

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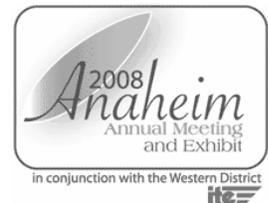
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