

Oregon Traffic Control Devices Committee

Meeting Minutes

April 10, 2001

Marion County Public Works, Salem, Oregon

Members Present: Stephen Wilson, Chair, ODOT Region 4; John Bustra for Rob Burchfield, City of Portland; Ed Fischer, Secretary, ODOT State Traffic Engineer; Gary Judd, Deschutes County; Randall Wooley, City of Beaverton; Gary Miller for Gordon Renskers, OSP; Mike Wilson, City of Bend; Charles Radosta, ITE/Kittelson & Associates; Bill Brownlee for Cynthia Schmitt, Marion County

Members Absent: Rob Burchfield, City of Portland; Gordon Renskers, OSP; Joseph Marek, Clackamas County; Cynthia Schmitt, Marion County

Others Present: Orville Gaylor, Rick Wood, Doug Bish, Lyle Misbach, Jan Gipson and Paul Davis, ODOT Traffic Management Section; Lew Garrison, City of Salem; Bill Brownlee, Marion County, Jane Lee, Travel Information Council and Cathy Ardanaz, 3M Corporation

Approval of March 2001 Meeting Minutes

Chairperson Stephen Wilson called the meeting to order. The Committee voted approval of the March 6 and March 20, 2001 meeting minutes and then went through introductions. No formal agenda was provided since the intent was to continue with review of the Millennium MUTCD and draft Oregon Supplements to that MUTCD.

Old Business

Legislative Update Discussion

The committee got a handout on current bills of interest before the Legislature. Jan Gipson said there hadn't been a lot of progress noted on the proposed legislation in the handout.

Ed Fischer said he'd heard news from Troy Costales this morning on SB 502. There was a meeting between Governor Kitzhaber and Senator Miller in which the governor expressed willingness to consider a raise in the rural interstate speed limit. So it's possible now that agreement may be reached on some speed increase through SB 502. A meeting was planned for April 11th between OSP and ODOT to discuss modifications they would recommend to the bill.

Ed said that ODOT would prefer to see any speed increases posted only after engineering investigations have been conducted, rather than initially raising all rural interstate speeds, installing signing and then lowering and re-replacing any signs where the higher speed wasn't justified by engineering investigation. ODOT would also like to see every speed become a limit, with the basic rule applying for any speed below the limit. Gary Miller said the State Police would prefer a 70 mph vehicle and 60 mph truck speed if speeds are increased. It was stressed that the process has not played out and nothing's certain at this point.

It was asked if there were any possibility that speeds would be increased on rural highways off the interstates. Jan said it wasn't covered in SB 502, and the only other legislation being looked at this week is HB 2924, which eliminates the federal maximum and changes everything to a speed limit, thus cleaning up the language that exists. Gary Miller said a lot of negotiation is going on such as attempting to get an increase in state trooper numbers in return. Ed said that ODOT's position on any attempt to increase speeds on non-interstate highways would be the same as on the interstates as far as having investigations before speed changes. Jan said the vast majority of the bills ODOT's interested in have had one hearing at most, no work sessions, as the legislature is busy on other issues.

Attorney General's Opinion on Speed Bumps or Other Physical Speed Controls

Ed Fischer quoted what he said was the operative paragraph of the 1975 opinion from the handout as follows (Note: the Speed Zone Review Panel, of course, has since supplanted The State Speed Control Board.):

"Because of their limited role in establishing speed limits, cities and counties may not construct physical speed control devices in roadways when the effect would be to regulate speed in a manner inconsistent with the speed established by the legislature or the State Speed Control Board for the roadway in question."

It was noted that the City of Portland has a different interpretation. Traffic Calming is apparently used to bring the 85% speed down, for instance, on a 35-40 mph speed road to 30-35 mph.

MUTCD 2000, Proposed Oregon Supplements

Ed Fischer suggested the committee decide on major elements to include in the supplements while reserving any wording or syntax issues that we just write them down and get back to them as time is available. Note: proposed supplements are in **bold text** for Standards or proposed Standards.

2F.04 Number and Size of Logos and Signs and 2F.05 Size of Lettering

Jane Lee, representing the Travel Information Council, spoke on the council's problem with the sections under Specific Service Signs. The concern is that the requirement in 2F.05 for 6-inch letters and numerals causes the distance (measured in miles) text in cases of mile fractions to run wider than the logo panel, and into the space needed for the adjacent logo panel. Jane suggested that the distance, while important, is secondary to the message of the service offered and direction of travel to get there. She said the council would like a supplement allowing this lettering to be only 4-inch tall on ramps. This would make it fit better and preclude having to go to bigger sign panel on ramps. The committee clarified that Lee was just asking for this supplement to apply to ramps, but Gary Judd said that would be a concern on supplemental signing on county roads as well. It was agreed that a supplement would only need to allow (not require) the smaller legend.

Decision: The committee agreed to create a supplement referring to 2F.05 that conveys that 4-inch letters and numerals for distance notations on conventional roads and ramps may be utilized.

2C.32 NO PASSING ZONE sign (W14-3) pennant shape (also referenced at 2B.24 and 2B.25)

Oregon has not used this sign and the proposed supplement prohibits it because it doesn't follow the positive guidance criteria of informing the driver of the desired action as follows:

"The DO NOT PASS pendant (W-14) shall not be used in Oregon. No pass zones should be initiated with the DO NOT PASS sign (R4-1)."

Decision: The committee agreed with this supplement disallowing use of the pennant in Oregon but with a correction to the sign number in the proposed text.

2C.27 CROSS TRAFFIC DOES NOT STOP

The committee discussed whether the sign would or should ever be used as a warning sign. It hasn't apparently been used as such up to now. Orville Gaylor pointed out that normally we don't mix regulatory and warning signs on the same post. The proposed supplemental guidance is as follows:

"Whether used as a warning or regulatory sign, the SIDE STREET TRAFFIC DOES NOT STOP sign should be used in Oregon."

Ed Fischer suggested that whenever the supplements refer to an Oregon sign its (Oregon) sign number should be referenced. Doug Bish asked if an illustration of the sign should also be included. Steve Wilson noted that the graphics are available in the Sign Manual and including them in the Supplement would just make it bigger. A concern was expressed that if the sign gets redesigned, the supplements would need to be edited. Gary Judd suggested adding the sign graphics as an appendix. Orville Gaylor said past practice is to just use the number. Ed said depending on how many Oregon signs are to be referenced in the supplement, with the

current technology it might be easy enough to include graphics, but as a minimum he'd like to see the reference included. This subject came up again later in the meeting, and an "Action Item" note has been placed there.

Decision: The committee agreed with this supplement with the sign number reference added to it.

3B.16 Stop and Yield Lines

The proposal was regarding when yield lines shall be used at roundabouts based on the results of current design efforts. It was pointed out that the committee decided at the March 6th meeting "to take no action on this optional marking. It may be useful in the future, particularly in advance of crosswalks on slip lanes."

Decision: The committee agreed to drop this proposed supplement for the present time.

3B.26 Speed Hump Markings

Randy Wooley said he'd like to see this proposed supplement reworded because it could be interpreted to adopt the option on page 3B-60 and requires the same type of marking on all speed bumps. He thinks the intention was that all speed bumps should be marked. Lyle Misbach clarified that if marked they should be a series of white markings. Jan said the second sentence in the proposed supplement wasn't necessary because the way it's written it doesn't have any affect anyway. The proposed supplement was as follows:

"Speed hump markings shall be placed on a public roadway speed hump to identify its location. The design of the markings shall follow the principles outlined in Section 3B.26."

Ed noted that the March 6th minutes said that we weren't going to make the markings mandatory but it appeared we are agreeing now that we will require markings. Orville asked if we're going to mark them, are we going to sign them also? Jan said the MUTCD didn't address it. Randy said 2C.22 said signs should be used.

Decision: The committee agreed to require the marking of all speed humps on public roadways but to leave off the second sentence regarding design of the markings.

Action Item: Jan Gipson/other ODOT staff will bring back the final wording for approval.

Note: This changes the decision at the March 6th meeting to shelve this proposal and allow the "May" condition to prevail. The committee may want to revisit this issue at the May meeting.

4B.02 Basis of Installation or Removal of Traffic Control Signals

Concern was expressed that as written this "Shall" supplement would go against the procedure used in Portland of utilizing a flashing operation for a period prior to covering the signal heads as allowed in the MUTCD. They want to continue having that option. To be consistent with Oregon traffic signal guidelines, Option D was proposed to be replaced with the following:

"Install the appropriate stop control or other traffic control devices and immediately cover the signal heads for a minimum of 60 days. (This does not apply to relocations of the roadway or the removal of temporary traffic signals used for construction or maintenance activities.)"

Ed said he liked the alert that conditions are changing that is provided by flashing operation although it's not allowed on state highways. Rick Wood explained the subcommittee's thinking in that they wanted to reflect current ODOT Traffic Signal and Policy Guidelines where covering of the signal head is only required for 60 days. Also, they wanted to eliminate what amounts to a two step process when they felt there was enough signing already required to notify drivers of the change in traffic control. However he didn't feel strongly about the issue. The committee first considered rewording the proposed supplement to remove the wording about immediately covering the heads, then agreed to just change the 90 days to 60 days in the MUTCD version of Option D so that it reads:

"Flash or cover the signal heads for a minimum of 60 days, and install the appropriate stop control or other traffic control devices."

Decision: The committee agreed to replace the proposed supplement with one that just changes the 90-days wording in the new MUTCD 4B.02, Option D to 60-days wording.

4D.04 Meaning of Vehicular Signal Indications (Standard C.1, Second Paragraph)

The committee agreed with the thrust of this proposed supplement but felt it would be better to retain the last part of the original sentence regarding yielding to pedestrians and other traffic lawfully using the intersection. Jan Gipson suggested that in this and similar cases the retained portion of the paragraph should be part of the supplement, thus replacing the whole paragraph as follows:

"Except when a sign is in place prohibiting a turn on red, vehicular traffic facing a steady CIRCULAR RED signal indication may enter the intersection to turn right into a two-way street, or to turn right or left into a one-way street in the direction of traffic upon the one-way street, after stopping. Such vehicular traffic shall yield the right-of-way to pedestrians lawfully within an adjacent crosswalk and to other traffic lawfully using the intersection."

Decision: Replace the entire Standard C.1 in the MUTCD with the edited Supplement as above:

Action Item: Jan Gipson and other ODOT staff will be sure final version of supplements replace any paragraphs being partially supplemented with a full paragraph including the supplementary language and the remaining, unsupplemented language.

4D.04 Meaning of Vehicular Signal Indications (Standard C.2)

The committee agreed with this supplement to remain consistent with state law. It replaces the second paragraph on page 4D-5 (STANDARD C.2 in its entirety) with:

"Except when a sign is in place prohibiting a turn on red, vehicular traffic facing a steady RED ARROW signal indication may enter the intersection to turn right into a two-way street, or to turn right or left into a one-way street in the direction of traffic upon the one-way street after stopping. Such vehicular traffic shall yield the right-of-way to pedestrians lawfully within an adjacent crosswalk and to other traffic lawfully using the intersection."

Jan stated that in this and all such cases where the supplement is to remain consistent with state law, the law or administrative rule involved would be cited. Ed Fischer commented that he liked the format and style of this supplement and the committee agreed it should be used throughout the final draft of the supplements.

Decision: The committee agreed with the supplement and with citing the state law as a part of it.

Action Item: Jan Gipson/ODOT staff will edit as necessary so that the final version of supplements use the same format style as this proposed supplement to introduce and explain all supplements.

4D.04 Meaning of Vehicular Signal Indications (Standard D.3)

The option at the end of this standard allows the use of a sign indicating that turns are allowed on red after stopping where right turns are allowed on red and the signal indication is an arrow. This supplement, which was approved without comment at the March 20th meeting, would remove the option to use the sign. This is because, unlike some other states, it is legal in Oregon at all such signals to proceed after stopping, and utilizing this sign in some cases implies that it's not always true.

Decision: The committee agreed to delete this option.

4D.05 Application of Steady Signal Indications

This supplement to provide for protected left turn displays from through-left option lanes was briefly explained by Rick Wood. It reads as follows:

"A signal face(s) that controls a particular vehicular movement during any interval of a cycle shall control the same movement during all intervals of a cycle. This shall not disallow the use of

protected left turns from lanes with through-left movements when either a four section face with a CIRCULAR RED, CIRCULAR YELLOW, GREEN THROUGH ARROW, and GREEN LEFT TURN ARROW is used for lagging turn intervals or a five section vertically stacked section face with CIRCULAR RED, CIRCULAR YELLOW, GREEN THROUGH ARROW, YELLOW LEFT TURN ARROW, and GREEN LEFT TURN ARROW is used for either leading or lagging turn intervals. When these displays are used, there shall be an adjacent through lane controlled by at least one additional face, and the opposing turn movement prohibited or not present."

Decision: The committee approved this supplement with little comment.

4D.07 Application of Steady Signal Indications for Right Turns

This supplement to provide for the use of a three section programmed signal display for exclusive right turn lanes was briefly explained by Rick Wood. It said:

"Protected/Permissive Mode - A separate signal face is not required for the right turn, but if provided, it shall either consist of all programmed-visibility indications, or it shall be considered an approach signal face, and shall meet the following requirements."

Decision: The committee approved this supplement without comment.

4D.13 Preemption and Priority Control of Traffic Control Signals

This supplement is to comply with OAR 734-020-0320(4)(e), which prohibits the termination of an active pedestrian or vehicular clearance interval by emergency preemption or bus priority, was briefly explained by Rick Wood with little comment from the committee. It replaces Standard B with the following:

"The shortening or omission of any pedestrian change interval shall not be permitted unless the shortening or omission results from an unexpected railroad or drawbridge preemption."

Ed Fischer suggested that ODOT staff edit this and all other supplements to refer more specifically to the section being supplemented, rather than relying on page numbering in case editing/revisions from FHWA alters current page numbering. Jan Gipson agreed and said that is planned, also because the new MUTCD will be put out in several different media forms which likely will alter pagination between media versions.

Decision: The committee approved this supplement without substantial comment.

Action Item: Jan Gipson/other ODOT staff will make sure the final version of supplements refer specifically to the section being supplemented while omitting current MUTCD page number data.

4D.18 Design, Illumination, and Color of Signal Sections

This supplement was written to reflect Oregon standard specification that all parts of signal housing should be non-reflecting black. The supplement does this by eliminating the Guidance that signal housings should be highway yellow and replaces the Standard above it to read as follows:

"All exterior surfaces of the signal housing, signal visors (hoods), louvers, fins and backplates shall have a dull black finish to minimize light reflection and to increase contrast between the signal indication and its background."

The committee discussed what exactly was meant by "dull black" and agreed it should be non-reflective black. The best way to describe this by consensus was "flat black."

Decision: The committee approved this supplement deleting the Guidance but changing "dull black" to read "flat black".

5B.03 Speed Limit Signs (R2 Series)

This supplement covering Section 5B.03 of the new Part 5 regarding low volume roads also applies to Section's 2B.11 and 2B.14 of Part 2 on signs. It suggests maintaining the current supplement section 2B-10 under appropriate numbering for the new MUTCD. The current supplement reads as follows:

"The word "LIMIT" shall not be used on speed signs in Oregon. Speed zones shall be posted using signs bearing the legend "SPEED" with the designated speed shown directly below."

As discussed by the committee, this supplement could prove ill-advised if the current legislature passes legislation removing the dichotomy in Oregon law between speed limits and Basic Rule speeds.

Decision: The committee agreed to hold off on this supplement pending the outcome of the legislative session.

Action Item: Jan Gipson/other ODOT staff can continue looking at wording to cleanup and consolidate in the meantime. The OAR will be cited in whatever wording is used if this supplement is retained in the final draft.

5A-5G Traffic Control Devices for Low Volume Roads

Lyle Misbach's subcommittee noted that Part 5 is a new section of the MUTCD and suggested a supplement to remind users that all changes in other parts of the manual that are referenced in Section 5 be referenced in the supplements as well. The committee had no objection to this at the March 6 meeting and Jan wrote the supplement language as follows:

"All Oregon Supplements for other Sections of the Manual on Uniform Traffic Control Devices shall apply to this section."

Decision: The committee agreed to the supplement as written.

6F.03 Sign Placement

This supplement was meant to clarify the intent and soften the language of 6F-3 and other places in Section 6 that the subcommittee found too strong. At the March 6 meeting the committee had agreed to have the subcommittee summarize all the new provisions for pedestrians and bicyclists and bring it back to the committee, at which point the committee would again look at proposed wording for the supplement.

Jan reported back the following wording, saying the committee felt the intent of the language in 6F.03 could be carried out better by specifying the decisions to be made when placing sign supports, replacing the second Guidance with the following supplement:

"Work zone traffic control where there are sidewalks, bicycle lanes, or areas designated for pedestrian or bicycle traffic should be placed to maintain safe pedestrian and cyclist access and movement. If the movement of pedestrian and/or cyclist traffic must be impeded, appropriate warning signs and/or detours should be provided."

Decision: The committee agreed to adopt the supplement as presented.

6F.52 Variable Message Sign Standards

This proposed supplement was put off at the March 6th meeting in order to provide the committee with copies of ODOT's Guidelines for the Operation of Variable Message Signs on State Highways, which the subcommittee felt provided better standards than that in the Millennium MUTCD. This was handed out to the committee. Ed suggested members take the time to look over the handout and be ready to identify any differences they have with it at the next meeting. The actual text presented for approval is as follows (as corrected upon presentation):

"Section 6F.52 MUTCD Standards shall not be used in Oregon. The standards for portable changeable message signs shall be Supplement B and C of the 'Guidelines for the Operation of Variable Message Signs on State Highways,' published by the Oregon Department of Transportation."

The committee discussed precedence against including the actual document and the fact that we have an Attorney General opinion that the Supplements would have to be reissued in any such case to refer to any new version of the Guidelines. They also debated the convenience of having the whole Guidelines in the supplement as opposed to the bulk of including all referenced documents.

Decision: The committee agreed to adopt the supplement as presented but no clear decision was made as to whether it would be by reference, by inclusion of the text in the appropriate location or as an appendix to the Supplements.

6F.53 Arrow Panels

This supplement is to add the horizontal bar to those in Figure 6F-3 as a Caution Mode option. This option is used extensively in Oregon with a long history of use and no research or supplemental language is discussed in the MUTCD to explain why it was not included there. Therefore the committee was asked to add to the Standard:

"The horizontal bar Caution Mode display is added to the allowed standard displays."

Decision: The committee agreed to adopt the supplement as presented.

6H.1 Notes for Figure 6H-4 - Typical Application 4

This proposed supplement is to shorten the distance allowed between advance warning signs and construction work from 8 km (5 mi.) to 1.5 km (1 mi.) for mobile operations on the road shoulder. The subcommittee felt that Oregon's current standard of one mile at times is too far to maintain driver awareness, let alone the MUTCD standard. The proposed supplement is as follows:

"The distance from the advance work sign to the work site or flagger shall not exceed 1 mile/1.5 kilometer."

The committee questioned whether this ought to be a "Shall" or a "Should" and agreed "Shall" as it appears in the current Short Term Workzone Handbook is appropriate. Discussion was had as to whether to stay with that or change it--and the Handbook at the next revision--to a "Should". The committee agreed that compliance is a separate issue, from what the standard should be.

Decision: The committee agreed with the supplement as written, requiring that distances from advance work signs to the work site or flagger shall not exceed 1 mile/1.5 kilometer.

Illustrations in Oregon Supplements

Ed Fischer, referring back to 6F.53 above, said he thought this was another case where an illustration of the caution panel would be valuable in the Oregon Supplements. After further discussion, the committee agreed that a page would be about all it would take to include sign graphics to the supplement.

Decision: The committee agreed that in addition to Oregon sign numbers, the Oregon Supplement will include a page of sign illustrations that corresponds with these listings.

Action Item: Jan Gipson/ODOT staff will add sign illustration graphics as an appendix to the text, which will list Oregon sign numbers.

School Safety Guidance

Jan said the supplements for Section 7 were to provide guidance to jurisdictions statewide regarding school area traffic control consistent with "A Guide to School Area Safety" published by ODOT's Traffic Management Section in cooperation with ACTS Oregon.

7B.08 School Advance Warning Sign (Guidance)

Randall Wooley said he'd had second thoughts since his subcommittee agreed that changing the "Shall" to a "May" and Guidance rather than a Standard regarding riders that say AHEAD or XXX METERS (XXX FEET). He said his understanding of the philosophy of the MUTCD is that you can tell the difference between the advance school crossing and the actual school crossing sign in that the former has the AHEAD or XX FEET rider, while the actual crossing has the downward arrow rider. Wooley now feels that it would be helpful to motorists and not that expensive considering the ten-year compliance time. He said if this is the new national standard we should go along with it. Randall said the only downside he sees is that current practice is to put

the FINES DOUBLE IN SCHOOL ZONE rider below the advance warning sign. He proposed canceling the proposed supplement.

In response to a question from 3M's representative, Cathy Ardanaz, Orville Gaylor said if this supplement is not included, ODOT would only use the AHEAD rider. The state would thus avoid any unpleasant legal charges that the distance specified on a particular rider was inaccurate. Other members said they would likely only use the AHEAD rider as well, but there was no consensus to forbid use of the distance riders. Ed Fischer said he was heartened at Randall's change position on this proposed supplement since he could see no compelling reason to make these riders optional.

There was discussion as to what the distance rider on the advance signs denoted, distance to a school crossing or to the beginning of the school grounds. The committee agreed this wasn't clear. Gary Judd said his only other concern was what the philosophy was that didn't make the distance riders apply to all other warning signs. The committee agreed not to request further clarification from FHWA.

Decision: The committee agreed to cancel the supplemental guidance that would make the riders optional.

7B.08 School Advance Warning Sign (Standard)

Randall said he had no objection to the second proposed supplement on Section 7B.08 for use when there is a reduced school speed established. That standard would read:

"In those areas where a reduced school speed has been established, the School Advance Warning sign shall be installed not less than 45 m (150 feet) nor more than 210 m (700 feet) in advance of the School Speed Limit Assembly."

This standard would not apply in cases where a school speed was not established. In cases where there was a school but not a school speed zone, the other standard that the committee had just agreed to leave as-is, would apply.

Decision: The committee agreed to adopt the additional Standard supplement as presented.

7B.11 School Speed Limit Assembly

Stephen Wilson noted that these proposed supplements are all subject to what comes out of the current legislature. Jan Gipson said the changes are also based on Oregon law. Doug Bish said the first three paragraphs are very similar to what's been in the supplements before. He said the first paragraph adds the "WHEN FLASHING" sign, the second paragraph came about in response to concerns from the committee that there was no definition for when flashing lights should be used. The third paragraph, he said, was similar to the current supplement. Ed Fischer clarified that the first paragraph (which the draft didn't differentiate) is a Standard, the second is Guidance, and the third is a Standard. With those edits, the proposed supplements to 7B.11 are as below:

Standard "When a 20 mph school speed zone is established, the school speed sign assembly shall be used. It shall consist of the 'SCHOOL' top plaque, a 'SPEED 20' sign, and a bottom plaque indicating when the school speed is in effect. The bottom plaque shall be either a 'WHEN CHILDREN ARE PRESENT' sign; or a 'WHEN FLASHING' sign; or both; or a 'WHEN FLASHING OR CHILDREN PRESENT' sign."

Guidance "The school speed sign assembly "SCHOOL SPEED 20 WHEN FLASHING" sign should be used together with flashing lights to indicate when children are scheduled to arrive at or leave school. The preferred placement of flashing lights is to mount them on the same structure as the speed sign assembly."

Standard "A 36" wide School Speed sign assembly shall be used on all four-lane highways and rural highways. A 24" wide assembly may be used on urban 2-lane streets."

Guidance "The reduced school speed zone should begin 30m to 60 m (100 ft to 200 ft) from the school property line or the crosswalk, whichever is determined by engineering judgement to be most appropriate, else the limits of a reduced school speed zone may be determined by an engineering study." replaces

Guidance "The reduced speed zone should begin at a point 60 m (200 ft) from the crosswalk, or 90 m (300 ft) from the school property line, whichever is encountered first as traffic approaches the school."

Ed asked if the first Standard is supplemental to the MUTCD Standard, or replaces it. Doug said it replaces it because the Manual didn't allow simultaneous use of both signs. Doug pointed out where the fourth paragraph states that it replaces the MUTCD Guidance.

Ed clarified that in the final draft of the Supplements they will all be edited and formatted the same with explanatory wording such as "The following paragraph replaces the first Guidance under 7.11". He suggested one person sit down and proofread/edit so that there's consistency throughout. Stephen Wilson assigned this task to Jan.

Jan asked about the placement of wording on the Standard regarding use of 36" wide school speed signing, suggesting that "rural" should go before "four-lane highways" and edit the 4-lane so that it reads "...shall be used on all rural and multi-lane highways." The committee discussed the definition of "rural highway", decided there wasn't any. Ed asked if rural highways were the target or the speed of the highway. Jan said she thought it did have to do with rural speeds. Ed said there were probably places with low speeds already posted where the 36" signs wouldn't be needed.

Decision: The committee agreed to send this group of supplements back to Doug Bish to further wordsmith.

School Crossing Sign (S2-1)

Orville Gaylor brought up the fact that the School Crossing Sign, with the parallel crosswalk bars depicted, has been discontinued in the new MUTCD, but said that doesn't mean it can't still be used. He said there were many locations on the state system where they're still in use, overhead above the traffic lanes. These are often interior illuminated. Orville said he couldn't see any reason to change them out. A downward arrow rider isn't practical because of the overhead location and clearance issues. Orville said they would be supplemented with the street level signs that do include the riders. The committee discussed whether a supplement was needed to continue using the school crossing signs.

Decision: The committee agreed no supplement was necessary, that it can be handled through the Sign Policy.

Strong Yellow-Green Signs

Ed asked the committee if there was any consensus for adding a supplement requiring or preferring these signs. Jan Gipson said the new MUTCD mentions them as an option in Section 7B.03. The signs have been listed as preferred in the school guidelines put out by ODOT in cooperation with ACTS and caused consternation in some quarters. Some jurisdictions don't want to absorb the cost of changing over all the signs. Washington State requires them uniformly. ODOT has decided to start using them exclusively on state highways on a replacement basis (unless the local jurisdiction wants to pay for the replacement sooner). Cost is a big issue for jurisdictions that might have a lot of signs to replace. Ed suggested surveying the League of Oregon Cities and Association of Oregon counties to find out what individual jurisdictions are doing. It is expected that as time goes on the usage will increase statewide without a statewide requirement.

Decision: The committee agreed not to require or even advise use of strong yellow-green signs in the Oregon Supplement at this point.

7E.05 Operating Procedures for Adult Guards

The committee had sent this proposed supplement back to the subcommittee to further inquire as to the legality of STOP paddles at stop signs. Doug Bish reported that the previous version of the proposed supplement had prohibited use of STOP paddles at traffic signals and STOP signs. Upon further research of the law, it appears that adult crossing guards could use a STOP paddle at stop-controlled intersections and not violate the integrity of stop control because the paddles just have STOP printed on them and not SLOW. The subcommittee therefore proposed the committee replace the second Guidance in 7E.05 with the following Standard:

"Adult crossing guards shall not use STOP paddles at crosswalks controlled by traffic signals."

The additional Guidance originally proposed at the March 20th meeting has not been changed:

"Adult crossing guards may use flagging devices similar to student patrols when adequate gaps in the traffic occur frequently. When the desire is to create safe gaps, adult crossing guards may use a STOP paddle."

Extensive discussion then ensued, touching on a number of concerns with the use of STOP paddles by adult crossing guards, particularly at signalized crossings. The way in which adult guards are recruited, trained and equipped in their jurisdictions were discussed by panel members and guests. The concerns included whether or not some type of training and/or certification should be required, if only the crossing flags should be allowed and STOP paddles not permitted, and the involvement of ACTS in determining the best policy to pursue.

Decision: The committee generally agreed that Doug Bish would carry the discussion to ACTS for their input. A decision on any proposed wording was postponed until the issues were clarified and ACTS is consulted.

Traffic Controls for Highway-Rail Grade Crossings

Stephen Wilson noted that proposed supplements to Part 8 were essentially as agreed to in the last meeting, starting out with the fact that the Rail Section has authority over traffic control devices under Oregon law. Rick Wood agreed noting that the only changes were adding references to Oregon law and administrative rules. He also noted the supplements had been reviewed by the Rail Section and they were satisfied. The committee quickly reviewed these supplements with only a minor typo corrected as detailed below.

8A.01 Introduction

The following sentence shall be added to the opening paragraph of the Standard:

"Under Oregon law, ORS 824.202 'Policy; authority vested in state and department', the ODOT Rail Division is authorized to determine the character and type of traffic control devices used at all highway-rail grade crossings."

Standards 17 and 18, definitions, shall be added on page 8A-3:

"17. Pedestrian Clear Out Interval (PCOI) - The interval prior to the start of a railroad preemption sequence at a traffic control signal, during which active pedestrian "WALK" intervals will be terminated and pedestrian clearance intervals will be provided."

"18. Vehicle Clear Out Interval (VCOI) - A traffic control signal interval during which motor vehicles are permitted to advance through a highway intersection and away from a railroad grade crossing. The controllers for both the highway intersection and the railroad grade crossing are electrically interconnected. Generally the VCOI follows a pedestrian clear out interval (PCOI)."

8A.02 Use of Standard Devices, Systems, and Practices

The second paragraph of the Standard on page 8A-4 shall be replaced with the following:

"Before a new or modified highway-rail grade crossing traffic control system is installed, approval shall be obtained from the Oregon Department of Transportation, Rail Division as documented in a Rail Crossing Order."

8B.02 Highway-Rail Grade Crossing (Crossbuck) Sign (R15-1, R15-2)

As required by Oregon Administrative Rules 741-110-040(8) and 741-110-0060(3), the Option to the first Standard shall be revised and made a part of the Standard:

"The supplemental Number of Tracks sign shall be used at all multiple track highway-rail crossings."

8B.09 Emergency Notification Sign (I-13 or I-13a)

Guidance, Support and signs contained in this section shall be replaced by the following:

"All Emergency Notification signs and markings shall conform to the requirements of the Oregon Department of Transportation, Rail Division as set forth in Oregon Administrative Rule 741-115-0040 and Rail Crossing Orders served by the division."

8D.07 Traffic Control Signals at or Near Highway-Rail Grade Crossings

The second Standard shall be supplemented by the following:

"When a vehicle clear out interval (VCOI) is required, the indication for the clearance phases shall be green."

"Advance railroad detection or other appropriate methods shall be used to provide a pedestrian clear out interval (PCOI) before the vehicle clear-out interval. This should be designed to minimize the occurrence of abbreviated pedestrian clearance intervals."

Decision: The committee approved all supplements as presented above for MUTCD Part 8.

9A.05 Relation to Other Documents

This suggested supplement was to add the Oregon Bicycle and Pedestrian Plan to the list of documents used during the development of signing and marking recommendations in Part 9. As proposed it reads:

"Informational documents *to be* used during the development of the signing and marking recommendations in Part 9 include the "Oregon Bicycle and Pedestrian Plan" which is available from ODOT Bicycle and Pedestrian Program Unit."

Doug noted that the words "to be" in the first line probably were erroneously included and that it wouldn't be accurate to say that the subject publication was used in developing Part 9 of the MUTCD. He said we might want it to refer to Part 9 supplements or to just drop it as a supplement. Stephen Wilson suggested the document might be referred to as part of the Support in 9A.01 or as a separate Guidance. Doug suggested he take this supplement back to Michael Ronkin to work on the wording as Guidance in 9A.01.

Decision: The committee agreed to send this supplement back for possible rewording as Guidance.

9B.04 Bicycle Lane Signs (R3-16, R3-17), 9C.04 Markings for Bicycle Lanes

Doug said this supplement was to delete the second part of the 9B.04 Standard requirement for bicycle lane signs to be used in advance of marked bicycle lanes and replace it with Guidance that it may be used as follows:

"Bicycle Lane signs may be used in advance of the beginning of a marked bicycle lane or at periodic intervals."

Additionally in 9C.04 the Standard that declares "Signs shall be used with preferential lane symbols." would be deleted in the Oregon Supplements

Decision: The committee approved these supplements to the MUTCD.

10A.01 Introduction

As introduced, this supplement was originally suggested to be inserted in the last paragraph under "Support" consistent with the requirements of ORS 824.202 "Policy; authority vested in state and department". Jan Gipson asked why it wouldn't be a Standard. Rick said it really should be a Standard. Therefore, he said it should be placed after the Standard. It clarifies where MUTCD Part 8 and supplements to it apply to Light Rail in Oregon as follows:

"Where light rail transit operates in exclusive or semi-exclusive alignments and highway-light rail grade crossings exist, the traffic control devices, systems, and practices for highway-rail grade crossings described in Part 8 and these supplements shall be used."

Ed Fischer asked what a semi-exclusive alignment. Rick gave an example of San Diego where the rail runs adjacent to the traffic and where traffic crosses the rail it has to be gated, so they use gates as well as signals. In Oregon, Rick said we try to avoid that. Ed suggested Holiday Street might be covered under the definition but Rick said if the rail is not in the street section we don't consider it as covered by the definition. Stephen Wilson suggested we strike "semi-exclusive" since we'd probably never use it. Rick said that had been considered but saw no harm in leaving it there. Doug asked if the "...semi-exclusive *and* highway light rail grade crossings exist..." means where both exist together, not just where it goes along our road or on our roadway. Rick said if it was anywhere within the cross-section, as opposed to having it's own right-of-way.

Further discussion ensued as to whether other Portland streets such as Burnside were included in the definition, and whether "exclusive" or "semi-exclusive" should be struck from the supplement. Rick suggested it was best if he went back and reworded the supplement more specifically without using either term. Then it was discussed whether we should even include this supplement or leave well enough alone. Rick said he'd go back and discuss it with Craig Reiley and if they have no problem with it, he'd be happy to leave it out.

Decision: The committee agreed with Rick having further discussions with the Rail Section and coming back to the committee with new wording or a recommendation to leave this supplement out.

Action Item: Rick Wood will check with Craig Reiley on what Rail needs and either re-write the supplement more specifically to cover Oregon's situation or recommend not using it..

Part 10 Errata

10D.07 Use of Traffic Control Signals for Control of Light Rail Transit Vehicles at Grade Crossings

Rick said the subcommittee noted that Table 10D-1 didn't allow the use of an amber horizontal bar for the STOP indication. He said this was probably an error and that it should be suggested to FHWA as an erratum.

MUTCD Definitions

Rick discussed his subcommittees discussions of whether definitions should be included in the supplements, and the conclusion they came to as indicated in Allan Troyer's notes that it was better to let MUTCD definitions apply to the MUTCD and let Oregon law apply as appropriate. Otherwise it would complicate things by introducing problems where there is a conflict.

Part 2 Revisited - Suggested Supplement

2A.02 Definitions

Orville Gaylor suggested a supplement continuing current practice on static signs, stating that the following are acceptable definitions:

Left = LT

Right = RT

Avenue = AV

Decision: The committee agreed to adopt the definitions as a Supplement to the MUTCD.

Part 2 Revisited - Additional Significant Changes Worthy of Committee Attention

Orville Gaylor then went over further changes that he'd come across in the new MUTCD that the committee should be aware of. These were included in a handout provided to the committee and meeting attendees.

2A.08 Retroreflectivity and Illumination - Requires signs to be retro-reflective or illuminated to show the same shape and similar color both day and night.

2A.14 Word Messages - Changes legend size on signs to 1" of letter height per 40 feet of viewing distance (was 50 feet).

2B.04 STOP Sign R1-1 - Requires use of riders under all-way stop conditions - Compliance date of 1-17-2004.

2B.11 Speed Limit Sign R2-1 - Speed limit signs indicating the statutory speed limits shall be installed at entrance to the State and at jurisdictional boundaries of metropolitan areas. Similar wording was in the 1988 edition. This has been interpreted to mean that when statutory speeds are not posted in a jurisdictional area, the speed limits must be given to the driver entering the jurisdiction. For example: Speed Limit 25 on all streets in Curryville.

2B.16 Reduced Speed Ahead Signs - Allows metric riders. If used, this change is effective for all new sign installations. Allows for phase-in period of seven years.

2B.17 Turn Prohibition Signs - Requires signs where turns are prohibited; except where ONE WAY signs are used.

2B.25 PASS WITH CARE Signs - The PASS WITH CARE (R4-2) sign should be installed at the end of a no-passing zone if a DO NOT PASS sign has been installed at the beginning of the zone.

Figure 2B-2 Typical Wrong-Way Signing for Divided Highways - The figure shown is typical *if* the road authority decides these signs are needed, but *not* a mandatory condition for all such crossings.

2B.32 ONE WAY Signs - ONE WAY signs shall be placed parallel to the one-way street at *all alleys* and roadways that intersect one-way roadways. The alley reference is new and compliance is in seven years (1-17-2008).

The committee considered making a supplement to allow the use of RIGHT (OR LEFT) TURN ONLY signs, but decided there wasn't enough reason to deviate from the MUTCD and the seven year allowance for compliance shouldn't be too burdensome.

2B.40 Traffic Signal Signs - When right turn on red is permitted and pedestrian crosswalks are marked, the word message TURNING TRAFFIC MUST YIELD TO PEDESTRIANS should be used. Orville noted that Oregon law requires drivers to yield to pedestrians in crosswalks so this sign doesn't need to be used in Oregon and there are other alternatives in our Sign Manual if there are cases where vehicle/pedestrian conflicts are a problem. It was suggested that this merits a supplement changing the "should be used" to "may be used" in order to preclude legal issues.

Decision: The committee agreed to modify this section with a supplement and cite the appropriate Oregon law in the supplement.

2B.44 Weigh Station Signs - The R-13 federal sign has been modified for Oregon use; see sign OR22-4.

2B.48 Preferential Lane Signs - New signs for preferential lanes with compliance date of 1-17-2007 (six years).

General Note: Chapter 2C includes "Shall" conditions on numerous warning signs.

2C.07 Combination Horizontal Alignment/Advisory Speed Sign (W1-9) - When used, the W1-9 sign shall supplement other advance warning signs.

2C.08 Combination Horizontal Alignment/Intersection Sign (W1-10) - Allows combination of curve with intersection warning.

2C.23 PAVEMENT ENDS Sign (W8-3) Deletes symbol sign and allows for word message sign only.

2C.24 Shoulder Signs (W8-4, W8-9, W8-9a and W8-11) - Deletes symbol signs and allows word message signs only. Compliance date of 1-17-2011 (ten years).

2C.26 Advance Traffic Control Signs (W3-1, W3-2, W3-3, W3-4) - Allows use of a BE PREPARED TO STOP sign in addition to flashing beacons and a SIGNAL AHEAD sign.

2C.43 Supplemental Arrow Plaques (W16-5P, W16-6P) - Allows use of warning sign and plaque to warn of conditions on intersecting roads.

2D.06 Size of Lettering - Requires 6" letter height on all guide signs where speed is greater than 25 mph. Allow 4" legend for speeds up to 25 mph.

2D.11 Design of Route Signs - Allows use of State name on Interstate Route Shields.

2D.30 Directional Assembly - The beginning of a route shall be designated with a route shield and a single-headed arrow. The end of a route shall be designated with a route shield and an END auxiliary sign.

The committee recalled it's decision at the March 6, 2001 meeting to forward this to FHWA for correction from "Shall" to "May", and if there is none forthcoming, to bring it back to the committee for consideration of a supplement to the MUTCD.

2D.33 Destination and Distance Signs - When route sign and cardinal direction are used as part of the guide sign, the size of the route sign and cardinal direction should be at least as big as if they were independently mounted.

2D.38 Street Name Sign (D3) - Legend on street name signs should be at least 6" high. Where speeds are 25 mph or less, a 4" legend may be used. Compliance is required by 1-9-2012 (15 years)

2D.48 Signing of Named Highways - Memorial signs should not appear on or along a highway. When memorial signs are installed, they are limited to one each direction. This direction is also repeated in Section 2E.08.

2C.34 Roundabout Signing - Stephen Wilson brought up roundabout signing saying that he thought the committee had opted not to use the traffic circle "gunsight", that we would use the chasing arrow sign. Orville said that's right, do we need to do something about it? Jan said we're allowed to use special signs. Charles Radosta suggested that was one of the things we were going back to FHWA and ask why they have two contradictory signs and that we would follow up if they didn't address it.

Ed Fischer pointed out the minutes of the March 6th meeting. The minutes report the committee agreed that a note in the Oregon Supplement to the MUTCD should be include stating the Chasing Arrows sign should be used for roundabouts. Jan said she thought, like Charles that this was going to be pursued as an erratum. She remembered in the presentation in Corvallis that they had chosen one sign as the standard and not the sign that several states had wanted--and that it was something they were revisiting, not a closed case.

Decision: The committee agreed to reverse course and pursue this as an erratum, and consider a supplement if that doesn't work out.

2D.50 Crossover Signs (D13 Series) - These signs will not be used in Oregon. There was some discussion as to whether we had any configurations on the state highway that might be considered crossovers but this was not confirmed.

2E.13 Size and Style of Letters and Sign - There are four new tables with minimum sizes of letters, numerals, etc.

2E.21 Changeable Message Signs - This provides new standards for operation of these signs.

- 2E.28 Interchange Exit Numbering - Increases Exit Number Panels to 30" in height with a compliance date of 1-17-2008 (seven years).
- 2E.30 Advance Guide Signs - For major and intermediate interchanges, two or preferably three Advance Guide signs should be used. This is a "Should" condition but compliance is set for 1-17-2008 (seven years).
- 2E.32 Other Supplemental Guide Signs - No more than one Supplemental Guide sign shall be used on each interchange approach. This used to be a "Should" condition. No compliance date noted.
- 2E.41 Freeway to Freeway Interchange - Overhead signs shall be used at a distance of 1 mile and at the theoretical gore of each connecting ramp. Overhead signs may also be used at the 1/2-mile and 2 mile points. Cantilevered signs are considered overhead.
- 2E.42 to 2E.44 Cloverleaf Interchange - Requires several overhead sign installations.
- 2E.54 Reference Posts - Requires milepost markers on Freeways and Expressways.
- 2E.56 Radio Information Signing - Limits set at three frequencies per sign.
- 2F.01 Eligibility - Allows Attraction services to be added.
- 2F.02 Application - Limits to four specific service signs per interchange approach. Limits to three service types per sign (new).
- 2F.04 Number and Size of Logos and Signs - 6 logos per sign maximum. No more than 4 logos for 1 of 2 services per sign. Logos on Freeways and Expressways - 60" x 36" (Gas was 48" x 36"). Conventional roads & ramps - 24" x 18". 8" vertical and 12" horizontal spacing between logo plaques - vertical spacing is a problem.
- 2F.05 Size of Lettering - 10" on Freeways and Expressways. 6" on conventional roads and ramps. Compliance date of 1-17-2011 (ten years).
- 2F.09 Signs at Intersections Where TODS and LOGOS are at the same intersection, the design of the TODS shall be used. Eliminated 4-logo maximum for off-interstate. Eliminated "visible for 300 feet" requirement. Allows directional legend to be at bottom of logo sign.
- 2G.03 Style and Size of Lettering - Requires 6" minimum letter height (an increase).
- 2G.04 Arrangement and Size of Signs - Allows TODS to a maximum of 6' in height in addition to TOURIST ACTIVITIES and directional word messages. This will allow 4 TODS per post.
- 2G.06 Sign Locations - Intersection approach signs should be located 200' before the intersection. Advance signs should be located 1/2 mile from intersection and be placed 500' from other signs.
- 2G.07 State Policy - State shall adopt policy about discrimination, licensing and approval of service facilities.
- 2H.01 General Design Requirements for Recreational and Cultural Interest Area Symbol Signs - See Table 2H-1 for Symbol Categories and numbers. See Figure 2H-5 for modifications to existing symbols. See Figure 2H-6 for new symbol signs.
- 2I.01 Emergency Management - This chapter has been changed from "Civil Defense" to "Emergency Management."
- 3C.04 End-of-Roadway Markings - Requires use of end-of-roadway marker either with or without a red and white barricade.

Stephen asked if it was correct that the supplements would come back at the next meeting in final format for approval. Jan said this is the case and she's just waiting for the outcome of this meeting to complete errata and clarification.

New Business

Next Meeting Location

Our next meeting is scheduled for May 18, 2001, at 9:00 a.m.

The meeting will again be at the New Kings Inn/Best Western, 3658 Market Street NE, Salem, Oregon. This will be in conjunction with the ITE Conference (see map, next page).

The meeting adjourned at 3:30 p.m.

New Kings Inn/Best Western 3658 Market Street NE Salem, Oregon



From Interstate 5, take Interchange Exit 256 (Market Street). The Best Western New Kings Inn is located on the southeast corner of I-5 and Market Street.

- Northbound, from Market Street Exit (256), turn right at the light, then right onto Motor Court Road, just past Denny's Restaurant.
- Southbound, from Market Street Exit (256), turn left at the light, traveling under the freeway. Turn right on Motor Court Road, just past Denny's Restaurant.