

Oregon Traffic Control Devices Committee

March 11, 2011

Meeting Minutes

ODOT Technical Leadership Center, 4040 Fairview Industrial Drive SE, Salem, Oregon

Members Present: [Massoud Saberian](#), Chair, City of Lake Oswego; [Joseph Marek](#), Vice-Chair, Clackamas County; [Bob Pappé](#), Secretary, ODOT State Traffic Engineer; [Brian Barnett](#), City of Springfield; [Ed Chastain](#), Lane County; [Mark Davie](#), OSP; [Alex Georgevitch](#), City of Medford; [Joel McCarroll](#), ODOT Region 4; [Charles Radosta](#), ITE, Kittelson & Associates; [Cynthia Schmitt](#), Marion County

Others Present: Nick Fortey, FHWA; Doug Bish, Rodger Gutierrez, Kevin Haas, Mike Kimlinger, Justin King, Kathi McConnell, Gary Obery, Chris Rowland, Don Wence, ODOT Traffic/Roadway Section; Angela Kargel, ODOT Region 2 Traffic; Tamara Abbott, Oregon State Parks; Jim Renner, Oregon Travel Info Council; Scott Beaird, Kittelson & Associates; Cecilia Hagle, Washington County; Terry Hockett, Kevin Hottmann, City of Salem; Renee Hurtado, DKS Associates; Jabra Khasho, City of Beaverton; Haregu Nemariam, DEA; Mojie Takallou, University of Portland; Lani Tribbett Radtke, City of Portland

Introduction – Approval of Minutes – Additional Agenda Items



Chair person Massoud Saberian called the meeting to order. All attendees then introduced themselves. The committee received but were not asked to approve the November 2010 and January 2011 minutes until they've had more time to review them.

Public Comment

There were no public comments.

Non Agenda Items

Bob Pappé said he had an update on the ODOT research project on Operational Guidance for Bicycle-Specific Traffic Signals.

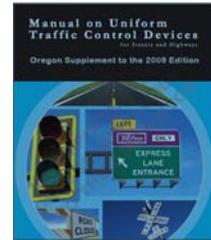
Don Wence had an informational item on Flexible Solutions for Smart Work Zones.

Bob Pappé and Massoud Saberian announced they would have to leave the meeting for other commitments at the break.

[\(Listen - Meeting Intro\)](#)

MUTCD Supplements – Sub-Committee Reports

Kevin Haas asked members to have the [draft MUTCD Supplements](#) as well as the [updated spreadsheet](#) of FHWA Issues regarding them. He noted some lag in updating part of the draft Supplements due to lag in producing meeting minutes for his review. He proposed to address FHWA's issues delivered prior to the January meeting on Parts 5, 6, 7 and 9 and some OTTCH comments. He said he'd briefly run through those issues, and then back up to some remaining Part 2 issues and potentially Part 4 issues.



Part 5 – Traffic Control on Low Volume Roads

Starting with Part 5, and in coordination with Section 2B.13 on speed limit signs Kevin Haas pointed out that **Section 5B.03** of the draft Supplements also has the change to Shall from May regarding omitting the word LIMIT on all Speed Limit (R2-1) signs on highways outside of city limits (that are not interstate highways or school zones). This was a reminder of the vote taken at the January meeting. It is a Standard now in both Sections.

[\(Listen - MUTCD Intro\)](#)

Part 6 – Temporary Traffic Control/OTTCH

Moving to Chapter 6 Kevin noted that the two pages of notes regarding Chapter 6 apply to the [Oregon Temporary Traffic Control Devices Handbook](#) and he believes they have been addressed with Nick Fortey. Doug Bish said the changes have been sent to Nick but he probably hasn't had time to look at them. The subcommittee has gone through all Nick's comments and addressed them. Sometimes that amounted to disagreeing with his comments. Nick said he needed to look at the whole Handbook again.

Kevin Haas reminded the committee that the only Part 6 Supplement is the notice that the OTTCH is a separate publication from the Oregon Supplement to the 2009 MUTCD and covers applications of Part 6 for work zones of 72 hours or less. This is for the entire State of Oregon. It will be approved by the OTC at the same time as the Supplements. Local agencies may be more restrictive if they want to in their own local policies on work zones.

[\(Listen - Part 6/OTTCH\)](#)

Part 7 – Traffic Control for School Areas

Moving to Part 7, Kevin Haas first addressed the Supplement for **Section 7D.05**. The Supplement revises the Standard that requires adult crossing guard to use a STOP paddle to require use of the STOP paddle or School flags as approved by the Oregon Department of Education. FHWA said they needed some clarification of ODOE requirements. Kevin said ODOT met with Nick last week and that Doug researched the statutes giving the ODOE authority over school crossing programs. These are ORS 339.650, ORS 339.655, ORS 339.660 and ORS 339.665. ODOT agreed to include those in the Support statement. They are not yet included in the draft Support statement. Kevin said he'd like the committee to approve giving him editorial liberty to include the ODOE statutes in a revised Support Statement.

The other issue Nick Fortey had a concern about was that because of the way it's worded (and since the ODOE sets the standards for school flags), they might go off on their own and set an unacceptable standard of some kind that conflicts with standards set by road authorities.

Kevin Haas thought that a statement similar to that provided in Section 8A.02 stating something to the effect that adult crossing guards would use such devices as shall comply with standards in the MUTCD. Doug said they do that via Administrative Rule and the statute says they must get ODOT concurrence with their Administrative Rule. It turns out they got concurrence from Transportation Safety Division rather than Traffic-Roadway Section. Doug said they have a new Manual. He said it might be good in the Supplement where it refers to ODOT's Guide to School Area Safety to also say that the Safety Patrol Guide published by ODOE provides additional information on school crossing guards and standards.

Kevin Haas noted that ORS 339.650 states what a traffic patrol is and ORS 339.660 says that the State Board of Education in consultation with the Department of Transportation and the Department of State Police, shall make rules relating to traffic patrols. The ODOE is supposed to consult with ODOT and State Police but they have the authority to set the rules. So he hoped something like we have in Section 8A.02 would make sure that they're not adopting rules in conflict with the MUTCD and would meet Nick's concerns.

Nick Fortey said he was concerned about flags because the language referring to signals in ORS 339.660(c), says "*May display a directional sign or signal in cautioning drivers where students use a school crosswalk of the driver's responsibility to obey ORS 811.015*", it doesn't talk about the flag so to him it may mean they're limited to the STOP paddle referred to in the Standard ("Shall use the STOP paddle"), and we have the ODOE document that doesn't mention the flag. Doug said the flag's been around for a long time and ODOE supplies them to schools. Brian Barnett said it was reasonable to think that ODOE sees this as referring to a signaling device of some type, and not to a traffic control signal. It may refer to the flag or various hand signals. Cindy Schmitt noted that over the years, we've preferred use of the flags, so crossing guards would go

into traffic gaps, rather than using STOP paddles to create gaps in traffic. Kevin pointed out the lower Standard that prohibits using a STOP paddle at a crosswalk controlled by a traffic control signal, so that leaves them with only the school flag.

Nick Fortey was still concerned about the mention of the STOP paddle without mention of use of the flag. Doug said the ODOE would argue that they train their adult crossing guards but they are not flaggers and the flag is a better tool for them to use than a STOP paddle. Doug wondered why student patrols are even in the MUTCD. He knows that it is trying to say that you should use a STOP paddle and a safety vest but it doesn't fit the persona of a traffic control device. He said that's ODOE's take on it too. In his conversations with ODOE, they feel they have statutory authority to say what a signal is. We've given them all the reasons why we think a STOP paddle should be used but we sympathize with them because we feel that a flag sometimes would work better. So he doesn't know how we get past that.

Massoud Saberian said it was his understanding that we did not want crossing guards using STOP paddles. Doug said that we don't unless they're certified, which is why the previous Supplement required flagger training. It was not included in the proposed 2009 Supplement, he doesn't remember how that decision came about. Massoud was concerned that without that provision, we could have a real issue with non-certified people using the paddle in various school-related events. He has a real problem with non-certified people using a STOP paddle. Joe Marek asked if the ORS actually permits that, if that's where we have a conflict. The ORS doesn't say what type of control they use. Kevin pointed out that ORS 339.660(c), says *"May display a directional sign or signal in cautioning drivers where students use a school crosswalk of the driver's responsibility to obey ORS 811.015"*.

Joe Marek asked if those terms were defined anywhere. Kevin said no, only what a traffic patrol is in ORS 339.650. Doug said that ODOE goes more into what training is required and what responsibilities are required.

Nick Fortey said it would be nice if we could get something that says Oregon interprets this as not saying a traffic control signal. Kevin said he didn't think an official interpretation would help since this is a statute, not a rule. Nick said he doesn't know what it means. If ODOE says you use a flag then they use a flag but this doesn't say that.

Brian Barnett said it's ODOE's obligation to interpret this statute and then create it's OARs or it's policy documents. ODOE has published it's policy document and it includes flags. That's it's interpretation there. Brian said ODOE, in the ORS 339 context that they're addressing, means a signal to caution drivers, not a traffic control signal. They have the latitude to interpret what the words mean, looking at legislative intent. There's a good solid history of how it's interpreted. Brian said he was in favor of following up on the earlier comment about being explicit that because it talks about cautioning drivers about their obligations according to ORS 811 which is the pedestrian

STOP law, that we can very easily say that they are prohibited from using the STOP paddle unless they're certified as flaggers.

Decision: Brian Barnett moved to give Kevin Haas and Doug Bish editorial liberties to reinstate the 2003 language in Section 7D.05 that prohibits non-certified flaggers using stop paddles without flagger certification and only allow that at non-signalized intersections; and to include reference to ODOE Policy documents under ORS 339; and that a statement similar to that in Section 8A.02 saying that equipment used shall comply with MUTCD design application and Standards. Charles Radosta seconded. After further discussion in which it was clarified that this Section/Supplement applies to private schools under ORS 339.650 and Nick Fortey indicated he was comfortable with the amended Supplement (assuming it cites our interpretation of the laws and administrative rules so that FHWA doesn't have to insert their own interpretation of them), the committee voted in favor of the motion.

[\(Listen - Part 7\)](#)

Part 9 – Bicycles

Kevin Haas then moved on to Part 9, starting with **Section 9B.20**, Bicycle Guide Signs and **Section 9B.21**, Bicycle Route Signs. This modifies an Option to allow the use of previously developed ODOT bike guide signs and bike route signs. FHWA asked for clarification in the intent behind use of these signs in Figure 9B-4 different than those in Figure 9B-4OR. Kevin explained that the intent of the Amendment was to allow these variations while precluding road authorities going far afield from the MUTCD Standards.

Decision: Brian Barnett moved, Ed Chastain seconded that we add a Standard statement to this Supplement similar to Part 8 in Section 9B.20 and 9B.21 stating that road authorities will follow the signing Standards for color, shape, sizes, layouts as much as practicable in designing bike guide signs. The committee voted in favor.



Cindy Schmitt then asked for clarification of the Supplement for **Section 9C.04** in which 8 inch wide longitudinal pavement markings shall be used to define bike lanes. She said it has been required that either bike pavement markings or signs also be used when defining bike lanes. She remembered that the committee adopted this sometime in the past and doesn't know where or why it was lost. She feels that without one or the other, the 8-inch lines aren't enough to define bike lanes (as opposed to other wide lines) and are harder for the police to enforce. Kevin noted that there was no further requirement for bike lanes in the 2003 Supplement.

Decision: Cindy Schmitt moved, Joel McCarroll seconded, and the committee voted in favor of adding language back into the Supplement that requires either bike markings or signs in addition to the 8 inch longitudinal pavement markings, turning the Guidance statement into a Standard statement. The committee voted to approve, giving Kevin Haas latitude to come up with the exact wording.

Part 2 - Signs

Kevin Haas then introduced Justin King, acting State Sign Engineer to discuss proposed changes to Section 2.

Justin King started with **Section 2D.36** on Destination and Distance Signs (reducing the size of route shields). He said that ODOT is willing to drop this Supplement to the Guidance statement. Mike Kimlinger said ODOT does so few of these that they believe reducing route shield size can be justified on a case-by-case basis.

Decision: Brian Barnett moved, Charles Radosta seconded and the committee voted in favor of eliminating this supplement.



Justin King then brought up **Section 2D.43** on Street Name Signs and said that at the November meeting, it was agreed to wordsmith this Supplement to give more information on when deviation from the Standard is an Option. Salem, Medford and Beaverton originally supported this Supplement and still think it's needed.

The Proposed change had this option statement:

"Where engineering judgment determines that structural limitations such as the load capacity of the mast arm or lateral spacing of signal heads prevent the prescribed dimensions for overhead Street Name signs from being met, the lettering on overhead Street Name signs may be reduced to initial upper-case letters at least 8 inches in height and lower-case letters at least 5 inches in height."

The Support statement would add:

"Overhead Street Name signs are more visible to drivers and are preferred over post-mounted Street Name signs at locations such as signalized intersections. Some road authorities have smaller overhead structures with limited load capacity. Allowing reduced letter sizes results in smaller overhead Street Name signs that can be accommodated on these smaller structures."

The committee discussed whether this was the best language to meet both the intent of the MUTCD and the needs of the jurisdictions, or if further wordsmithing would improve it. The consensus was that there was not.

Decision: Brian Barnett moved, Bob Pappé seconded and the committee voted to approve revised text as discussed.

Operational Guidance for Bicycle Signals & Part 4 on Bike Signals

It was decided to move to Bob Pappé's non-agenda item since he needed to leave early for another commitment (as did Massoud). Bob referred to a [research project paper](#) on Operational Guidance for Bicycle-Specific Traffic Signals. He said that it looks like it now has a good chance of being funded. It is the eighth item on the SPR list and there appears to be sufficient funding to get to it. Once he's sure of funding, he said that he will open the project back up for interested parties to participate in.

Kevin Haas noted that FHWA still has issues with Bike Signal language in the Supplements. Even though there is legislation going through to authorize the signals in Oregon, FHWA still feels these signals are experimental and it's inappropriate to put them in a Supplement. He said one of the things that could be proposed is to drop the wording on bicycles out of the Supplement and since we have a research statement, petition FHWA with some supporting research for interim approval of bike signals. Kevin suggested the committee discuss whether to keep the language on bike signals in hopes the legislation goes through or propose dropping the language and pursue bike signal research and interim approval from FHWA.

Brian Barnett suggested since there's already similar approval elsewhere (California), Oregon should stick with proposed Supplements already approved. Lani Tribbett Radtke said she's heard two days ago that the National Committee is quite reluctant to drop the experimental status yet. Kevin Haas said that ODOT also learned last week from Nick that [Scott Wainwright](#) at FHWA is adamant that he doesn't see bike signals being more than experimental until such language comes out from the National Committee or from Federal Highway. Lani said Portland would like to talk to Scott more about that before we make a decision. Brian said it sounds like we need to defer further action to a future meeting pending further discussion with the Feds. Kevin said the question is whether FHWA will declare that Oregon does not conform with the MUTCD if the bike signal language remains.

Nick Fortey said that whatever happened in California, FHWA still considers bike signals experimental and they will not be able to approve the Supplements if they go through with the bike signal language and no requirement to comply with the experimental procedures. He said FHWA was willing to look at making that process less onerous but that is as far as they're willing to go.

Brian Barnett suggested a compromise where the Supplement would be retained with language stating that each application of the signals are subject to an experimental approval. Kevin asked if the City of Portland would prefer to avoid the whole experimental process as onerous. Lani said that was the case. Joel asked if we did the experimental process at the state level, whether the City would be okay with that. Lani suggested that was worth further discussion on. In response to Brian again suggesting the California approval should work for Oregon too, Nick said that FHWA Oregon was not going to approve that.

Joe Marek asked Nick if FHWA would see Oregon's SPR research project as covering the experimental requirement or not. Nick said as he reads the SPR research statement, he didn't think it complies. Bob said there could be some changes in the project to try to accommodate FHWA but it couldn't be a 90 degree change from the current research project. He said the desire was to avoid individual experiments for each signal.

Joe Marek suggested that we should have further discussions about the research project and how to proceed with FHWA and bring it back to the next meeting and see if consensus could be reached then. Bob said that the request from the City of Portland probably could encompass that discussion and Lani agreed.

Brian Barnett asked if we take action on the Supplement then, would that be sufficient for our timeline. Kevin said he hasn't opened the rule making process yet since we committed to OTCDC that we'd wait and see how the legislation came out. He doesn't see that as a valid point at this point since Nick and Scott Wainwright have made it clear that no matter what legislation goes through, they still see these signals as experimental. The legislation has passed through the Senate but he can't predict whether the House will do the same. The committee consensus was that adopting the Supplement language on the bike signals without further information would be risky and could just confuse the issue.

The question of what kind of research would be required was discussed, including whether a synthesis study of what others such as the Europeans have done would be adequate. Nick said he'd like to have the City come forward with some kind of proposal stating what their issues were with the experimental requirements and what they're willing to do rather than just have a conference call and go around and around. He'd rather some preparation be made for that call, and hopefully some kind of written proposal.

Kevin Haas said he thought Scott Wainwright should also be involved in the meeting to be sure that we don't make a decision that we later find out is not okay with all parties including the National Committee.

Decision: Brian Barnett moved to defer this discussion to the May meeting with a phone conference with committee members and other interested parties in the meantime. Joel McCarroll seconded, and the committee voted approval.

[\(Listen - Bike Signal Research & MUTCD Part 4\)](#)

Crosswalk Stop Bars, LIMIT on Speed Signs and an Oregon MUTCD

Both Bob Pappé and Chairperson Massoud Saberian had to leave the meeting at the break for other meetings. Following the break, Vice-Chair Joe Marek chaired the meeting and recognized Mojie Takallou for three NOA's. Mojie then addressed the committee regarding the subject issues.

In regards to the MUTCD Section 3B.16 at the November meeting, Mojie referred to a conversation he had with Charley Zegeer at the Champlain College regarding the stop bars and safety. He said Zegeer has over 40 years experience and has an older study from the 1980's involving the use of stop bar and he feels it demonstrates a lot of safety benefits. Mojie said it's been a bad year in Oregon regarding pedestrian safety with 39 fatalities, each year we are coming in with 62 fatalities. He noted bike lane safety has been given more attention than pedestrian safety. He thinks that the use of stop lines in front of pedestrian crosswalks allows a further safety buffer that should be required in all cases.

Mojie suggested the committee have a conference call with Charlie Zegeer and reconsider the Supplement and Oregon's policy regarding crosswalks substituting for stop bars. Committee members were interested in receiving copies of the study which Mojie said he'd provided to Katie Johnson at ODOT last December. It was agreed that the study would be forwarded to all interested parties.

Kevin Haas suggested that changing the policy without a phase-in process would lead to legal liability problems immediately. Mojie suggested an option would be to explain the benefit of the stop bar so that it doesn't become common practice. Cindy said that it already is fairly common.

Kevin Haas said he didn't think that Zegeer's research separated out crosswalks with and crosswalks without stop bars. He suggested we're hypothesizing that the stop bars will improve safety but asked if there was research that shows that the stop bars improve safety. Mojie said yes, the study does show that and the committee should contact Zegeer and talk about it with him.

Kevin Haas pointed out that it would be a large change in striping practices statewide. Brian said it would also require changes in loop placement. Gary Obery said he thought the study only looked at stop bars two or three feet away from the crosswalk. Mojie said no, it was ten feet or more away from the crosswalk.

Mojie Takallou then went on to comment on the issue of having SPEED LIMIT XX signs and signs that just say SPEED XX. He said that it is confusing to motorists and compromises safety. He suggested that Oregon just use LIMIT on all signs. Joe and Kevin pointed out that the problem is with Oregon laws; that if we made the change that Mojie suggested, tickets for VBR outside cities could be thrown out in court. Mojie suggested it might be a good idea to try to get the law fixed. Joe said there have been two or three attempts to fix the law in the last ten or fifteen years but the Legislature hasn't seen fit to do so. Mojie said Oregon has used VBR since 1936 and the benefit is still there to use it in cases like when the weather is not very good.

Mojie Takallou then suggested that he thought that it was a good idea to incorporate Oregon Supplements into an Oregon MUTCD. Kevin said that the states that have done this are generally larger states and have 3 to 4 times the traffic engineering staff in order to do so. Mojie said that the benefit of doing so makes it worth doing if the

resources are available, it is a good and valuable thing especially for small cities where the maintenance person is also in charge of the signing. The committee discussed whether states which have done their own Manual have marked up a PDF copy from FHWA or gotten a HTML copy from them and worked with that. Kevin said we can do some research on how the other states do it and what kind of effort they put into it.

Returning to the stop bar issue, Joe Marek asked if we were going to contact Zegeer and review the report and discuss it at the May meeting. Mike Kimlinger said that Katie read the report and responded to Mojie Takallou back in December. He said that he would get Katie involved in the conference call with Zegeer and ODOT will report back to the committee in May.

Action Item: Katie will provide a copy of the Zegeer report to staff for transmittal to committee members and interested others, as well as facilitating a conference call with Charlie Zegeer. *Note: Report available online [here](#).*

[\(Listen - Takallou NOA Issues\)](#)

Sign Policy and Guidelines

Justin King then addressed the Committee regarding [proposed changes](#) to the Sign Policy and Guidelines. This is part of the ongoing work to eliminate signs that are not needed in view of available alternatives in the MUTCD.

Justin first asked to verify who uses the SP&G which ODOT maintains. Do other jurisdictions outside ODOT rely on it heavily? Mike explained that (as an outgrowth of the current sign purge effort) it occurred to staff that it might be helpful to take signs that are rarely used to a recurring sign file in another location. They would then be available on-line when needed but not have to be thumbed past every time someone uses the SP&G. If other jurisdictions rely on the SP&G, then it's important to get agreement to do things like this as part of maintaining and updating the document.

Brian Barnett and Joe Marek both confirmed that they and other jurisdictions do rely on the SP&G and refer others to it as an authoritative document. Mike said that's what he thought. So while it's an ODOT-maintained document, it's used by everybody and needs to have a blend that serves everybody. Doug clarified that there is kind of a mix. Historically, the SP&G at one time was more of an exclusive ODOT document. But that has evolved over time. Mike said an example of signs maintained in the document that ODOT no longer uses are interior-illuminated signs. ODOT could take them out of the SP&G if no other jurisdictions use them anymore or if they're rarely used. They could be removed to the recurring sign file.

Justin King said ODOT already maintains a recurring sign file. Are other jurisdictions in agreement with putting infrequently used signs in there? Do we want to do that for everybody? Mike said an example would be the WIDE LOAD signs that go on the back of trucks. The sign is available but it's not in the SP&G because it's rarely used.

Cindy Schmitt asked why there should be this splitting of SP&G material. Mike explained that it was suggested by his subcommittee. They thought that it might make the document more user-friendly by slimming down the volume to include most frequently used signs, and to exclude signs that are only used for a single case or project and never or rarely used again. Examples of signs that might go in the recurring sign file include No Trespassing or dual language restroom signs used in rest areas.

Doug Bish thought this can help reduce confusion where there may be multiple signs that might fit a situation in the SP&G. He likes the idea of taking some of these rarely used signs out of the SP&G. Mike said he doesn't have a preference here but he's happy to be a sign design resource for situations where somebody is looking for a sign to fit a rare specific application.

Chris Rowland pointed out that the SP&G is more than the physical document itself which is why slimming it down is attractive to staff. We have electronic files of PDF's and PGN's that must be maintained and updated whenever the SP&G is updated. Some of these electronic files are very large as a result of current practice, which makes them harder to work with.

Cindy Schmitt said that for cities and counties, the more we can keep in a single document, the better. It is hard enough to keep all agencies aware of the SP&G itself as the authority on Oregon signs along with the MUTCD. She observed that ODOT already has dozens of documents available on their website so it's already a lot to wade through without adding to it. She's okay with one-time signs not being maintained in the SP&G but things like the WIDE LOAD sign are still a traffic control device and it is still useful for local agencies to have access to in the SP&G. Mike said that information is important to know and will give ODOT a wider perspective on what needs to be included in the document.

Mike Kimlinger summarized the outcome of this discussion that the two issues are resolved in favor of 1) maintaining the SP&G for all agencies, and 2) minimizing use of a recurring sign file. Joe said that a good index to help find signs is important. Mike said ODOT's current electronic file index is by the first word on the sign which isn't always helpful. Joe said his staff has come up with an index that seems to work well for them. Mike Kimlinger said he'd like to see that.

Moving to the signs that have been slated for possible removal from the SP&G Justin said that for the 213 signs originally voted on by committee members, 64 were unanimously voted for deletion, 24 were majority vote for deletion, 111 were voted for further discussion, and 11 signs were initially voted out but have been chosen for retention (because of Supplements or other reasons).

Decision: Charles Radosta moved, Alex Georgevitch seconded, and the committee voted in favor of deleting the 64 unanimously-agreed-to-delete signs.

For the second category, where the majority voted for deletion the committee began individual review of and consensus for those was as follows.

| Keep | Delete |
|--|--------|
| OR1-5 | OR2-5 |
| OR3-1 | OR2-6 |
| OR3-2 | OR8-8 |
| OR11-4a | |
| OR14-6 [retain & clarify whether there should be separate Motor Carrier (and possibly other) section(s) of the SP&G to facilitate finding appropriate signs] | |

The process will continue at the next meeting as time allows.

[\(Listen - SP&G Maintenance\)](#)

Smart Work Zone Project

ODOT Traffic Control Plans Standards Engineer Don Wence announced ODOT is rolling out their [Smart Work Zone project](#). It is an ITS system that has been worked on for quite a while, since FHWA's release of the [Work Zone Safety and Mobility Rule](#). ODOT has followed up with work on it's own program. Don introduced the [specification](#) that will guide projects through the bidding process. He showed a [simulation](#) on how the system is expected to work, with variable message signs projecting different messages depending on traffic flow and other conditions the system senses. He explained how a vendor can take the specifications and build a website for a project that the project manager can access. It is a performance-based, turn-key specification and system.

The benefits will be worker and motorist safety, capacity increase through-put gained by eliminating the shock wave, trip reliability, accurate information provision to the motoring public and better response/awareness/respect from motorists. This should reduce primary and secondary crashes, reduce fuel consumption, time and emissions, road rage and speed differentials which is critical to safety. It's a traffic-responsive system to provide real-time management with sensors and message boards as well as a traffic camera and various kinds of alerts provided for the project manager. They are targeting travel time, delay time and queue management. They can also do dynamic lane merges as needed and different truck ingress and egress.

The Cornell Hwy 217 project in Portland is being considered for this, as well as the Iowa Street Viaduct project on I-5.

In summary, the system is dynamic, for big or small projects, cost effective, and will have 24/7 support from vendors with local representatives providing services. ODOT is optimistic that this will serve Oregon well. Almost 25% of non-recurring congestion on Oregon Highways is due to work zone construction. Don said 50-80% of drivers, when given accurate information will respond and adjust their driving accordingly. It will reduce queue lengths by 60% and have speed reductions that are more consistent with

the needs of the work zone. He said this kind of ITS system is being rolled out across the country to most states and ODOT is looking forward to joining them.

In response to a question from Joe Marek, Don said there are two costs incurred for the system; mobilization and daily cost. The basic system will cost approximately \$300 daily, or roughly \$10,000 a month. Then there's additional cost for the mobilization of the system including communication, software, programming, algorithms, website building and maintenance of the system. Mobilization cost depends on the amount of equipment and how far it is coming from. Oregon equipment, as it becomes more available will make it less expensive. There will be a webinar presented in early April by Ver-Mac that will provide further information.

Action Item: Don Wence will coordinate with staff to see to it that an announcement is sent out to the committee with details when the Ver-Mac webinar is scheduled.

[\(Listen - Smart Workzones\)](#)

Future Meetings Issues

Nick Fortey said that still on his plate for resolution besides bike signals are the yellow trap, audible signals.

Action item: Gary Obery will follow up with Nick Fortey on these and include Scott Cramer in the conversations.

Kevin Haas said that Lani Tribbett Radtke asked him to remind people of Traffic Day April 25th, sponsored by the City of Portland. Information is available on it at the [Oregon ITE](#) site. It will focus on signal operations but there will be other things going on, as well. It is an all day event on a Monday.

Kevin Haas also announced ODOT's second annual Traffic Engineering Conference June 7 and 8. Locals and consultants are invited to be part of the conference. It will be mainly focused on state highway issues. Any jurisdictions that have a lot of state highways. They'll talk about access management, signs and striping and the highway Safety Manual. Further information will be coming out to keep everybody informed.

The next meeting is May 13th at [Roth's IGA conference facility](#) on Wallace Road in Salem. It is a joint ODOT-ITE production.

Meeting Adjourned

The meeting adjourned shortly after noon.

[\(Listen - Meeting Wrap-Up\)](#)