

OREGON TRAFFIC CONTROL DEVICES COMMITTEE

Meeting Agenda

January 15, 2016

ODOT TLC Bldg., Alsea Conf. Room,
4040 Fairview Industrial Dr., Salem

9:00 – 9:10	Welcome / Building Orientation / Introductions / Approve Previous Minutes	Alex Georgevitch
9:10 – 9:15	Business from the Audience <i>Public Comment on Non-Agenda Topics</i>	Alex Georgevitch
9:15 – 9:35	Bikes on Roadway Signs <i>Information / Discussion / Recommendation for Approval</i>	Alexandra Phillips Gary Obery
9:35 – 9:55	Work Zone Bicycle Accommodation Signing <i>Information / Recommendation for Approval</i>	Scott McCanna
9:55 – 10:15	Project ID Signs – ODOT Application Updates <i>Information / Discussion</i>	Scott McCanna
10:15 – 10:25	BREAK	
10:25 – 10:45	Presentation on January NCUTCD Meeting <i>Information</i>	Mike Kimlinger
10:45 – 10:50	Fixed Photo Radar Camera Guidelines for State Highways <i>Recommendation for Approval</i>	Doug Bish
10:50 – 11:05	NACTO Urban Street Design Guide <i>Information</i>	Mike Kimlinger
11:05 – 11:20	Roundtable <i>Local Jurisdiction Issues - Discussion</i>	All Committee Members
11:20 – 11:30	Not-on-Agenda Items	Alex Georgevitch
11:30 – 11:35	Agenda Items for Future Meetings	Alex Georgevitch

2016 OTCDC Meeting Schedule

Date	Location
January 15	ODOT TLC Bldg., Alsea Conf. Rm., 4040 Fairview Ind. Dr., Salem
March 18	ODOT TLC Bldg., Alsea Conf. Rm., 4040 Fairview Ind. Dr., Salem
May 20	(w/ITE), TBD
July 15	ODOT TLC Bldg., Alsea Conf. Rm., 4040 Fairview Ind. Dr., Salem
September 16	ODOT TLC Bldg., Alsea Conf. Rm., 4040 Fairview Ind. Dr., Salem
November 18	ODOT TLC Bldg., Alsea Conf. Rm., 4040 Fairview Ind. Dr., Salem

Oregon Traffic Control Devices Committee

November 20, 2015

Meeting Minutes

ODOT [Technical Leadership Center](#), 4040 Fairview Industrial Drive SE, Salem, Oregon

Members Present: [Jeff Wise](#), ODOT Region 5, Chairperson; [Bob Pappe](#), Secretary, ODOT State Traffic Engineer; [Brian Barnett](#), City of Springfield; [Ed Chastain](#), Lane County; [Joseph Marek](#), Clackamas County; [Pam O'Brien](#), DKS Associates, Vice Chair; [Julia Uravich](#), Marion County

Members Present via join.me: [Mike Caccavano](#), City of Redmond; [Alex Georgevitch](#), City of Medford; [Jeff Lewis](#), OSP

Members Absent: None

Others Present: Miguel Guzman, Washington County; Kevin Hottman, City of Salem; Jabra Khasho, City of Beaverton; Doug Bish, Craig Black, Scott Cramer; Kevin Haas, Katie Johnson, Marie Kennedy, Mike Kimlinger, Justin King, Scott McCanna, Kathi McConnell, Chris Rowland, Heidi Shoblom, Zahidul Siddique, Matthew Wilson, ODOT Traffic/Roadway Section; Angela Kargel, ODOT Region 2 Traffic; David Smith, ODOT Rail Section

Introduction – Approval of Minutes – Additional Agenda Items

Chair Jeff Wise called the meeting to order at 9:00 a.m. and introduced the new committee member, [Julia Uravich](#), from Marion County, and passed on a certificate of appreciation to Cindy Schmitt whom Julia replaces on the Committee. Jeff then called for introductions from all attending, including via join.me (see attendance above). Ed Chastain then moved, Joe Marek seconded, and the committee approved the [July 17, 2015 OTCDC meeting minutes](#) and the [August 26, 2015 OTCDC phone meeting minutes](#).

Business from the Audience/Public Comment on Non-Agenda Topics

None to report.

Fixed Photo Radar Camera Guidelines for State Highways

Doug Bish introduced a [draft of the document](#). Currently only Portland can legally use the fixed photo radar cameras under [HB 2621](#) (no ORS code yet assigned). They can only be used on high crash corridors, not including “controlled access highways” (effectively, freeways). Portland can develop their own guidelines on local roads in their jurisdiction but must use ODOT’s guidelines on state highways in the City. Doug expects permission for

this technology to expand eventually to other jurisdictions, so he would like to get input on the draft guidelines in preparation for that time. The draft was adapted from the guidance for red light cameras. Committee members and others to study the draft with a view towards how it would work in their communities. Remarks, suggestions should be sent to [Doug](#) by December 15th. The draft will be brought back to the January 2016 meeting for further discussion.

NACTO Urban Street Design Guide

Mike Kimlinger reported on a [letter recognizing](#) the National Association of City Transportation Officials (NACTO) "[Urban Street Design Guide](#)" as one of a number of tools which can be applied in conjunction with other state design guides to fulfill [ODOT's] mission of developing and designing streets and public spaces in a safe and sustainable manner."

Kevin Haas noted there are elements in the Guide which are MUTCD-compliant but others which may need to get experimental approval from FHWA by the road authority that has jurisdiction over the roadway.

Bike Lane Regulatory Signs

Scott McCanna expanded on a [November 5th memo to the committee](#) with a [presentation of challenges and possible solutions](#) he's been developing to safely accommodate bicycles in work zones and address liability and risk management issues for contractors. We're looking at incorporating bicycle channelizing devices (BCD's). One is the curb-style device using vertical devices. The other is a barrier style device. Regulatory (black on white) signing to indicate the lane are also being incorporated which will also facilitate enforcement. The barrier is 18 inches high which should allow escape into the work zone in an emergency. The device should also have gaps where excavation or another hazard isn't an issue.

The committee discussed which direction the arrow on the sign should point. An upwards diagonal arrow was suggested as a better indication. Additional signs where barrier devices transition to the curb style (candle) devices to clarify you should still be staying to the left (possibly with KEEP LEFT legend) may be advisable. Accommodations in the signing to include pedestrians may be advisable where pedestrians may also be expected. There is some ability to resize sign graphics for fit since it is not directed at vehicles. Scott would be willing to draft three different versions of the sign for the document. Some experimentation on pilot projects for actual layout, spacing of cones, etc. is still to be done.

Scott said he'd take advice to keep the signs regulatory, to have the upward diagonal arrow, to allow for a barrier symbol and have three signs for bike only, bike and pedestrian and pedestrian only sign examples. This will be brought back to the committee at the January meeting.

Implementation of HB3402, Increased Speeds

Mike Kimlinger [reported on](#) ODOT's work towards implementing the 2015 Legislature's initiative to raise speed limits on certain freeways and highways in Central and Eastern Oregon in accordance with [HB 3402](#). This includes 70 mph, (65 mph for trucks) on I-84 east of The Dalles and US 95 between the Idaho state line and the Nevada state line and 65 mph (60 mph for trucks) on various state highways as called for in the new law under HB 3402. This will all be implemented beginning on March 1st of 2016. ODOT management said this will be implemented on or near the date (a day or two on interstate, a week or so on other highways) so there has been a lot of work necessary in regards to necessary changes which the raised speed limits will require including:

- Passing sight distance and striping changes – need to do before winter sets in
- Evaluate curve warning signs
- Truck speed signing changes off-interstate
- Increased speed sign sizes off interstates with addition of "LIMIT" to signs
- Identify expected reduced speed sections, changes to speed transitions into cities
- Other design issues – chevrons on curves
- Update policies, such as OTTCH, Sign Design Manual, Traffic Line Manual, Pavement Marking Design Guidelines, Traffic Control Plans Design Manual

ODOT has developed a way to evaluate no pass zones from LIDAR data and developed a 3D model of the zones utilizing Micro station Inroads and Google Maps. This was done without having to have striping crews out on the road.

Curve warning signs also needed evaluation or reevaluation. Data had already been collected using CARS and by simply changing the speed limit from 55 mph to 65 mph ODOT was able to recalculate safe speeds on curves and necessary curve warning signs with the same data. The only exceptions were a few areas where we wanted a reverification for trucks in locations district crews identified as problem areas for larger vehicles.

Decisions have been made on sign sizes for curve warning and speed signs/posts including the need for "LIMIT" on all signs. Chevrons aren't funded under the new law so they will have to be dealt with separately later.

Also being looked at are construction projects which might need a speed reduction after speeds increase, whether tapers are adequate on these project and whether changes to temporary traffic control standards are needed.

Other changes will be considered as the need develops and when projects occur.

ODOT expects calls for other interstate speeds to be raised in future legislative sessions, as well as gaps on other highways which HB3402 omitted. Before and after speed and crash studies are being anticipated.

2016 Committee Chair & Vice-Chair Election

After reviewing who's served recently, Joe Marek moved and Pam O'Brien seconded Alex Georgevitch chair and Julia Uravich as vice-chair for 2016. The committee voted in favor.

Meeting Schedule for 2016

The committee agreed tentatively with the meeting [schedule for 2016](#).

Roundtable

Joe Marek said Clackamas County is looking at a pilot project which would combine CONGESTION, 35 MPH and SCHOOL DAYS sign assemblies in a rural 45 mph speed segments for a rural charter school where parents drop off and pick up their children (no pedestrians). There's no crash history but there is citizen concern so they're going to try this signing combination out. Joe will provide a picture of the sign after it's installed to be emailed out to everybody.

Brian asked if any other jurisdictions with PHB or HAWK signals are having continuing issues with people not understanding the flashing red means stop and go when safe and if so are they putting up any supplemental signs to make clear it doesn't mean stop and stay stopped until the light goes dark? There was agreement this is an issue but no supplemental signs were suggested. Brian said he has some but they're not liked. In Arizona, there are enough of these the people learn how to navigate them. Elsewhere, they're still misinterpreted as rail signals.

Scott Cramer said ODOT has a job for an electrical or control systems engineer out for bid right now. Alex Georgevitch said his newly hired traffic engineer is Carl McNair, previously from Tri-Met.

Not On Agenda

Nothing added.

Agenda Items for Future Meetings

Report on AASHTO move to [MASH](#) crash standards
NCUTCD Update on MUTCD
Bike Sign Update
Fixed Photo Radar Update
NACTO Clarification

Adjournment

Jeff Wise adjourned the meeting at about 11:15 a.m.



Oregon

Department of Transportation
Traffic-Roadway Section
Traffic Control Plans Unit

INTEROFFICE MEMO

DATE: December 15, 2015

TO: Oregon Traffic Control Devices Committee (OTCDC)

FROM: Scott M. McCanna, P.E.
State Work Zone Engineer

SUBJECT: New Work Zone Bicycle Accommodation Sign

From comments received from the Committee in November, 2015, modifications were made to the proposed regulatory sign intended to be used within highway construction work zones in cooperation with the new "**Bicycle Channelizing Device**" (BCD) being developed by ODOT's Traffic Control Plans Unit. The intent of the sign is to provide some level of training or education as to the function of the new device; but, to also provide a work zone enhancement that carries an enforceable message to road users.

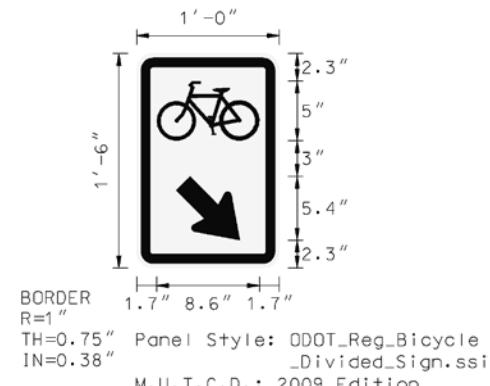
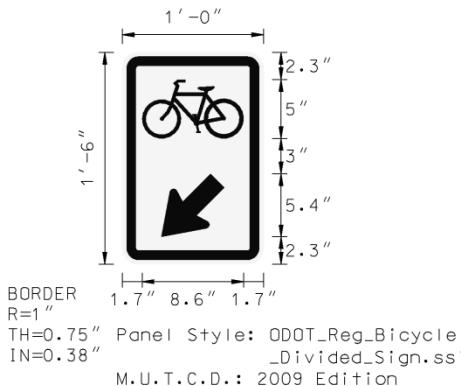
Modifications include the following based on Committee feedback:

- 1) Adjust the arrow symbol to point up-left (up-right) - coinciding with other sign design practices within the MUTCD, or within current MUTCD draft updates.
- 2) Explore using, or taking queues from, the *Keep Left (Right)* symbol sign (R4-8, R4-7).
- 3) Develop two additional signs based on the original "*Bicycles Keep Left (Right)*" sign design. The two signs could be used in areas where the symbol(s) would coincide with the predominant road user present:
 - A "*Bicycles/Pedestrians Keep Left (Right)*" symbol sign
 - A "*Pedestrians Keep Left (Right)*" symbol sign

In the development of these signs, the following should be noted:

- The minimum sign size for the "*Keep Left (Right)*" sign (R4-8 (R4-7)) is 12"W x 18"H. To be practical for BCD use, and because it is intended for bicycle traffic, this size should be used.
 - A custom "*Bicycles*" rider might be installed above the main sign. However there are concerns about the combined sign size and the resulting wind loading on the BCD sign post.
- For the two additional Bicycle/Pedestrian-specific signs, an investigation would be needed to determine the presence of bicycle/pedestrian traffic before including the sign in the TCP.
- Any of the new signs would require development of Specification instructions and language for both staff and contractors to successfully apply the signs in the TCP.
- Additional Standard Drawings would be needed to accurately convey sign usage and placement.

ORIGINAL SIGN DESIGNS (November, 2015)



NEW SIGN DESIGNS

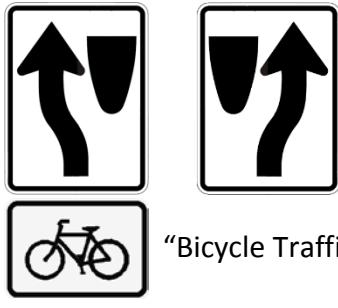
Modified Original Symbol Signs (Above) – “*Bicycles Keep Left*” and “*Bicycles Keep Right*” (12” x 18”):



Alternative Symbol/Text Signs – “*Bicycles KEEP LEFT*” and “*Bicycles KEEP RIGHT*” (12” x 20”):

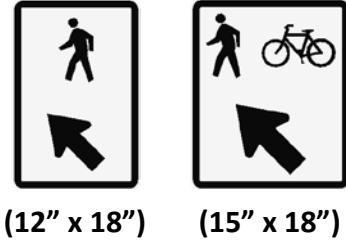


Alternative Symbol Signs – “*Keep Left*” and “*Keep Right*” (12” x 18”):



“Bicycle Traffic” symbol rider (12” x 9”) could be added above the sign.

Other Signing Ideas – Potentially used when PCD or BCD included in the traffic control plan:



Signing symbol(s) would correspond to the non-motorized users anticipated to be using the facility.

WORK ZONE BICYCLE CHANNELING DEVICES with REGULATORY BIKE LANE SIGNING





W16-1P

vs



Some History:

- Prior to the adoption of the 2009 MUTCD, the ON ROADWAY plaque was used to supplement the slow vehicle warning signs.
- In December, 2011, the ON ROADWAY plaque was removed from the Sign Policy & guidelines since the “SHARE THE ROAD” plaque was available in the MUTCD and it seemed to have a similar meaning and application.

Today:

- The clarity of the “SHARE THE ROAD” plaque is being questioned.
- OPRD staff are hearing that bicyclists prefer “ON ROADWAY” over “SHARE THE ROAD.”
- ODOT Region Traffic Engineers have expressed interest in making the “ON ROADWAY” plaque the preferred plaque.

2009 Edition

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Figure 2C-10. Vehicular Traffic Warning Signs and Plaques



W8-6



W11-1*



W11-5



W11-5a



W11-8



W11-10

Section 2C.60 SHARE THE ROAD Plaque (W16-1P)

Option:

- 01 In situations where there is a need to warn drivers to watch for other slower forms of transportation traveling along the highway, such as bicycles, golf carts, horse-drawn vehicles, or farm machinery, a SHARE THE ROAD (W16-1P) plaque (see Figure 2C-12) may be used.

Example of SHARE THE ROAD plaque



Example of ON ROADWAY plaque



Questions:

- Should the ON ROADWAY plaque be put back into the Sign Policy & Guidelines?
- Should this plaque be preferred over the SHARE THE ROAD plaque?

Sign No. OBW1-5	
24"	1½"R
	
<p>Sign Background: Yellow, Reflective sheeting</p> <p>Sign Legend: Black, Non-reflective</p>	
<p>"The ON ROADWAY plaque (OBW1-5) may be used with the Bicycle warning symbol sign (W11-1) to remind motorists that bicycles may be present in the roadway."</p>	
OREGON DEPARTMENT OF TRANSPORTATION	
Approved By: O.T.C.	Date: 1/90 Publication Date: 5/98

Please send any comments to: gary.r.obery@odot.state.or.us



Oregon

Department of Transportation
Traffic-Roadway Section
Traffic Control Plans Unit

MEMORANDUM

DATE: January 5, 2016

TO: Oregon Traffic Control Devices Committee (OTCDC)

FROM: Scott M. McCanna, P.E.
State Work Zone Engineer

SUBJECT: Project Identification Signs – Reduction in Application

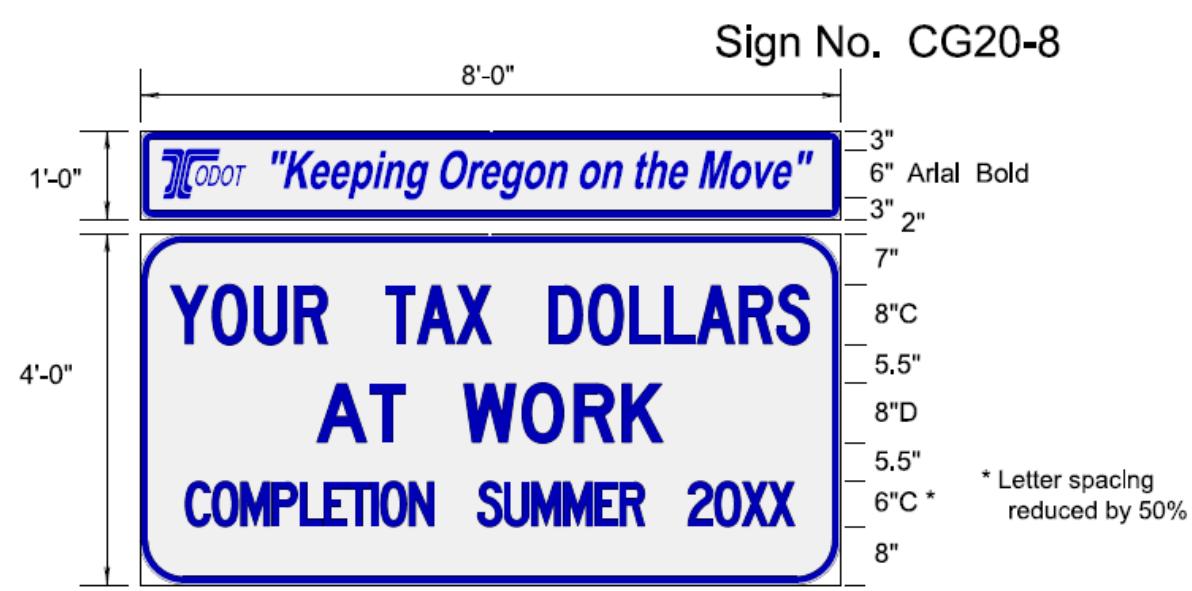
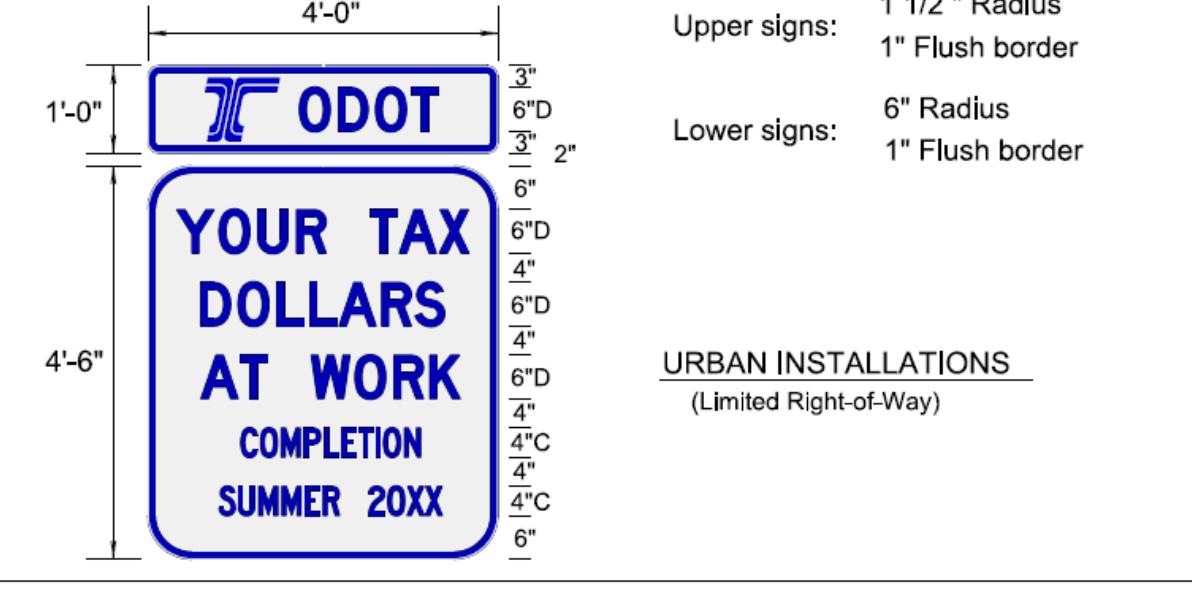
Following my presentation to the Committee in November, conversations between ODOT's Chief Administrator, Chief Engineer, State Traffic Engineer and me took place regarding the potential elimination or reduction of the use of the Project ID sign. From these conversations, I was given direction to develop new criteria that would help reduce the number of projects in which to include the ID sign – criteria that would also move some of the decision-making into the hands of the Regions.

In December, I met with our statewide Traffic Control Plans Design staff to discuss these new criteria and seek input from their perspectives. From this meeting, I received the following recommendations:

- a) Remove the larger (60" x 96") sign.
- b) The smaller (66" x 48") sign should be included in the TCP for projects meeting any of the following conditions:
 - Freeway project
 - Construction budget of approximately \$5 million or more
 - Projects that "winter over" and last more than one year
 - Other high-profile, politically sensitive projects to be determined by the Region Project Development Team

If these recommendations are implemented, updates would be made to the ODOT *Sign Policy & Guidelines* (Chapter 6, page 6-12), the *Traffic Control Plans Design Manual*, the Section 00225 Boilerplate Special Provisions, and any other reference materials, as needed.

Current ODOT Sign Policy & Guidelines information for Project ID signs:

 <p>Sign No. CG20-8</p> <p>Dimensions: 8'-0" wide by 4'-0" high.</p> <p>Upper sign details:</p> <ul style="list-style-type: none"> Logo: 1' - 0" Text: "Keeping Oregon on the Move" (6" Arial Bold, 3" height, 2" baseline offset) <p>Lower sign details:</p> <ul style="list-style-type: none"> Text: YOUR TAX DOLLARS AT WORK COMPLETION SUMMER 20XX (8" C, 5.5" D, 5.5" C, 6" C, 8" height, 1 1/2" radius, 1" flush border) <p>Letter spacing: * Letter spacing reduced by 50%</p>
 <p>Dimensions: 4'-0" wide by 4'-6" high.</p> <p>Upper signs:</p> <ul style="list-style-type: none"> Logo: 1' - 0" Text: ODOT (3" height, 2" baseline offset) <p>Lower signs:</p> <ul style="list-style-type: none"> Text: YOUR TAX DOLLARS AT WORK COMPLETION SUMMER 20XX (6" D, 4" C, 4" C, 4" C, 4" C, 6" height, 6" radius, 1" flush border) <p>URBAN INSTALLATIONS (Limited Right-of-Way)</p>
<p>Sign Background: White, Retroreflective sheeting</p> <p>Sign Legend: Blue, Non-reflective</p> <p>The PROJECT IDENTIFICATION sign shall be used to identify all ODOT construction projects.</p> <p>The 4'-0" x 4'-6" sign shall only be used in locations where there isn't adequate room for the 8'-0" x 4'-0" sign.</p> <p>Additional funding partners can be added with a revised sign design.</p>

OREGON TRAFFIC CONTROL DEVICES COMMITTEE Members

as of January, 2016

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