

see "Over The Shoulder Topic Index" ongoing WORD file for meetings' topics

1 **CONFERENCE CALL MEETING # 20 – OCTOBER 20, 2015**

2 **Meeting Participants: 18 Total / 7 Agencies**

3	<b>Deschutes</b>	Tom Shamburger	Bill Langdon		
4	<b>Jackson</b>	None			
5	<b>Marion</b>	Don Newell	Mike Harmel	Jolene Bray	
6	<b>Washington</b>	Keith Lewis	Dave Schultz	Ed Meeuwsen	John Fasana
7	<b>Pierce</b>	Mike Isun	Rick Butner	Steve Martin	Vernon Page
8	<b>Snohomish</b>	None			
9	<b>Spokane</b>	Bob Keneally	Nate Thompson	Art Cole	
10	<b>Yakima</b>	None			
11	<b>AOC</b>	Daniel Hauser			
12	<b>CRAB</b>	Bob Moorhead			

13  
14 **HOT TOPICS / UPDATES:**

15 Don asked the group to review the list on page 6 of the agenda and rate them from 1-5 (with 5 being the  
16 highest) as potential future topics. He said if anyone has hot topics to email to him and he will  
17 include at the beginning of the meeting.

18 Don said this is the last year of the Over-The-Shoulder project. He said we have used a lot of agencies'  
19 resources to make this happen. He said meeting notes are on the website and after this meeting  
20 there will be a "Part 4". He said Marion County just rolled out a new website and asked everyone to  
21 check their links, refresh their bookmarks, and let him know if they have problems with the website.

22 Don said Snohomish County has declined hosting a site visit next spring because they're too busy that  
23 time of year so there is no visit at this time. He said some OTS participants went to Deschutes  
24 County this summer to view their chip sealing work.

25 Don said he's hosted chip seal workshops in 2011 and 2013, and will host the next in December 2016.  
26 He said participants can bring their successes and learnings to share at the workshop. He said  
27 Marion County has switched to the same oil used by Washington County because of what they  
28 learned in the past workshop. Don said an **Enhanced Gravel Road Workshop** is tentatively  
29 planned for **March 15 at the Deschutes County Fair & Expo Center**. He said he is anticipating a 6-  
30 hour workshop with a working lunch.

31 Don said he will invite Oregon and Washington counties to attend and share about their programs so  
32 others can learn, but vendors will not be invited. Don said Marion County will help organize the  
33 workshop but Washington County will take lead and Deschutes County will host. He asked  
34 Spokane and Pierce county participants if they were interested in attending.

35 Bob (Spokane County) said he was interested. Mike (Pierce County) said he will need to speak with his  
36 superintendent because they only have 18 centerline miles, which is a fairly small program. Bob  
37 (CRAB) said he is doing data gathering on gravel road maintenance and will be meeting with 15-16  
38 counties. He plans to have a draft report to the CRAB board in January so is probably not in the  
39 position to participate in March. Don said Todd (Washington County) has a gravel road asset  
40 inventory system and suggested Bob may want to work with them.

41 Tom said Deschutes County will also host the **Cascade East Vegetation Management Conference** on  
42 **March 16-17, 2106** at the **Deschutes County Fair & Expo Center**. He said participants can earn  
43 spray license credits.

44 Don said OTS won a **NACO Achievement Award**. He sent out an email when he learned of the award.  
45 He said about 100 awards were given out across the nation from 19 categories. He said it was nice  
46 recognition for the program and said all participants can report about that to their directors and  
47 commissioners.

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48 Don said Bob (CRAB) supplied all competitive bids on oil and asphalt and that spreadsheet is on  
49 website in "X-Pavements" folder. Bob said he sends out a list weekly and will add Don and Tom  
50 (Deschutes) to the email distribution list.

51 Chris said they have a **couple gravel road conversion pilot projects**. He said they have gravel roads  
52 that require a lot more maintenance than they can give. He said they did an auto seal on one  
53 residential road with a one mile inlay and also paved with grindings a similar road. Chris said they  
54 put it down with a paving machine and watered in, then did an auto seal, which is high float oil that's  
55 placed on prepared base, and then rocked (used ¾ minus) and rolled. He said the jury's out on both  
56 projects because they only did a month ago. He said they're putting cost data together and looking  
57 at future maintenance treatments.

## 58 **Topic 48: Traffic: 1/5 – Signs**

### 59 **Deschutes County:**

60 Chris said they have **15,000 signs** in their inventory. He said they are inventoried based on mile post  
61 and offset, but they are in middle of evaluating other ways to inventory through an asset  
62 management system. He said they **record latitude and longitude with GPS coordinates** and are  
63 experimenting with bar codes in addition to asset stickers to track inventory. Chris said this is done  
64 with nighttime inspections for retro-reflectivity every of couple week.

65 He said their annual sign budget for materials is **\$60,000** but was upped because of federal  
66 requirements. Bill said **they manufacture 10% of their signs in house and orders 90%** of their  
67 signs. He said they use high intensity prismatic and a little bit of diamond grade, which is very  
68 effective.

69 He said they have two people in their sign shop who work independently and have 24/7 response  
70 through the road department and partially through the sign group. Bill said they have two auger  
71 trucks with cranes that can lift larger signs. He said they can do pretty tough drilling but also have  
72 soft earth drilling tools. Bill said if they need to, they can hire a drill truck to drill holes. He said they  
73 call for locates, which have a 48 hour window. He said they do hand digging when they have to but  
74 the truck is pretty important.

75 He said most signs are single post mounted with some double on pressure treated 4x4's, and they  
76 graduated to what ODOT is doing, which is a 3 bolt breakaway system that is a little more expensive  
77 but can get back up immediately. Bill said they mostly use aluminum for their sign material and have  
78 hardly anything out of wood. He said they have a pretty good selection in house to manufacture and  
79 their trucks are set up to accept aluminum signs. He said they don't use any engineer grade for new  
80 construction.

81 Chris said they have a **roadside traffic safety policy** and have a four hour commitment to replace stop  
82 and yield signs. He said they have two sign shop employees and one on-call, as well as two  
83 supervisors with one on call 24/7 365 days a year.

84 Don asked if there are any unique things about signs in desert. Chris said they try to use 3M product  
85 with a 10 year warranty and use EC Film rather than prismatic. He said southwestern exposure eats  
86 up signs and some black on yellow signs have faded badly with yellow coming through. He said they  
87 also see damage from snow plows and temperatures.

88 Chris said they do not wash signs regularly but they're not terribly dirty. He said it's often more cost  
89 effective to recycle a sign than to spend \$20 on a **vandalism laminate**. He said they don't see  
90 paint-balling but do have signs with bullet holes.

91 **Marion County:**

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92 Mike said Marion County has 900 miles of paved roads and 200 miles of gravel roads, and has **28,000**  
93 **signs**. He said the sign shop also does a lot of work for other county departments. He said they  
94 also do special signs for elections, parks signs, and banners.

95 He said most signs are aluminum with a small number of wood. Mike said they are using pressure  
96 treated 4x4's for posts because they find metal posts expensive and the labor cost is high. He said  
97 he agrees with Deschutes County about the quick replacement. He said having a two person sign  
98 crew that does a lot of work daily can replace a lot faster.

99 He said they are looking at the cost replacement factor also since they have a lot of down signs. Mike  
100 said Marion County has 60-80 steel square channel posts and have used them mostly in urban  
101 areas. He said while they've had success with them, the cost is less with wood posts. Mike said  
102 they have a lot of vandalism, such as 20 signs on a road may be knocked down, and crews can  
103 replace quickly. He said two people from the road crew that are trained on what to look for are sent  
104 out once a week at night to do inventory.

105 He said they **recycle/ repurpose aluminum signs** by recovering and send back out, and is happy with  
106 the results. Mike said there are no problems with peeling so they do a good treatment and clean  
107 before reapplying. He said there are a lot of problems in the city area with graffiti so they went with  
108 making their own stop signs that we can clean off the ink.

109 He said they also sign all chip seal and slurry seal projects out of the sign shop, which takes a big chunk  
110 from July – August. He said Marion County has a big program and they document everything for  
111 accident purposes. He said the latest season there has been no incidents with citizen owned  
112 vehicles. Mike said he has been getting a lot of calls from smaller agencies for advice because  
113 many smaller cities aren't experienced with MUTCD.

114 Mike said their 24/7 response is 2 hours from the time of the call. He said they have 16 people from the  
115 road crew, sign shop, and radio shop who sign up, carry a phone and can be called out. He said  
116 they could be called for a dead animal, sign down, or traffic accident. He said the sign shop is a  
117 basic go-to with traffic control and sometimes will shut down regular job to respond to incidents and  
118 provide traffic control.

119 He said they **have Ford 450's that are equipped with aluminum sign racks** and have the capability  
120 to carry taller sign posts. He said they have an air compressor and use all air tools. Mike said they  
121 bought Dewalt cordless impact wrenches that are nice, portable and good for walk in jobs. He said  
122 one project with engineering has been to upgrade a curve and 36" signs and are moving closer to  
123 radius per MUTCD guidelines. He said they also have snow plow damage which is usually broken  
124 posts and mail box repair.

125 He said paint balling is also reduced and agreed that it's easier to replace because reflectivity is gone  
126 and easier to change out. He said they also get a lot of bullet-hole damage and try to replace as  
127 soon as possible. Mike said they have moved some signs because people shot at them and they  
128 lined up with homes putting people at risk. He said their **budget for material is \$100,000**.

129 He said they have a pretty extensive backlog of aluminum signs and are running out of places to store  
130 them so it's a manageable. Mike said the sign trucks have a pressurized air tank and will wash signs  
131 than rinse with water with a pressurized wand that does a good job. He said they see problems with  
132 moss and road spray and try to get off in the winter in a timely manner.

133 Mike said the new MUTCD guidelines for the **mast arm for signs is pretty big** so he is explored the  
134 issue and found they can get by with a lot smaller sign if it's mounted on an upright rather than over  
135 a mast. He said they are taking direction from engineering and watching what the City of Salem is  
136 doing. He said they're keeping the sign blank smaller and mostly mounting on an upright.

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137 **Washington County:**

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138 Keith said they don't currently have complete sign inventory yet but have **approximately 20,000 signs**.  
139 He said this is one of the last items to add to their asset management inventory but doesn't know  
140 when that will happen.

141 He said Washington County **uses all steel posts and no wood posts**. He said it was thought initially  
142 that it might be tougher to get anchors in but once in, it's pretty easy to replace.

143 Keith said all their signs are aluminum signs and about 95% are ordered. He said Tomar is their vendor  
144 for signs and they have also the capability to make own signs, as needed. Ed said they are using  
145 .080 aluminum high intensity signs and high intensity and recycle aluminum signs and posts.

146 He said they have a **night crew that runs from December to February and they do a retroreflective**  
147 **inventory by splitting the county into sections**. Ed said although they do hand digs, they have bucket  
148 trucks and a signal tech truck.

149 Their **annual budget is \$155,000**.

150 Keith said in the past they combined traffic operations with traffic maintenance but years ago traffic  
151 engineering split off so while they're closely associated they have their own section. He said they  
152 have four full-time traffic maintenance staff and supplement with four employees during the summer  
153 season.

154 He said they have a two hour, 24/7, sign response time for employees. He said they have staff on a call  
155 out list throughout the week and all are trained to replace signs, anchors, and posts. Keith said  
156 during the weekend they also have standby folks and their charge is to respond to the yard and then  
157 to downed signs, trees, or other road hazards.

158 He said he echoes what others have said about **vandalism of signs** and that it's better to replace than  
159 try to clean. He said they have a recycling program and recycle all clean aluminum signs, posts, and  
160 guardrail are recycled at a metal recycler but in separate bins.

161 He said they have **two traffic maintenance response trucks and each has a gas powered boom**.

162 **Pierce County:**

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163 Rick said they have 26,000 signs, including street signs. He said they run 11 sign technicians with 1  
164 field supervisor and 1 supervisor overseeing the sign techs, and ask for additional help during the  
165 summer time during striping. He said they have a computerized database inventory program where  
166 all signs are inventoried with serial numbers and dates. Rick said sign techs do inspections on all  
167 signs on predetermined routes on quarterly basis in the field with laptops.

168 He said they have a retro-reflectivity program that is tied to their asset management program using a  
169 combination of the measured sign retro- reflectivity method, controlled signs method, and expected  
170 sign life method. He said they are testing 10% of each category for each year and each particular  
171 group represents that entire group. He said they have levels where a group is reaching 20%  
172 minimum value and that group is replaced. He said their **annual budget with materials is \$200,000**  
173 including their preservation project (changing over to steel sign posts). Rick said they are running 10  
174 sign trucks and have two on call people with the county split into two sections.

175 He said they **take trucks home and respond 24/7 within 15 minutes to stop and yield signs** and will  
176 have back up within 1 hour. Steve said they have a sign fabrication department and make their own  
177 street and specialty signs in-house, but purchase warning and regulation signs from Tomar. He said  
178 they are typically using .080 aluminum signs, and are in the process of replacing a small handful of  
179 engineer grade speed limit signs.

180 Rick said they have a little vandalism and replace signs as needed. He said they stopped using 4x4  
181 cedar posts and **are converting to aluminum with heavy duty anchors and concrete in hole**. He  
182 said they replaced 3,000 stop and yield signs with metal posts in last 4 years.

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183 He said through this process they have seen a reduction in vandalism. He said they still have to  
184 respond to signs down but aren't seeing signs stolen. Rick said the wood they use all gets recycled,  
185 either chipped by the parks department, the school district for wood projects, or sent to auction. He  
186 said their 10 sign trucks have an innovative cat walk sliding platform that extends 2 feet on each side  
187 that protects techs from falls and can reach over the ditch line. Don said he would like to see some  
188 photo or videos of any innovative solutions to sign trucks and policies about sign programs that can  
189 be posted and shared on the OTS website.

190 Mike said they have the county broken into three different regions and inspect stop signs monthly. He  
191 said they live in a maritime climate and signs get dirty so **try to wash once a year** but retro-  
192 reflectivity signs are washed one month before doing inspections. He said the signal department,  
193 not the sign program, washes mast arm signs. He said trucks are set up to do hand digging and all  
194 posts are metal after 2013 so there is no utility digging or locate conflict.

195 Nate said they are replacing **15-20 existing wood posts per day with steel posts**. He said the wood  
196 is western red cedar with 20 rings or less per inch. He said they chose this instead of pressure  
197 treated wood because it can be recycled. He said the local high schools picks up 800 used wood  
198 posts per year and use student projects. Don asked for photos of these projects. Nate said the new  
199 maintenance facility has an all wood ceiling that came from 1,600 wood posts that had milled down  
200 for ceiling. He said it's very cool and he will send photos of this too.

201 Rick said they have a good program and have eight years of history with a lot of data and it drives asset  
202 mgmt. program. He said he has a good PowerPoint presentation he can email and it's also available  
203 at [www.nwtrafficalliance.com](http://www.nwtrafficalliance.com).

204 Nate said they're still managing quite a **few stop signs that were installed in 1995**. He said they used  
205 to replace every 10 years but are managing them well through their retro-reflectivity program and  
206 using the savings to replace all 7,000 street signs upgraded to **high intensity prism (HIP)**. He said  
207 he's done multiple presentations and Pierce County won a NACO award on this, as well as their  
208 Stop and Yield Program. He said he would share with the group.

209 Rick said they use on street reference system and are in the process of changing their inventory  
210 program through **GPS locations**. He said they are using laptops with a local version of the program  
211 and then upload to queue where it is viewed by a supervisor before being pushed into the program.  
212 He said he hope crews will soon be using a tablet in the field. Keith (Washington) said they don't  
213 have a reflectometer and one issue they run into during winter time is fog, dew, and mist on signs.  
214 He asked if Rick had any comment about winter inspections. Rick said their retro-reflectivity  
215 program is done in late summer/early fall and always in dry weather because signs need to be dry or  
216 the reflectometer will give a bad reading. He said they also clean signs expected to inspect 30 days  
217 prior to the inspection.

## 218 **Spokane County:**

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219 Bob said they maintain about **34,000 installations of signs**, and also maintain Spokane Valley signs  
220 which have about **46,000 signs**. He said they have seven people in their signing/pavement marking  
221 group. He said during the summer they run two sign trucks and have defined patrol routes. Bob  
222 said for retro-reflectivity they are switching out 10% of their oldest signs a year and will incorporate  
223 some sort of monitoring program. He said this year they have a curve project to look at curve signs.  
224 Bob said their **annual budget is \$300,000** for their sign program.

225 Art said their sign trucks are equipped with generators and they install posts in ground with a jack  
226 hammer. He said they use no wooden posts. He said they're set up to manufacture almost any sign  
227 from stock blanks and make their own street signs but also purchase from a truck and safety supply  
228 company. He said they recover about 100 stop signs per year.

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229 Nate said their signal shop maintains mast arm signs and don't wash signs on a regular basis. Art said  
230 they are trying to **remove vandalism** any way they can but are leaning more toward replacing  
231 because it's cheaper. He said they make their own stop signs and can remove vandalism from  
232 those. He said they also get bullet holes in their signs and replace as needed. Nate said they do  
233 locates on everything and will have temporary stands for stop signs if they can't get a locate.

234 Nate said they switch out sign plates based on manufacture warranty and when they are 10 years old  
235 they are replaced. He said they purchased a retro-reflectometer and measured reflectivity. He said  
236 they measure engineering grade white and at 5 years they start looking to see if they meet  
237 requirements and replace as they degrade on a year by year basis.

238 Nate said each sign gets an inventory sticker that includes the year it was put in the field so staff knows  
239 its age and that it's in the system. He said they have some really old signs but are trying to do 10%  
240 per year. He said they are looking at what level they should monitor and typically look at signs two  
241 years before they hit their warranty life.

242 Nate said if it's an **engineering grade sign**, they look at it two years before retro-reflectivity wears out.  
243 He said if looking at speed limit signs they would measure 30 signs from that year as a control  
244 sample and if those 30 signs fell below they would verify and within one year replace all 300 signs.

245 Don (Marion) said he would like to have them attend an Association of Oregon Counties (AOC)  
246 conference and speak with county engineers about retro-reflectivity. He said it hasn't been well  
247 received in Oregon and has been viewed as an unfunded mandate.

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**\*\* End of Meeting #20 \*\***

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252 **CONFERENCE CALL MEETING # 21 – NOVEMBER 5, 2015**

253 **Meeting Participants:** 16 Total / 7 Agencies

254	<b>Deschutes</b>	Tom Shamburger	Chuck Shutte	
255	<b>Jackson</b>	None		
256	<b>Marion</b>	Don Newell	Marek Lloyd	Jolene Bray
257	<b>Washington</b>	Keith Lewis	Dave Schultz	Ed Meeuwsen
258	<b>Pierce</b>	Bryan Chappell	Mike Isun	Scott Skoda
259	<b>Snohomish</b>	Mike Boxford		
260	<b>Spokane</b>	Bob Keneally	Nate Thompson	Art Cole
261	<b>Yakima</b>	None		
262	<b>AOC</b>	None		
263	<b>CRAB</b>	None		
264	<b>Tillamook</b>	Ron Newton		

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266 **HOT TOPICS/UPDATES:**

267 **Hot Topic 49: Dust Abatement – Tillamook County**

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269 Don said Ron Newton from **Tillamook County** had a special request to make to the group. Ron said  
270 they will be undertaking a project that removes seven miles of existing levies of 244,000 cubic yards  
271 of material. He said county roads will be used for 600+ truckloads of material for removal. He said  
272 the challenge is **dust control** since the roads travel through wetlands and an exposed estuary area.  
273 Ron any knowledge and/or experience related to dust control that could be applied to estuaries  
274 would be invaluable would be invaluable.

275 Don said since this meeting's focus is on signs and striping, he doesn't he realizes most participants  
276 don't have their soil staff attending but hoped attendees could point Ron to someone who can assist.  
277 Don asked if any portion of the roads were paved.

278 Ron said only about 400 feet off Hwy 101 heading west and the rest is fairly agriculture based with a  
279 crushed aggregate surface. He said they have begun taking out washboards to prepare for the  
280 spring, but because of federal funding inspections the dust abatement work must be done by the fall  
281 of 2016. Ron said he realized this request has caught participants flat footed but said they can email  
282 him with any information or contact recommendations.

283 Tom (Deschutes) said although he hasn't worked with these circumstances he's done dust abatement  
284 experiments. He asked if Ron had access to **asphalt grindings** that could be put down, **Earthbind**  
285 **that could be put down, which could stand repeated water, or a single application CRS1 or**  
286 **CRS2 to keep dust out and could be taken out later.**

287 Don said this is a good segue to the workshop in Deschutes Co in March 2016. He asked if Tillamook  
288 County would attend and share what they've learned up to that point. Don said the March workshop  
289 is to look at alternative treatments on gravel roads. He said he agreed with Tom about asphalt  
290 grindings, but that he has a problem with Earthbind because it hasn't been reviewed and approved  
291 by environmental agencies in Oregon.

292 Ron said he looked at **Earthbind's website and they recommend a process that looks fairly**  
293 **complicated.** He asked if Don went through the entire process. Don said he didn't because he's  
294 using it for dust control and not for road building and has had successes. He said the environmental  
295 community also hasn't given any best management practices (BMPs) for Lignin, so Marion County  
296 wrote on their own but haven't had the staff to do for Earthbind. Don said he will share Tillamook  
297 County's issue with the group and other counties, and will send Ron any information he collects.

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299 **UPDATES:**

300 Don said next month's meeting is moved back to first Thursday, its original meeting date. There was a  
301 potential meeting conflict in Oregon, but that's been resolved.

302 **Topic 50: Traffic: 2/5 – Long-Line Striping**

303 **Deschutes County:**

304 Tom said Deschutes County has a dedicated **crew of 5 people** who do striping. He said they don't use  
305 a lead car but have two tail cars. He said they will do yellow and white lines together with the same  
306 truck so that limits the number of passes.

307 Tom said they have 700 miles of paved road in Deschutes County so try to do all each year. He said  
308 when they chip seal a road they will stripe twice because it will absorb the paint on the first striping  
309 and if they want it to stand out in the winter it needs a second pass. He said they do the centerline in  
310 one direction and on second pass they stripe in the other direction.

311 Tom said they do the county, as well as for the cities of Redmond and Sisters; Jefferson and Crook  
312 counties; and occasionally, the cities of Prineville and Madras. He said they use a **water base paint**  
313 from **Sherman Williams** and have been very happy with it.

314 He said they've heard complaining about other water borne products that have problems with plugging  
315 but they've had none of those issues. Tom said he's thinking about trying other beads for reflectivity  
316 but decided not to because he thought they would need to recalibrate their machine and stock with  
317 current beads. He said they have a highly skilled crew and try to keep them together all summer  
318 with a few alternates to keep up the quality of the work.

319 Don asked if they are using **seasonal employees** and what part of summer schedule they are using.  
320 Chuck said they start in May for Jefferson County and use two seasonal employees through October  
321 for the pilot cars.

322 **Marion County:**

323 Marek said they have been striping long line since 1994. He said they **run two independent trucks;**  
324 one with yellow and the other with white, w/ 2 pick-up pilot trucks. He said both have two pilot  
325 vehicles; a lead and a tail. **Crew consists of 3 operators and 4 pilot (seasonals) trucks** = 2  
326 operators in Yellow Paint (driver & buttons); 1 in White paint truck.

327 Marek said they stripe for the county, as well as Polk County and **20 cities** inside and outside Marion  
328 County. He said they have 3,500 miles total of white and yellow striping.

329 Don said one thing unique about the Marion County program is they use a **smaller striper truck and**  
330 **use mirrors instead of cameras** while only shooting one color at a time. He said he came from  
331 Multnomah County and compared financially, it comes out as a wash.

332 Marek said they use low **VOC acetone base** because other agencies need to get out as soon as it's dry  
333 and with acetone they can get out sooner.

334 **Washington County:**

335 Keith said they have 401 centerline miles, which combines both white and yellow. He said they use a  
336 single truck that shoots yellow and white.

337 He said they supplement the striping program **with contracted work for about 50 miles** of night  
338 striping which usually takes a couple of weeks to complete on their heaviest travel roads.



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339 He said it's a struggle most years to complete force account work and they use water borne paint which  
340 is not quite as forgiving and sensitive to dry time, humidity, and temperature.

341 He said they use **Ennis paint and run 10,000 gallons** of paint per year on their roads. He said they  
342 have a regular traffic maintenance crew with **four full-time employees and supplement that**  
343 **during the summer with four staff from other sections and temp staff**. Keith said they are  
344 currently in the process of refurbishing their striper truck and are going with what they had before but  
345 with new power and platform.

346 He said they're not able to help other agencies but went back to two week night striping program which  
347 has helped during the long, hot summer. He said they use cones at intersections for traffic control  
348 and have a front reader board they also use. Dave said contracted overlay roads are striped by the  
349 contractor.

350 Don asked about the retrofit of their striping truck. Keith said they are getting a new **Peterbilt chassis**.  
351 Don said Marion County's latest truck was rebuilt and they used **Autocar** (which does garbage  
352 trucks) and the chassis has virtually no soundproofing. He said they took the interior out and put  
353 soundproofing into it. He said it's a nice truck but noisy, with the decibels at 107 before they  
354 soundproofed and took down to 92.

355 Mark (**Pierce**) asked what speeds and capacity of paint. Chuck said they shoot two 250 yellow gallon  
356 totes at about 8 miles per hour. He said they have front and rear facing so it gets better coverage.  
357 Marek (Marion County) said they are able to do 10 to 12 miles per hour.

358 Tom (**Deschutes**) said they go 8-10 mph when shooting and have a paint support truck that goes out  
359 with the crew to haul extra totes and beads to reload in the field.

360 He said the entire crew are CDL operators and they have a piggy back fork lift to pick up totes and swap  
361 out. He said they go through about 1,000 gallons of paint a day and was curious if anyone else has  
362 a support truck.

363 Mike (**Snohomish**) said they have a knuckle boom support truck that does the same thing as  
364 Deschutes. He said it lifts 2,400 pound bead sacks and they don't use a vacuum system but have a  
365 screen that they dump in.

366 Keith (Washington) said they have no field offices and no chase vehicle, so they load up every morning  
367 and use a tote each day. He said they typically use stainless steel totes but are looking to switch  
368 over to wire baskets with a plastic liner and asked if anyone else has feedback.

369 Mark (Pierce) said they used in the past and found they tend to get more flakes if they use water base  
370 paint because it tends to dry more in plastic so they went back to stainless.

## 371 **Pierce County:**

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372 Mike said they use **three regular and five seasonal employees** on their striping crew. He said they  
373 have a cone setting platform that sets and picks up cones. He said they paint 2,200 lane line miles  
374 and 11 contracted city miles.

375 Mike said they use Ennis paint and use a spring blend that's a hotter formula.

376 He said they use a pilot truck, which is flat bed, and load totes and beads on that and then load in the  
377 field. Mike said they have 6 tanks, use about 1,000 plus gallons a day, and can go about 10 mph  
378 when shooting.

379 He said they use a lot of cones and also use a placard on top of that cones that says "wet paint," which  
380 helps with claims. He said they also have one striper truck. He said the bigger trucks don't work  
381 well with overlays so they're having an older truck outfitted into a smaller striper truck for smaller  
382 projects.

383 Keith (Washington) asked if they use 28" cones and if they can post a photo of their cone truck on the  
384 web. Mark said they use larger cones at intersections with a placard and use smaller 18" cones in  
385 between. Don (Marion) said Mark can email to him and he will post on the website.

see "**Over The Shoulder Topic Index**" ongoing WORD file for meetings' topics

386 Keith asked if anyone had thought about **using cameras** on the trucks to record traffic and help with  
387 complaints. Mike (**Pierce**) **said they have 5 Hi-Def cameras** mounted forward and front and on  
388 second shadow truck. He said these are the same cameras that police use and they cut claims  
389 down to less than a handful a year.

390 Don asked how long data was kept. Mark said the data is on flash drives and they download every day  
391 and kept on a portable 1 TB hard drive for 7 years.

392 Keith asked about the cost vs savings and claims. Mike said they are worthwhile.

### 393 **Snohomish County:**

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394 Mike said Snohomish County as a **crew of 6 people and will use a couple of seasonal workers** if  
395 needed. He said they run two trucks and have a camera on the first shadow truck which they  
396 download daily and has knocked down claims.

397 He said they have no lead truck but have a knuckle boom supply truck that can pick up 3,700 pounds.  
398 He said each year they paint their county, about a dozen cities, a small airport in Arlington, and an  
399 airport that Boeing uses.

400 He said the biggest city they paint is Marysville which takes about 85 hours. Mike said they used to do  
401 their own painting on a **golf cart**. He said they use waterborne paint and piggyback on Pierce and  
402 run the spring blend.

403 He said they paint about 2,000 lane miles each year and have a **Peterbilt** single axel truck built by  
404 Mercedes-Benz in 2006.

405 He said they average 10 mph on yellow and 15 mph on white. He said they shoot their colors  
406 separately, with the driver doing yellow on one side and white on other.

### 407 **Spokane County:**

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408 Nate said their program does **900 road miles of striping**. He said they paint for the county, Spokane  
409 Valley, and 5 other smaller cities.

410 He said they have a **three man crew with a striper and one tailing pilot car**, and have purchased a  
411 new striper. He said they use seasonal employees on their pilot vehicle, which has a reader board  
412 and also carries water.

413 He said their truck is an easy liner single axel that carries 250 gallon totes of paint. He said they use  
414 water borne paint from Ennis and go 10 mph when shooting.

415 Tom (Deschutes) said they purchase directly from Sherwin Williams and negotiate their own price,  
416 which is better than the price ODOT negotiates, and asked how they purchase paint beads in  
417 Washington State.

418 Don said Marion County uses the same paint as Multnomah County, so piggyback off their bid, which is  
419 with Ennis Paints.

420 Mike (Pierce) said they created a specialty paint with Ennis so they created their own contract and other  
421 agencies can buy their formula.

422 Don said Multnomah County has converted to an oil-based paint because water-based underperformed.  
423 He said ODOT likes water-based but counties don't have to follow suit so Multnomah and Marion  
424 counties chose oil-based paint. He said Marion County can stripe for Washington and Clackamas  
425 counties because those counties run out of production time with water-based paint.

426 Don said Marion County had incident a few years ago where they were **fined \$5,000 by OSHA** because  
427 a tail truck driver and passenger both picked up cones without putting their seatbelts on after each  
428 stop.

see **"Over The Shoulder Topic Index"** ongoing WORD file for meetings' topics

429 Tom (Deschutes) said it was his understanding that seatbelts were not required in a work zone. Don  
430 said Marion County lost that OSHA safety argument and the OSHA ruling is that the driver must stay  
431 in the truck with their seat belt on.

432 He said Marion County receives \$400,000 in revenue annually from other agencies and use 2 crews  
433 and 2 pilot vehicles. He said they've been aggressive in filling up the calendar with work for others  
434 and have turned away customers each year.

435 Tom (Deschutes) asked how they **prioritize work for other agencies**. Don said they haven't had to  
436 say no to anyone in the last few years and have been able to get all the work done. He said they will  
437 pull a truck back from Tillamook to get a project done but with good planning they can get the work  
438 done without conflict and no one had been left out. Marek (Marion) said they do all Marion County  
439 routes first and are fortunate that there is one county who wants to be last on list so if anyone gets  
440 left out it would be them.

441 Don said Tillamook has a specific window of early to mid-July that they need the striping crew to be  
442 there. Don said Yamhill County asked to be put on Marion County's list after going to Multnomah  
443 County, but had to say no so they're contracting now.

## **Topic 51: Traffic: 3/5 – Legends: Plastic/Stencils & Stop Bars**

### **Deschutes County:**

445 Tom said their pavement markings are **75% paint and 25% thermoplastic**.

447 He said they use **no full-time employees, but have a crew of "seasoned seasonals"** that have been  
448 doing this a long time.

449 He said one issue they've had with thermoplastic and chip seal is that they almost need to **grind off**  
450 **thermoplastic to get chip seal to bind**.

451 Tom said they use thermoplastic for cross walks. He said they don't do for other agencies because  
452 most of the agencies they stripe for do their own legends.

### **Marion County:**

453 Marek said about **100% plastic**.

455 He said they use **one full-time employee and up to four seasonal employees**. Marek said they buy  
456 their thermoplastic product from Flint.

### **Washington County:**

457 Keith said they are **2/3 paint and 1/3 thermoplastic**. He said they used to have painted stenciling but  
458 have moved away from that are going to torchdowns.

460 Keith said they don't have a long line thermoplastics program but have a thermoplastic card for cross  
461 walks and patch work. He said they try to get the process done with overlays on a new surface  
462 especially at high use areas, such as intersections.

463 He said they have a **4 person crew for thermoplastics, with 2 full-time and 2 seasonal employees**.

### **Pierce County:**

464 Mike said they have **1 full-time employee and 2 seasonal employees** on their crew and **can go up to**  
465 **6 people if they need to flag**.  
466

see "Over The Shoulder Topic Index" ongoing WORD file for meetings' topics

467 He said they are **98% in plastic** and use Flint. He said they're trying to get rid of the last 2%, which is  
468 painting for a couple of cities.

### 469 **Snohomish County:**

470 Mike said they are **100% plastic and don't do any paint stencils**. He said they don't do torch downs  
471 but have that available if needed.

472 He said they have a **five person crew with two full-time and three seasonal employees**.

473 He said they don't do any cities because they can contract out more inexpensively.

### 474 **Spokane County:**

475 **Bob said they don't use much plastic**. He said for some road projects they will put down plastic but  
476 otherwise **they are 100% paint** and will also do stencils.

477 He said they have a **two person crew for early and late season, and during the summer they hire**  
478 **two helpers for a four man crew**.

479 Art said they paint everything once a year and paint schools twice. He said **75% of their painting is at**  
480 **night and they use oil based paint with beads**. Art said if painting is done at night, they can't use  
481 water based paint.

482 Keith (**Washington**) said they will typically **send a signal tech for intersection work** rather than using  
483 flaggers and shut down an intersection for a brief period of time. He said they found this to be more  
484 effective than using flaggers. He said they also found they have four times the work done when they  
485 do it at night. He asked if anyone else has issues with plastics and chip seals.

486 Tom (Deschutes) said at the cities of Redmond and Bend they cover the plastic legends with plywood to  
487 try and protect them during chip seal with mixed results. He said it's not too bad an idea to try and  
488 preserve some plastic. He said some agencies will grind out with pavement grinder and get down to  
489 pavement so they don't have bonding issues. Tom said they don't stop short on intersections and do  
490 the entire thing so that could be quite a bit of exposed surface if it peels off.

491 Mike (Pierce) said their road crew grinds markings off where they do overlay on intersections before  
492 chip sealing roads. He said they have they have the program laid out so they know when the chip  
493 seal crew will be in and will do overlay 3-4 days before.

## 494 **Topic 52: Traffic: 4/5 – Legends: Buttons, Markers**

### 495 **Deschutes County:**

496 Tom said they **don't have any buttons** because they are damaged so frequently by plow roads that  
497 they're not effective.

### 498 **Marion County:**

499 Marek said they do buttons on overlays, chip seals, on straightaways every 80 ft. and on corners every  
500 40 ft. He said they have a **four person crew** and can do 700 a day.

### 501 **Washington County:**

502 Chuck said they have a **four person crew** and a button trailer they pull. He said they can do 700-900  
503 buttons a day and have tighter spacings on corners.

see "**Over The Shoulder Topic Index**" ongoing WORD file for meetings' topics

504 Chuck asked how others dealt with chip seals and buttons. He said they remove and replace with new  
505 when they chip seal.

506 Marek (Marion) said they usually chip seal over them and re-button. He said by the time you chip seal  
507 most have been knocked off. Don (Marion) said a grader will also remove quickly.

### 508 **Pierce County:**

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509 Mike said they remove buttons with a grader or front end loader and put down brand new buttons. He  
510 said they run a **three person crew**. He said they converted flatbeds with a tar machine that has an  
511 adjustable seat where operator can remove buttons with chip hammer. He said they have a shadow  
512 vehicle with a variable message board.

### 513 **Snohomish County:**

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514 Mike said they run a single axel truck with a shadow truck with a message board. He said they haven't  
515 done any grindings and chip all off before they chip seal. Mike said they usually have a series of  
516 buttons through corners and will leave reflectors and chip rounds off 2-3 weeks ahead of chip seal  
517 program, then use reflectors for guidance when putting down. He said they stay three roads ahead  
518 of them because of weather and then tighten up closer to winter.

519 Don (Marion) said their chip seal crew does all stick and stomps with a seasonal crew that walks down  
520 road with buckets.

### 521 **Spokane County:**

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522 Nate said they don't have buttons because they plow the roads a lot.

523 Tom (Deschutes) said one thing that concerns him is temporary markers with chip seals and asked what  
524 others do for crews as far as stick and stomps. He said they're out there, exposed, and he had close  
525 call this year.

526 Mike (Pierce) said an employee **invented a little tool (photos on OTS web site)** where guy can stay in  
527 the cab of the truck and apply chip seal markers so there's no exposure. Mike said the employee  
528 drives down and puts on an existing striping and helps with the center of road.

529 Don (Marion) said they can apply but didn't they still have to get out and rip them.

530 Mike (Pierce) said they leave on until they wear off.

531 Don said an employee used a device similar to what you use to pick up trash and adjusted the bottom  
532 so he can apply buttons. He will try to get a photo and share.

533 Keith (Washington) said they have an old button trailer ahead of the crew to pop buttons and behind the  
534 crew they have a satellite crew that supports the process.

535 Tom (Deschutes) said they have a worker with a truck with flashers in traffic and wanted to know if  
536 anyone uses flaggers or variable message boards.

537 Keith (Washington) said they are using with a crew and trailer.

538 Mike (Snohomish) said they use a single axel truck and worker sits into the chassis so they are  
539 protected. He said previously workers walked the centerline but they had someone get clipped so  
540 they have nobody out now. Don **asked for photo of** that too.

541  
542 Don said he had asked everyone to look at the **topic list** on page seven of the agenda and let him know  
543 if there are any they'd like to discuss at future meetings.

*see "Over The Shoulder Topic Index" ongoing WORD file for meetings' topics*

544 He also asked Washington State participants to help get the word out about **the Enhanced Gravel**  
545 **Road Workshop in March**. He said attendees would arrive in the morning and agencies would  
546 share processes that have worked for them. He said lunch would be provided and no vendors would  
547 be allowed. He said he expects this to be a good work shop.

548

**\*\* End of Meeting #21 \*\***

549

550

see "Over The Shoulder Topic Index" ongoing WORD file for meetings' topics

551 **CONFERENCE CALL MEETING # 22 – DECEMBER 3, 2015**

552 **Meeting Participants:** 13 Total / 4 Agencies

553	<b>Deschutes</b>	Tom Shamberger	Chuck Shutte		
554	<b>Jackson</b>	None			
555	<b>Marion</b>	Don Newell	Mike Harmel	Mike Shepard	Jolene Bray
556	<b>Washington</b>	None			
557	<b>Pierce</b>	Rick Butner	Vernon Page	Mike Isun	Gary Grindley
558	<b>Snohomish</b>	None			
559	<b>Spokane</b>	Bob Keneally	Nate Thompson	Tim McIntyre	
560	<b>Yakima</b>	None			
561	<b>AOC</b>	None			
562	<b>CRAB</b>	None			

563

564 **HOT TOPICS/UPDATES:**

565 Don said the OTS will continue to meet monthly through May 5 unless others have another idea. He  
566 asked everyone to review the list of discussion topics on the agenda and let him know if there are  
567 any new items the group wants to discuss or any past topics they want to revisit.

568 Don said the group will be discussing employee safety, training and succession planning at the January  
569 meeting, and then best management practices in February.

570 He said he is working with Tom (Deschutes) to put together a **gravel road enhancement workshop** on  
571 March 15 at the Deschutes County Fair & Expo Center. He said the workshop will offer learnings  
572 from various organizations and focus on the successes and failures with various products and  
573 methods. Don said the Cascade **East Vegetation Management Conference** is March 16-17 at the  
574 same location and will offer continuing education credits for Oregon and Washington professionals.

575 **Topic 53: Traffic: 5/5 – Signals, Flashers & Blinkers**

576 **Deschutes County:**

577 Tom said they only have **two signals** in the La Pine and Sunriver area and **they contract with ODOT** for  
578 maintenance.

579 He said they use **quite a few flashers** and flashing signs such as STOP AHEAD, along with some  
580 flashing stops and a few curb signs. He said if there is a location with a lot of accidents, they will  
581 upsize a standard sign or put a regular steel sign along the road, but if that doesn't work they go to  
582 flasher.

583 Tom said they don't want to use too much because people become immune so they only use in high  
584 accident history areas. He said they stand out at night, so in areas with a lot of background clutter  
585 where a sign can be lost, flashing signs work well there. Tom said they have a few blinking warning  
586 lights for trouble intersections and are doing traffic studies on several to see if they need to improve  
587 or upgrade.

588 He said they have **a 2 person sign shop and do flashing signs**. Tom said ODOT has quite a few in  
589 their system and they do no work in cities.

590 Tom said the only thing they're really changing is to replace one flasher where they have a lot of  
591 vandalism and the highest accident rate in the county with a roundabout. He said it could be a  
592 million dollar investment but is in a location where there are a lot of wrecks.

see "**Over The Shoulder Topic Index**" ongoing WORD file for meetings' topics

593 Tom said in locations where they've had problems with people running stop signs, they've put STOP  
594 AHEAD signs on both sides of road which seems to help.

## 595 **Marion County:**

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596 Mike H. said they have **5 traffic signal** intersections **that are maintained by the City of Salem or**  
597 **ODOT** and **19 flashing intersections** the county maintains.

598 He said the flashing intersections are flashing yellow with combo red or flashing red for a 4-way stop.  
599 He said there has been some vandalism with people shooting out lights but went to LED bulbs about  
600 7 years ago and they'll still flash but have to be replaced. He said going away from incandescent  
601 bulbs has been good because **LEDs don't burn out**.

602 Mike said the **20 mph school zones are solar powered** and have 18 schools they are working on, with  
603 another 18-20 in the coming years. He said there were a lot of issues with the 7 a.m. to 5 p.m.  
604 school zones and people wanting to know when they need to go 20 mph and slow down. He said  
605 having a couple of flashing signs helps with that. Mike said the engineering department is looking  
606 into that in areas where people aren't paying attention to stop ahead signs.

607 Don said Marion County has 2 river **ferries** and just received a grant for a new component to help with  
608 the service for ferries including **open and closed signs**. He said each ferry has another county  
609 bordering on the opposite side of the river and have signs to turn when the ferry goes down, which  
610 takes several hours with 15 signs. He said they were on track to get solar powered signs but learned  
611 from Clackamas County that it's better to have an open and close flash sign on a powerline instead  
612 of solar with all the gray days in the northwest.

613 Don said the school zone signs belong to the county's in Oregon and Marion County maintains those in  
614 the county. Mike H. said the trend is to go to flashing 20, which takes guess work out for drivers. He  
615 said they are doing 5 different school zones in a couple weeks and will bring up over Christmas  
616 break.

617 He said they are looking at advanced low clearance for underpasses because have problems with  
618 commercial trucks getting stuck under low underpass. He said this would give a heads up to those  
619 using GPS and help to prevent accidents. Mike said if they're not reading standard signs, they're  
620 doing a lot of damage and there are a lot of instances where they tear the top off the truck trailer. He  
621 said they see a issues this time of year with out of state Christmas tree truckers and the plan is to try  
622 to catch them before they get off freeway or state routes.

## 623 **Pierce County:**

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624 Vern said their system has about **225 locations they maintain**. He said close to 25 are traffic signal  
625 flashers at 4-way stops or T intersections. He said they have about a dozen driver feedback signs  
626 (radar) and a couple lighted CURB AHEAD signs where they have a trouble area.

627 He said they have **very little solar powered** anything because Washington doesn't lend itself to that.  
628 Vern said they maintain traffic signals in 4 cities and probably have 125-130 signals that belong to  
629 the county. He said they have a few with flashing yellows they've started implementing at T  
630 intersections that work well but said the jury is still out for him.

631 He said they have **6 technicians that do preventive maintenance inspections** on signals every other  
632 month to verify operation, as well as yearly aerial inspections. He said they have **1200 luminaires**  
633 **and rent another 800 from the power company**, and twice a year they have a worker drive around  
634 at night to make sure they all work. He said the power company charges an inordinate flat rate to  
635 rent and the county has a meter on each owned luminaire.

636 He said they went to LED modules a few years ago and used to change an incandescent lamp daily  
637 which took hours, but now only have to do a couple times a year. Vern said they have been  
638 changing luminaires to LEDs for a few years and have not had one fail. He said they are also saving  
639 about \$400,000 per year on electricity costs and the new LED street lights should last 20 years.



see **"Over The Shoulder Topic Index"** ongoing WORD file for meetings' topics

640 Vern said they have maintenance contracts on **lighted school zone signs** in the right of way but school  
641 districts own the signs. He said their techs are required to have a strong electrical background and  
642 they encourage IMSA licensing level, but there are no electricians on staff but they can work on  
643 equipment because the county owns.

644 Vern said **they have 3 bucket trucks** (one van, one Ford F-150, and one International) and are getting  
645 rid of the bucket van for a service van. He said they have a service van and fiber optic van, as well  
646 as a couple other vehicles. He said although it may seem they have more vehicles than people, they  
647 do so many varied things they never know what they'll need. Vern said their lab tests every piece of  
648 equipment in the field and items they put in the field (cabinets, buttons, **Opticom, video detection**  
649 systems) needs to run for at least 2 weeks before it goes in field.

650 He said most technicians could fix down to component level although they don't. He said they'll never  
651 get into conflict monitors and those go back to the manufacturer for repair, although if it's out of  
652 warranty they may open and look. Vern said they certify every conflict monitor on a yearly basis. He  
653 said they have 35 signals they have fiber running past and about 22-23 he can monitor from the  
654 office. He said they just purchased an Econoline Centracs which allows them to install and work on  
655 fiber a little easier. Vern said probably 25% of signals that belong to them they can monitor from the  
656 office.

657 Vern said they have **very little overtime**, perhaps 30-40 hours a year per person. He said some is  
658 scheduled such as luminaire inspections, which is an eight hour drive. **He said they are in cabinets**  
659 **every other month to make sure everything is working**, and have 2 service vans that have just  
660 about everything they need to do in the cabinet. He said they are having 4 brand new signals being  
661 built and 2 rebuilt.

662 Vern said they received special permission from federal government to use a 3 section flashing yellow  
663 arrow with bimodal yellow instead of a 4 section, and likes it better than the 4 section. He said they  
664 use video detection but still have some legacy. He said with a couple of overlay projects they'll take  
665 the loop out and put back in but most are going to video detection. He said he uses Wavetronix to  
666 supplement video detection where he has narrow side streets and a wide main street and puts it in  
667 for left turn pockets.

668 He said he tried Econolite and SolarPro, which worked pretty good, but Cara was horrible. He said  
669 Cara started out okay but with each successive upgrade it got worse and worse, but finally received  
670 an upgrade that made it tolerable. He said they use a lot of battery backups now and people like  
671 them. Vern said they run an alpha product inverter program and get good run times when set for 4  
672 ½ hours.

673 He said this gets him past any outage, and if it's anything longer he takes it to red and then drops to  
674 flash. He said he has 6 hours of flash and if they turn off everything else in the cabinet they can get  
675 10-12 hours of operation.

## 676 **Spokane County:**

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677 Tim said they have **100 signalized intersections they maintain and about 30 belong to them**, about  
678 70 to Spokane valley, and 2 to other towns. He said they have **40 flashing school beacons** they  
679 maintain.

680 Tim said they **work well with WashDOT**, which has 2 main roads that runs through the county. He said  
681 they have a 5 person crew and 2 bucket trucks, 3 service pickups, and do some lamination but most  
682 is owned by the utility companies.

683 He said for routine maintenance they try to have a tech drive through all the intersections to make sure  
684 there's no damage over a weekend. Tim said they pull in all monitors every year to test and certify,  
685 and do field check on all fixtures and Opticon checks twice a year. He said they're **about 95% LEDs**  
686 **and are on a 10 year replacement program, and have had no real failures with those.**

see "Over The Shoulder Topic Index" ongoing WORD file for meetings' topics

687 He said the area is starting to go to reflectorized back plates and they are getting a program together to  
688 do that. Tim said they have spare parts and signals in their shop and 3 test sets to set cabinets in.  
689 He said when they get anything from a manufacturer they test it for 2 weeks in the shop before it  
690 goes in field. Tim said they have several spare cabinets and monitors, and are ready to go for knock  
691 downs.

692 Tim said they use Iterus detection systems and their first choice is loops in the ground when available  
693 during new construction and their second choice is Wavetronix.

694 He said they have pretty much all Siemen controllers and are switching from Peek controllers and are  
695 running M50s.

696 Tim said a question they get is what agencies do with **old equipment**, such as old controllers, and can't  
697 find anyone who wants an older controller. He said they have one tech on call 24/7 with a paging  
698 system, but calls are down quite a bit with the new tech and LEDs.

699 Tim said they don't do any battery backups and had some intersections down 4-5 days after storm and  
700 they just left dark. He said some people run gas powered generators but they don't as of now but  
701 there's been talk about alpha battery backups.

## 702 **Topic 54: Guardrails**

### 703 **Deschutes County:**

704 Tom said they are trying to get their program into an asset management program, and have been trying  
705 to it put together since visiting pierce county and seeing how advanced they are. He said there are  
706 two guard rails they don't have tracked in system although they visit. He said also trying to get  
707 culverts into asset management. Tom said they have crew who do checks, especially after a storm.  
708 He said they had a bridge that had its guard rail peeled off.

709 He said they don't have a **dedicated bridge crew and it ends up with the maintenance crew**. He  
710 said they have one junction over Hwy 97 that they contact out for repairs because it has metal posts  
711 and they only do wood posts.

712 Tom said if you put normal reflectors on guardrails the snow plows rip them off, so they use a **butterfly**  
713 **that's bolted to the head of a post and tucked into the V of guardrails**. He said at night they really  
714 **stand out and are protected**.

715 He said they have a lot of **cattle guards** and put object markers to closest grate and it protects people  
716 at night. Tom said they buy their replacement rails through Coral Sales.

717 Tom said one thing they look at when upgrading a road (widen or overlay) is if the guard rail is too low  
718 they'll upgrade that and signs. He said they use a lot of Core 10 guard rail in Deschutes County  
719 because it blends in and they don't have to paint.

720 He said they are looking some guardrails from Pacific Barrier Resources they saw at the Pavement  
721 Conference that are flexible and are in talks with the company about doing a test section. He said  
722 the technology is fairly new and comes from Europe. He said they haven't found a location but they  
723 will come over when ready.

724 Tom said when the guardrail is hit, instead of flipping over or pushing back into the other lane, it flexes  
725 and keeps damage down and prevents bounce offs. He said they don't do cable at all. Tom said  
726 they have a money in their budget, so every year they look for projects where they can get new  
727 installations in and any time they have damage they try to upgrade with treatments or replacements.

728

see **"Over The Shoulder Topic Index"** ongoing WORD file for meetings' topics

729 **Marion County:**

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730 Mike S. said they have **12 ½ miles of MLP rail in inventory** and Coral Sales is their supplier. He said  
731 they deal with all galvanized rail and no one else is able to beat their price. He said do work with the  
732 **6 man bridge crew** that's dispatched when there is rail damage.

733 Mike said they use a 1 ton pickup that has a hoist to pull posts, and a crummy and crew pickup that can  
734 straighten posts that's been pushed back. He said when there is a large hit, they have a mini auger  
735 they can use to auger holes, which necessitates a call in for locates. Mike said they can also use  
736 hydro-inductor trucks to excavate.

737 He said their routine maintenance includes painting, which he's not big fan of, and they have a lot of  
738 white painted rails which show up well with reflector markers. He said over the years with all the  
739 pavement overlays they found a lot of guardrails were under the standard height and would have to  
740 go out and lift to 21-22". He said their response time is to do the work the same day or the day after  
741 once notified or come across as long they have inventory.

742 Mike said they hope to have the police case number for motor vehicle accidents so they can recover the  
743 costs to repairs. He said one issue is **connecting the guardrail to timber bridges**. He said half of  
744 their inventory is timber bridge with timber rail and he's looking for a creative solutions to connect a  
745 guardrail to a bridge. Mike said he wants to switch out the flair ends to full end wraps and is also  
746 stocking butterfly reflectors.

747 He said they are working with engineering to install more guardrail because about 50% of bridge  
748 inventory doesn't have guardrail on all 4 corners, and he wants to add this in to protect structures.  
749 Don said he and Mike learned of new product of installing a cable on top of a guardrail and stringing  
750 an old cable rail, which raised up the guardrail about 12-14 inches.

751 Mike said if federal dollars are involved than all upgrades need to be made to current standards and  
752 most of these are handled through Traffic Engineering or Capital Projects section. He said he has  
753 aged rail that he can't get components for anymore and concrete posts he wants replaced. He said  
754 Marion County doesn't have cable on any of their bridges but ODOT has one over Hwy 22.

755 **Pierce County:**

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756 Gary said they have **36 miles of continuous guardrail**. He said they have been doing a thorough  
757 inventory and inspection of it the past 4-5 moths with inspection teams who are building a database  
758 with every type file for them including pictures of everything.

759 He said they have a mix of guardrails that has been in the ground for 6 years to new stuff every year.  
760 Gary said their traffic engineering does upgrades annually to about 1000 feet of guardrail, either  
761 changing out and upgrading antique or adding to new location for traffic volumes. He said they get  
762 all supplies from Coral Sales in Oregon, which has the best bid and a great response time.

763 Gary said they keep a reasonable amount of supplies on hand to respond to about any type of service  
764 calls and have a **2 person crew that does guardrail for the county**. He said it took some time to get  
765 coordinated with the sheriff's office and they're now sending emails regarding incidents involving  
766 county structure so staff can review. He said they try to do within 1-2 weeks and sometimes have  
767 issues with getting materials but will get secured. He said their bridge/guard rail crew has an  
768 International crane truck with a 55' crane or man lift for bridge work or guard rail work. He said they  
769 are getting case numbers right away on police issues and try to recover every dime they can. He  
770 said they forward all information to Risk Management and they go after the responsible party for  
771 reimbursement.

772 He said they had a series of B. Type-31 Trinity products installed over 30 years and traffic engineering  
773 said every time it is hit, it must be replaced because of liability and are going to a MSV terminal.  
774 Mike Isun said they had 3 different databases with info about guardrails and none were kept up well.  
775 He said about 4-5 months ago they sat down with the asset management team and went through  
776 what they needed inventory wise for guardrails and sent out a crew of 2 over a month.

*see "Over The Shoulder Topic Index" ongoing WORD file for meetings' topics*

777 Mike said they drove every road in the county and collected end terminals separate from guard rails  
778 because they have different info than rails and are now waiting to meet and go over what sort of  
779 assessment they want to do on them or if want to do because of liability issues.

780 Gary said they take direction from the traffic engineering team and as they come across things they  
781 send pictures to them if they think they should be removed because they're not functionally sufficient  
782 or not needed and they decide. He said during the overlay program each year these things are  
783 looked at and in the past, part of the project was to have the contractor raise the guardrail because  
784 had the previous overlay and new overlay would make it too low. He said at the time of overlay if the  
785 existing guardrail needs upgraded, that will be part of the contract.

786 Gary said from a maintenance standpoint, unless its hit and damaged, they don't replace and have  
787 always replaced like with like because at initial installation that was approved method. He said they  
788 have about 9 different terminal ends in use and it would be nice to have one style of terminal which  
789 would make maintenance easier. He said every time they pick a new style when upgrading so must  
790 maintain different styles throughout county.

791 Don asked if Deschutes or Pierce **racked on the ground**. Gary said they are trying to free up space on  
792 the yard because it would make easier at least to have rail on a pipe rack or lumber rack to be able  
793 to grab with a forklift and load on a truck. He said they're looking at more efficiency and that would  
794 free up the footprint because now it's scattered over an area that can be condensed if they have a  
795 couple berth style racking systems. Tom said don't have racking system for rail. He said they store  
796 outside on pallets on a gravel yard but it's a fairly dry climate and it doesn't seem to hurt to store it  
797 outside.

798 Don said the structures topic will be shifted to February and the group will discuss employee safety,  
799 employee training, and succession planning in January. He asked participants to email photos,  
800 exhibits, and documents that can be shared on the secured site. Don said the county reps have the  
801 contact information and links to site.

802

803

**\*\* End of Meeting #22 \*\***

804

805

see "Over The Shoulder Topic Index" ongoing WORD file for meetings' topics

806 **CONFERENCE CALL MEETING # 23 – JANUARY 7, 2016**

807 **Meeting Participants:** 17 Total / 6 Agencies

808	<b>Deschutes</b>	Tom Shamberger	Chris Doty	Randy McCulley	
809	<b>Jackson</b>	None			
810	<b>Marion</b>	Don Newell	Jim Thompson	Jolene Bray	
811	<b>Washington</b>	Keith Lewis	Deb Balenburg	Larry Kanaub	Jeff Peck
812	<b>Pierce</b>	Bryan Chappell	Gary Grindley		
813	<b>Snohomish</b>	None			
814	<b>Spokane</b>	Bob Keneally	Jay Imhoff	Randy Moran	Dan Gadd
815	<b>Yakima</b>	None			
816	<b>AOC</b>	None			
817	<b>CRAB</b>	Bob Moorhead			

818

819 **HOT TOPICS/UPDATES:**

820 Don said the OTS meetings will be ending in May. He said the group started with the original discussion  
821 topic list and have hit most of those items but if there is another topic anyone would like to touch on  
822 before the meetings end to please contact him.

823 Don said the group will discuss environmental best management practices at the February meeting and  
824 if all the topics scheduled for today's meetings aren't covered, they will be rolled into the March  
825 agenda. He asked everyone to bring their environmental specialists to the February meeting.

826 Don said in there will be an "Enhanced Gravel Road Maintenance Treatments" workshop on March  
827 15 at the Deschutes County Fairgrounds in Redmond. He said the two days following that, March  
828 16-17, Deschutes County will hold an herbicide training that will give credits to Oregon and  
829 Washington participants. Don said he is requesting presentations for the gravel road workshop. He  
830 said there have been new products, applications and processes, and he wants to share those  
831 experiences with a larger group. He said the workshop will be done in a similar format to the chip  
832 seal workshop where attendees share presentations from their programs but vendors aren't allowed  
833 to be present.

834 Don said he would take suggestions for added topics before the May meeting and that he had thought  
835 of a couple items, one being fleet. He said speaking for Marion County this group has been very  
836 valuable and he just spent \$40,000 on GPS tracking for a vehicle for the first time. He said Marion  
837 County also likes how Pierce County puts down A/C overlays at intersections and are making shifts  
838 in their program because of this recommendation.

839 Post meeting, both Deschutes and Pierce followed up with some additional positive comments  
840 reinforcing the value of the OTS project.

841 **Topic 55: Organization Culture #5: Employee Safety**

842 **Deschutes County:**

843 Randy said their road department has a strong safety program compared to other county programs.  
844 He said they've worked with risk management and tailored it around their work zones and hazards,  
845 with the department taking an active role. He said their accident investigation is done through  
846 trained members of their safety committee, which is made up of managers and employees.

see **"Over The Shoulder Topic Index"** ongoing WORD file for meetings' topics

847 Randy said for training they do daily tailgate meetings before crews go out, and the shop and operations  
848 crew meet together especially during a snow event or chip sealing when there may be daily hazards.  
849 He said they do weekly topics and presentations, and any hazardous communications are done on a  
850 monthly basis.

851 Randy said they send their safety committee members to OSA trainings and COSHA (Central Oregon  
852 Safety and Health Association) conferences.

853 He said their accident review used to be done in the safety meeting and it felt adversarial and negative,  
854 and not a lot of information came out because people were defensive. He said because of this they  
855 created an incident review committee made up of four people (management and peers) that was not  
856 disciplinary and had solutions come out of the first meeting. He said it was a big change in culture  
857 but it made the safety committee more positive. He said the committee has been in place for 3 years  
858 and has been very successful.

859 Randy said they are also part of **Oregon OSHA SHARP (Safety and Health Achievement**  
860 **Recognition Program)** and are on their second year of graduation. He said they use OSHA  
861 consultation before big projects.

862 Chris said management participated in the safety committee and recommendations that come through  
863 are dealt with in management team meetings. Randy said having support from above helps gets  
864 things done. He said all managers attend the safety committee meetings so they stay engaged in  
865 the program. He said the safety committee meetings have about 10-12 participants, are held  
866 monthly, and last about 1 hour and 15 minutes.

867 Randy said people would make suggestions and they'd make the change but it wouldn't be noticed by  
868 others. He said they added an action report and take before and after photos, and share those with  
869 staff. Tom said they were finding new employees struggle with the safety program so they assigned  
870 them to a seasoned veteran as a mentor they can go to and follow their example.

871 Tom said they have two major seasons – chip seal and snow season – and prior to each they sit down  
872 with the group for a minimum 2 hour safety conversation to prep them for the upcoming season. He  
873 said they do quarterly inspections - from work zone safety to all facilities – that are signed out to  
874 respective safety committee members. Tom said they look at all aspects of the area and bring back  
875 a report to discuss and comment.

876 Randy said they are also involved in **Trans 360** and so far it's shining a light on a lot of things. Tom  
877 said if they have an accident, the first question is "What is the training program?" He said a few  
878 people who have ridden with the trainer have come away with a positive impression and new ideas  
879 or techniques.

## 880 **Marion County:**

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881 Don said it's interesting when an outsider look at an organization's safety program. He said he thought  
882 Multnomah County had great safety program but had rude awakening when he came to Marion  
883 County and was reeducated to a different culture, and the program has moved farther down the road  
884 in last nine years.

885 Jim said Marion County's program was similar to Deschutes County, in regards to if an incident or  
886 accident occurs, he will interview all involved parties. He said there is an **Incident Report process**  
887 form that takes everyone through what needs to be done and is posted in the web folder. Don said  
888 Marion County is using SharePoint filing sharing for these forms so multiple people can check them  
889 out and back in.

890 Jim said Marion County has started a preliminary study of using **molded earplugs** that are unique to  
891 each person (**ProtectEar**). He said the initial cost at fitting is about \$120 and the earplugs have a  
892 life expectancy of 5 years with a 3 year warranty. Jim said if you consider that most people wear 1-2  
893 earplugs a day, the initial investment is paid for in 1-2 years of disposable earplugs.

see **"Over The Shoulder Topic Index"** ongoing WORD file for meetings' topics

894 He said this type of earplug is more comfortable than the standard, disposable foam earplug and also  
895 has a small tube that runs out and bypasses tones of a typical human voice but can be clipped at 85  
896 decibels, allowing better communication with co-workers while protecting high/low frequency and  
897 high decibel sound. He said they've only been using since September but are getting positive  
898 feedback on them. Don asked if anyone else was using but no one was.

899 Jim said he is interested in hearing what others are doing to **prevent backing accidents**. He said they  
900 are taking steps to place a cone by the backside of vehicle, which causes people to walk back and  
901 pick it up, but staff are still having backing incidents. Don said one thing learned from Pierce is to  
902 have an **aggressive spotter program**.

903 Tom (Deschutes) said they are looking to experiment with **proximity sensors** that will let you know if  
904 something is behind you. Randy (Deschutes) said they are looking at **Preco Radar System**. Jim  
905 asked if anyone has retrofitted vehicles with backing cameras. Randy said they have but they're not  
906 always looked at when in the midst of work such as plowing snow.

907 Bryan (Pierce) said they had accidents so they implemented a policy that they have to get out of vehicle  
908 and check, and if there is passenger in the vehicle they have to get out and act as a spotter. He said  
909 their accident numbers went down dramatically. Bryan said they stressed the backing issue more  
910 than anything because of safety to employees on the ground and it's been drummed into them so  
911 much that it's now automatic for employees. **He said they've now changed the culture so it's been**  
912 **very effective**. He said they use radar back up for loaders and graders but it alerts the operator  
913 when something is behind the equipment. He said they retrofitted their 10 yard trucks and when the  
914 5 yard trucks come on line, they're also having them installed. Bryan said much of this has come at  
915 the request of employees who bring them their safety concerns.

916 Don said despite everything that's good about the safety program, **the county is self-insured** and  
917 between physical injuries and equipment damage, they are spending up to \$150,000 plus a year.  
918 He said basically that is charged to the department so they are losing the equivalent of a 12 yard  
919 truck every year. Don said they brought in a specialist to do a culture study and out of that they've  
920 implemented new ideas and reinvented the program, which they asked employees to help rename  
921 and rebrand.

922 He said emergency management is a section of public works at Marion County and all employees  
923 participate in their trainings. He said they had grant money to **purchase incentives and employees**  
924 can earn points from hours in trainings or working in the emergency operations center (EOC) to "buy"  
925 these items. Don said they folded the Safety program into that and the department now has a  
926 Safety/Emergency Management Incentive program. If an employee has a clean safety record for the  
927 quarter, they earn points to "buy" safety items from the "store." He said this has worked out well and  
928 he will share the spreadsheet on website.

929 Don said Risk Management identified that most injuries involved back injuries and are aggressively  
930 trying to address that. He said saw costs went down by 2/3 but have increased again.

## 931 **Washington County**

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932 Keith said they work with risk management on components of their safety program. He said previously  
933 their program operated on a department level but 5 years ago they were able to move to division  
934 level. Keith said they hold **safety committee meetings once a month** and also have a quarterly safety  
935 walk-through in the yard, observing any hazardous materials or areas of concern, after which Jeff  
936 writes a comprehensive report.

937 He said it was good having a safety specialist who is able to go to crews in field and work in close  
938 proximity with crew members as safety concerns come up. Keith said he liked Deschutes involving  
939 employees in their committee because that will bring more buy-in. Jeff said their **safety program is**  
940 **comprised of policy and committee**, and that's in addition to the county program which is spread  
941 really wide and doesn't address what the road department needs.

see "Over The Shoulder Topic Index" ongoing WORD file for meetings' topics

942 He said their training addresses risks and hazards of jobs to be done, weekly training on what's going  
943 on at the moment, monthly safety committee meetings, and two yearly safety stand-downs in the fall  
944 and spring to address issues coming up for the season. Jeff said all major work groups (field and  
945 administration) are represented on the committee and meetings usually run ½ to 1 hour. He said the  
946 initial review is done by the supervisor and the employee involved, with Jeff joining them. He said  
947 some things they like to focus on is employee feedback and empowerment because they've found  
948 this helps them find out what's going on from employees.

949 Keith said most recently they discussed LED lights on a plow and are planning to change out all lights  
950 on trucks to improve lighting. He said in years past there was talk at a department level to have a  
951 cone policy (for backing accidents) but it didn't happen. He said they do have a spotter when  
952 backing a vehicle and haven't had a real problem with backing accidents.

953 Keith said new employees come in at an entry level without a CDL and they can then take department  
954 trainings and advance to a CDL. He said the more experienced drivers with CDLs train those  
955 without a CDL and the county pays them overtime to conduct the trainings.

## 956 **Pierce County:**

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957 Gary said they meet weekly and monthly with their risk management department. He said they rarely  
958 have accidents with county vehicles and private vehicles, but when they do the initial accident claims  
959 are done by supervisors at the shop, which are then sent to risk management.

960 Gary said they have multiple forms instead of one master form. He said as far as training and feedback  
961 for employees to improve their skill set, they award demerit points. Gary said no one has hit the  
962 minimum number but it has encouraged people to improve. He said they hold regularly scheduled  
963 trainings with their field supervisors leading crews and some are done at shops before they go out,  
964 and also hold monthly safety meetings and trainings at site locations. He said their safety officer has  
965 a rotation of safety practices and goes through that with crews, and they also share reminders about  
966 BMPs for use in the field.

967 Gary said they bring in outside trainers annually, such as Puget Sound Electric to remind crews how  
968 to operate around down lines and Northwest Natural Gas to teach operators who are digging what to  
969 do if they hit a gas line.

970 He said they also do monthly safety and vehicle inspections where they check first aid kits and fire  
971 extinguishers. Gary said if anyone is with the operator, they have to be a spotter. He said they only  
972 had backing accidents when they didn't have a spotter.

973 He said they do annual hearing testing for employees on the roads department. He said one third of  
974 their employees have molded hearing protection and this came as a recommendation from the  
975 testing service to risk management for people showing more than normal hearing loss.

976 Randy said they are looking to go to a Fastenal vending machine with gloves, safety glasses and ear  
977 plugs available 24/7 and will get lockers to go with it. He said it's free if they meet a certain tier.  
978 Randy said just by having an employee name attached to supply use has cut use by half. Gary said  
979 he thought this would be a much faster and easier way to track supplies and they will just pull weekly  
980 or monthly reports. Don asked Randy to send some photos of the machine that he can post online.

981 Bryan said when they have to go to confined space, they will schedule regulatory agencies to come out  
982 with crews on the jobsite. He said they have GPS with ABL tracking units on vehicles that reports  
983 back to the shop if the vehicle goes off the road, so they can have emergency personnel on the way  
984 before it can be called in.

985 Gary said one thing they're in process of doing to improve employee safety is to build a training facility  
986 for such as falling trees, confined space, and practice installing pipe plugs. He said he thinks this will  
987 be a big benefit to crews. Gary said since they are a unique county going from sea level to 2400',  
988 they have a lot of dead areas and have bought satellite phones. Randy (Deschutes) asked what  
989 GPS or ABL using. Gary said LTI. Bob (Spokane) said they use Precise.



see **"Over The Shoulder Topic Index"** ongoing WORD file for meetings' topics

990 Gary said every two weeks their safety training officer will go out in the field and visit actual crews and  
991 do a review of the crew's set-up. He said the safety training officer will intervene and correct if  
992 necessary or compliment if correction is not needed. He said they have another inspector that looks  
993 at quality control on maintenance work and also looks at safety issues he can address. He said  
994 that's been a big help if things are missed they have tendency to show up at those crews and this  
995 helps keep them safer. He said that has decreased potential injuries on the job considerably.

## 996 **Spokane County:**

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997 Dan said they have an overall safety program that blankets the county and encourages or requires  
998 departments to create their own accident prevention program. He said their risk management  
999 department handles all workers comp and accident claims and there is three loss control specialists  
1000 assigned to departments who are part of safety committee meetings.

1001 Dan said they are a resource if departments have questions or concerns. He said if a county employee  
1002 is injured or hurt, and/or if a county vehicle is involved, the loss control specialists are notified and  
1003 they do the investigation. He said they work with the road department and create a report with  
1004 suggestions that's passed on to the roads department.

1005 Dan said that topic is then reviewed in safety committee without any names to see how to prevent in the  
1006 future. He said he goes out on projects and is very involved in state or federally required training.  
1007 He said all flagging training, drug testing, and hearing tests are done in house. He said they found  
1008 this to be beneficial because they can work with individual departments. Randy said their safety  
1009 committee is similar to other counties in that it's made up of line workers and managers. He said he  
1010 looked back through their minutes and the process has been very positive.

1011 Jay said they try to be proactive rather than reactive. He said they daily meetings for chip seal and  
1012 snow operations, which are flagger related, to try to integrate together. He said they have monthly  
1013 and yearly required trainings, as well as equipment training for trucks, graders, and backhoes, and  
1014 product training. He said some other things they may add are power and gas hazard trainings.

1015 He said with regards to spotters with backing equipment, they include that in their truck training. Jay  
1016 said typically they have spotters at all their job sites and when they do load securement, ditching,  
1017 and snow removal. He said in comparison they have a venue that's pretty decent to lay out truck  
1018 courses and are able to cover without going outside.

1019 Jay said they do a lot of in-house training with their own operators and they do this because they have  
1020 employees who have been doing the work for 20+ years and it would be a wasted resource to not  
1021 use that. Jay asked others how they compensate workers who are incorporated into trainings.  
1022 Don (Marion) said if an employee is doing work outside their job classification, the county has a  
1023 "working out of class" pay that is 5% increase over their hourly wage. Jay said they have "trainer's  
1024 pay" that's a set amount and wanted to see if they're compensating adequately. Bob said they  
1025 tightened up documentation of accidents so they can track. He said each employee meets with a  
1026 supervisor who may discipline, if needed, or recommend additional training.

1027 Don said there is a portion of the Marion County form that asks after all the information is gathered,  
1028 "What do you believe is the root cause of the accident?" and it's helped quite a bit.

1029  
1030 Don said environmental bmp's will be discussed at the February meeting and the second two items on  
1031 today's agenda will be discussed at the March meeting.

1032

1033 **\*\* End of Meeting #23 \*\***

1034

see "Over The Shoulder Topic Index" ongoing WORD file for meetings' topics

1035 **CONFERENCE CALL MEETING # 24 – FEBRUARY 4, 2016**

1036 **Meeting Participants:** 15 Total / 6 Agencies

1037	<b>Deschutes</b>	None				
1038	<b>Jackson</b>	None				
1039	<b>Marion</b>	Don Newell	Keare Blaylock	Tanya Beard	Evie Pech	Jolene Bray
1040	<b>Washington</b>	Keith Lewis	Janet Oatney			
1041	<b>Pierce</b>	Bryan Chappell	Jeff Rudolph			
1042	<b>Snohomish</b>	None				
1043	<b>Spokane</b>	Marianne Barrentine	Howard Hamby			
1044	<b>Yakima</b>	None				
1045	<b>AOC</b>	Emily Ackland	Daniel Hauser			
1046	<b>CRAB</b>	Bob Moorhead				

1047

1048 **HOT TOPICS/UPDATES:**

- 1049 Don said the website link to the OTS secure folder is broken but will be fixed after the meeting.
- 1050 Don said the March agenda will include organizational culture, employee training, and succession
- 1051 planning.
- 1052 Don reminded the group that the “**Enhanced Gravel Road Treatments**” workshop will be held in
- 1053 Redmond, Oregon at the Deschutes County Fair and Expo Center on March 15, 2016. He said the
- 1054 workshop will allow counties to “show and tell” their experiences with dust abatements, soil
- 1055 stabilizers, and gravel road upgrades. Don said there is still time to RSVP and presenters are still
- 1056 needed.
- 1057 Don said the **OTS project is over after May**. He said he has a proposed list of topics but asked
- 1058 participants to send him any suggested items they want to cover.

1059 **Topic 56: Environmental: Best Management Practices**

1060 **Marion County:**

- 1061 Keare said Marion County’s **water quality program includes TMDLs and Limit 10-40**, and they have
- 1062 a way to integrate all this information into reports. She said they have a **fish passage program**, and
- 1063 although drinking water and air quality is not associated with their program, they do have the
- 1064 **Migratory Bird Treaty Act** into the program. Keare said she is one of three environmental
- 1065 specialists at Marion County. She said one works with crews, one does regulatory work, and she
- 1066 does education and outreach.
- 1067 She said they are working with NOAA to get reapproved and are waiting to hear on the latest approval.
- 1068 Keare said they **incorporate their program into HART and integrate with TMDLS and BMPS**.
- 1069 She said they have monthly trainings for staff and crews and also do external trainings that are more
- 1070 specific to their work.
- 1071 She said they’ve started a **new BMP leadership program and have incentivized participation** in
- 1072 BMPs. Keare said they trained crew leaders and supervisors on BMPs and when they use in the
- 1073 field, they write a short report about how its applicable to water quality and send to Keare. She said
- 1074 when winter program is finished, they get to choose rewards for what they’ve done (t-shirts, caps) for
- 1075 their crew, which helps create a team mentality.

see **"Over The Shoulder Topic Index"** ongoing WORD file for meetings' topics

1076 She said crews have taken tons of pictures, which she's never been able to capture before, that have  
1077 wonderful descriptions from the crew leaders about their understanding, which she uses to document  
1078 in their BMP program. Keare said they've had excellent participation and have also had a pizza  
1079 party and subway gift cards for another crew. Don said crews encourage crew leaders for good  
1080 reporting because they want the rewards and they're competing against each other. He said it's very  
1081 manageable and a good portal into the program and reporting. Tanya said Marion County works  
1082 very closely with ODOT and FHWA, which also has fish and wildlife approval.

1083 Don said Keare has a strong computer arts background and **designed glovebox size BMP flash cards**  
1084 on a ring. Keare said there are about 40 cards that cover overarching topic areas and are specific to  
1085 crews and are on durable, rip and water-proof paper. Don said her master file is in the OTS web  
1086 folder, and are open domain and anyone can use.

1087 Don asked Keare about some future issues she's concerned about. Keare said they are looking at the  
1088 **Migratory Bird Treaty Act** and need to be able to manage that with some issues at the Public  
1089 Works yard. She said they are seeing some Killdeer nesting, which are a little early, and have also  
1090 had Mourning Dove nesting in the equipment in the yard. She said once the nest becomes active  
1091 and has eggs, the equipment can't be disturbed so there is critical equipment that can't be used.  
1092 She said they had a nest inside the cage where the propane is kept so had to make alterations to  
1093 keep them from getting inside.

1094 Keare said their permit would allow up a certain number without issues but after that number they would  
1095 need to report. Keare said they are expanding BMPs in programmatic requirements with contractors  
1096 because there needs to be better communication when they're hired about the work they do for  
1097 Marion County.

1098 Bryan (Pierce) said they do most of their own work so the regional road maintenance guidelines don't  
1099 extend to them. He said their capital projects work has its own environmental requirements and  
1100 contractors have to get their own permits. Bryan said their capital projects staff attends Jeff's two  
1101 day BMP trainings.

1102 Don said there are monthly **safety meetings** and the safety officer will give 15 minutes of the agenda to  
1103 Keare to **give an update or overview they call a "BMP moment" with staff**. He said they also do  
1104 full day trainings with safety officer for issues such as tree falling and include environmental issues  
1105 during these too.

1106 He said the county just bought **a Hydra platform, which is a snorkel crane** that goes under bridge.  
1107 Don said by investing in the hydro-platform with a 32' reach, they can be at any bridge component  
1108 within 15 minutes and don't have to take days building scaffolding and diversion dams. He said this  
1109 has also alleviated a lot of bridge maintenance issues.

## 1110 **Washington County**

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1111 Janet said they have NOAA approved BMPs. She said they're all based on the ODOT Blue Book but  
1112 they use more aggressively than ODOT. She said they push for regulatory partners to recognize  
1113 this. Janet said they have **two full time staff and an environmental consultant** that works on their  
1114 program. She said they have other programmatics and a fish passage programmatic agreement that  
1115 streamlines things. She said they've been approved for design of fish passages/culverts when they  
1116 do culvert replacements, and although they do annual reports, they don't have to consult prior to  
1117 designing.

1118 Janet said they have included Kincaid lupine appendices, which allows them to avoid a habitat  
1119 conservation plan. She said this includes new species of concern and avoids more complex issues  
1120 that come along. She said Level 10 is used pretty aggressively, and they report what's working and  
1121 not working. Janet said they created a good BMP program and when there are FHWA or FEMA  
1122 disasters, they become the non-federal designee. She said this makes disaster claims easier.

*see "Over The Shoulder Topic Index" ongoing WORD file for meetings' topics*

1123 She said crews collect data, but accounting and **documentation is a challenge**. Janet said their  
1124 training program is constantly about evolving, and they work to find the optimum training and  
1125 learning that includes RTMLs and BMPs with Clean Water Services. Keith said their program is  
1126 similar to Pierce County's with some Oregon changes. Janet said Dave Schamp wrote the program  
1127 and challenged them to develop it as a template that others can use. She said she can pass this on  
1128 so Don can share with the group.

1129 Don said Janet has been tremendous statewide trainer and has helped many programs get up to speed,  
1130 and is an excellent resource. Janet said working with ODOT on the **Road Scholar Program** and is  
1131 updating training modules with newer BMP1 and BMP2.

1132 **Pierce County:**

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1133 Jeff said in 2002 Pierce County and other local, state, and county governments developed a road  
1134 maintenance program in response to Chinook Salmon being listed as a threatened species on the  
1135 Endangered Species Act (ESA). He said twenty-three Washington State agencies, with road  
1136 maintenance professionals playing a key role, developed the Regional Road Maintenance ESA  
1137 Program Guidelines, which was approved by NOAA.

1138 He said the program is voluntary but agencies following these guidelines have 4(d) protection from  
1139 lawsuits by the National Marine Fisheries Service. Jeff said this has been a good program and has  
1140 grown to include other species including whales since it was originally implemented. Jeff said  
1141 because of this, FEMA, FHWA, and US Forest Service recognize the program and NOAA's approval,  
1142 which saves a lot of time in permitting, and the only Section 7 is U.S. Fish & Wildlife and they're  
1143 working with them to get 4(d) coverage now.

1144 Jeff said they **give crews yearly training** on how to use BMPs and talk what to put on the ground and  
1145 procedural BMPs, such as a spill kit, doing work in the dry, and things to lessen impact to the  
1146 environment. He said they had to develop a training program as part of the program, which they  
1147 have taken to the Washington Department of Ecology to ensure it meets CESCL requirements.

1148 Jeff said he and a new person that was hired last year are the only staff working on this program.

1149 He said there are over 60 different physical BMPs in the program and he will share the link. Jeff said for  
1150 reporting purposes each agency that gets coverage has to produce a report about projects they put  
1151 out using BMPs. He said he can send a sample of some of the reporting requirements. He said they  
1152 train all their employees, including field staff, engineers, so everyone knows the rules and  
1153 responsibilities. He said when they need to add a new species they work with NOAA but don't  
1154 anticipate any new changes because that would mean going through the approval process again.

1155 Jeff said the manager of the road maintenance division has it made clear supervisors will follow the  
1156 program, which flows down to crews. He said they have supervisor meetings each week and talk  
1157 about any problems meeting requirements. Jeff said with record keeping they have checklist for field  
1158 work, planning, and BMPs used, on the back of timesheets and he keeps track and reports at end of  
1159 year. He said when they put the program together, the feds thought they were doing all their work in  
1160 water but they're not so they need to clarify that in their yearly report.

1161 Jeff said they **use iPads to track a lot of work**, ESA reporting, and incidents, but have not had any with  
1162 lawsuits or complaints. He said they work with FHWA, FEMA, and the Corp of Engineers to define  
1163 what a maintenance activity is so when they get permits everyone is clear on what is occurring. He  
1164 said when they replace a bridge, as long as they replace with the same, they will need to meet new  
1165 design requirements but it will fall under the 4(d) process, which means easier permitting and quicker  
1166 completion.

1167 Jeff said there are some things they won't cover, such as pile driving, but they have done two projects  
1168 and gotten permits in less than a year. He said they've had no issues with property owners and also  
1169 discuss what they are doing with adjacent property owners when they get an easement or right of  
1170 entry.

see **"Over The Shoulder Topic Index"** ongoing WORD file for meetings' topics

- 1171 Don asked if they **have any issues with farmers and ditch maintenance**. Jeff said they meet with  
1172 farmers and although they used to do ditch work in winter, they now try to do it in September or  
1173 October when it's dry and has less environment impact. He said crews will now work on one side of  
1174 the road and then the other, but a ditch only has grass and is not flooding, they don't do ditching. He  
1175 said so far this has gone okay and thinks they are making progress with farmers. He said **skip**  
1176 **ditching is another BMP** that was approved by NOAA fisheries.
- 1177 Jeff said they are trying to get programmatic approval with U. S. Fish and Wildlife and are working with  
1178 the Army Corp of Engineers to get a programmatic permit. He said they will then have coverage on  
1179 everything from third party lawsuits to federal permits.
- 1180 Jeff said when they have a FEMA event and have to do clean up or replace, permitting would take some  
1181 time but since they've received approval of their program it will be interesting to see how process  
1182 works for future events. He said they are applying to the U.S. Forest Service for grant funds for  
1183 improvement projects on forest highways in the county.
- 1184 Janet (WA) asked how looking to comply with **floodplain issues**. Jeff said FEMA has approved 4D  
1185 program for any maintenance activity so if it's done in the floodplain or to the roadway, their  
1186 consultation is already done.
- 1187 Jeff said one highlights is when they do training for crews they go to pit sites and bring water trucks to  
1188 give them an idea if the BMP is working properly. He said they use the right bmp, install correctly,  
1189 and focus on in-field training. He said they have people in capital projects that come to the trainings  
1190 to see how BMPs are installed and that it's worked out well for them.
- 1191 Jeff said they work with 2 or 3 other counties or WA DOT to reduce costs (less than \$50 per person).  
1192 Bryan said engineering staff and inspectors also get this training. Jeff said every three years staff  
1193 get refresher course.
- 1194 He said they will have a **simulation in May if anyone wants to attend and view**. Bryan said it will  
1195 begin at 8:30 a.m. and wrap up 3:30-4:00 p.m. and will probably be held the second or third week in  
1196 May. He will send an announcement and Don will share with the group.

## 1197 **Spokane County:**

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- 1198 Marianne said they don't have the ESA issues that those on west side do, so their program is less  
1199 complicated. She said their program is geared towards fish passage and hydraulics approval project  
1200 and Corp of Engineer reporting requirements. She said they are hoping to do more hands on  
1201 training this year based on working in water BMP training and could use help and advice from more  
1202 experienced counties.
- 1203 Marianne said she is **coordinating with Wash DOT and hopes that will help them set up their own**  
1204 **program**. She said they are setting up a stockpile of BMPs (materials for diversion, rocks) and have  
1205 had difficulty in the past getting crews to use. She said right now not a lot of reporting but thinks it  
1206 will get more involved. She said their **general permit is limited in scope for items such as**  
1207 **culvert replacement**.
- 1208 Howard said they've incorporated water treatment storm area in their inventory and assessment of all  
1209 facilities. He said they're  $\frac{3}{4}$  of the way through doing inventory of all **culverts** in the rural area and  
1210 once they get an inventory, they will send a team of drainage experts to do assessment of all those  
1211 facilities for type, condition, and other issues to do with that drainage facility. Howard said that will  
1212 tie in with their one call system to mark drainage facilities for contract work.
- 1213 He said for their urban containment water containment area they're going to equip staff with tablets and  
1214 when they do maintenance all data will go into the program that's loaded on the tablet. Howard said  
1215 **their decant facility was built up north and is functional**. He said they have an agreement with  
1216 the state that they will use this facility when working in that area and the county will use the state's  
1217 facility when working in the valley. Don asked for photos and plans of the facility. Howard will send  
1218 to Don.

*see "Over The Shoulder Topic Index" ongoing WORD file for meetings' topics*

1219 Don said they did a lot of quarry rock mining, but wanted to know if that spilled over to BMPs and  
1220 reporting. Howard said it isn't that big an issue. He said Kaufman Engineering designed the decant  
1221 facility and Anchor Construction built it. Marianne said they are also hoping to do BMP training in  
1222 April and invited anyone who wants to view to attend.

1223  
1224 **Bob (CRAB)** said on a state level they're having issues with HPAs. He said at least one state agency  
1225 thinks their territory needs to expand jurisdiction above high water mark and they are having  
1226 discussions and resisting that. He said there has also been talk about needing HPA for any work  
1227 done on bridges.

1228  
1229 Don asked participants to share their program information, decant facility plans, and this will be shared  
1230 on secure website folder. He said next month the group will discuss employee training and  
1231 succession planning.

1232

**\*\* End of Meeting #24 \*\***

1233  
1234

see "Over The Shoulder Topic Index" ongoing WORD file for meetings' topics

1235 **CONFERENCE CALL MEETING # 25 – MARCH 3, 2016**

1236 **Meeting Participants:** 11 Total / 5 Agencies

1237	<b>Deschutes</b>	Tom Shamberger	Chris Doty		
1238	<b>Jackson</b>	None			
1239	<b>Marion</b>	Don Newell	Mike Shepard	Jim Thompson	Jolene Bray
1240	<b>Washington</b>	Dave Schultz	Deb Dalenberg		
1241	<b>Pierce</b>	Bryan Chappell	Paul Marsh		
1242	<b>Snohomish</b>	None			
1243	<b>Spokane</b>	None			
1244	<b>Yakima</b>	None			
1245	<b>AOC</b>	None			
1246	<b>CRAB</b>	Bob Moorhead			

1247

1248 **HOT TOPICS/UPDATES:**

1249 Don said the group had been scheduled to go until May and that had been changed to April. He said he  
1250 had one minor topic for the last meeting, but besides that all that remains is nuisance control and  
1251 adopt-a-road items, which he said doesn't merit a meeting. Don asked the group to weigh in  
1252 whether they should meet in April. After some discussion, the group **decided that April would be**  
1253 **their last meeting** and they would cover Don's item and then have a wrap up discussion about the  
1254 project.

1255 Don said the **Enhanced Gravel Road Treatments Workshop** is March 15 and he has received RSVPs  
1256 from approximately 25 agencies that are sending 70 people. He said the room will hold 100 people  
1257 and he would like to invite federal workers. Don asked group members to share information for  
1258 Department of Transportation and other federal road agencies (BLM, Forest Service) contacts at  
1259 their locale. He said if he receives that information, he will invite them to the conference. Don said a  
1260 number of OTS participants, including, Bob (CRAB), Chris and Tom (Deschutes), and himself will be  
1261 speaking at the conference.

1262 Don reminded everyone that the **Cascade East Vegetation Management Conference**, which is a  
1263 herbicide training, is being March 16-17 at the same location as the gravel road workshop.

1264 **Topic 57: Organizational Culture #6: Employee Training**

1265 **Deschutes County:**

1266 Chris said Deschutes County has **informal employee development plan**, which is trending towards a  
1267 more formal process that includes discussion on a yearly basis during the evaluation process. He  
1268 said they ask employees where they see their careers going and how their personal goals to match  
1269 with training.

1270 Chris said they recently implemented a policy to guide management on individual, department-wide,  
1271 division, and specialty trainings. He said specialty trainings are used when they can't afford to train  
1272 an entire group but need a few adept at operating certain equipment. Chris said they have a policy  
1273 that walks them through who gets which training opportunities if there are not enough seats. He said  
1274 their **union has a training center** and the county takes advantage of that for training new employees  
1275 and apprentices on equipment.

1276 He said they also implemented training with **Trans 360, Inc.** Chris said they review the organizations  
1277 records and practices, and focuses on truck driving. He said they take more of concerted effort in  
1278 looking at how they are driving, which is the biggest liability situation each day.

*see "Over The Shoulder Topic Index" ongoing WORD file for meetings' topics*

1279 Tom said when they bring in a new person they try to assign them to a mentor who is a senior employee  
1280 who is exemplary in their own work, who will walk the new employee through each process and  
1281 keeps them aligned with goals and focused on what they need to learn so they don't pick up bad  
1282 habits. He said he thought this will help direct new people in their career.

1283 Chris said their training schedule depends on the seasons, as it is does with most road departments,  
1284 which means they have slow and busy seasons and take advantage of the slow seasons to cram in  
1285 as much training as they can when opportunities arise.

1286 He said they don't have many issues with their union and appreciates the county's access to their  
1287 training center, which works well for employees. He said their HR department provides trainings for  
1288 professional development, leadership, and various software products, and works with the college to  
1289 provide office skills development.

1290 Chris said in the past has been very reactionary in addressing training needs but is becoming more  
1291 strategic because they now ask the employee during their yearly evaluations where they want to be  
1292 in five years, which helps them help the employee to get to where they want to be. He said they  
1293 develop skills internally and employees can view their records systems.

1294 Chris said promotions are tied into succession planning and they recruit for entry level positions. He  
1295 said where they have a leadership deficit, they will recruit. He said they receive tons of applicants so  
1296 they need to draw a line in what types of folks they look at. He said if a position requires a CDL that  
1297 might be a cut line.

1298 Tom said in other organizations employees try to move from 2s to 3s to 4s, but at Deschutes County  
1299 they only have two layers – apprentice and journeyman. He said that doesn't lend itself very well to  
1300 promotion unless an employee wants to go into leadership.

## 1301 **Marion County:**

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1302 Don said he's learned a lot about how other organizations decided on training. He said one county has  
1303 three job classifications for graders and training was tied to whether the operator's skill level was low,  
1304 medium, or high. He said about 15 years ago Clackamas County went to one job class with skill-  
1305 based pay and it became a tremendous headache that was complicated because it is a strong union  
1306 shop. He said these were examples of two extremes where they were basically splitting hairs on  
1307 pay.

1308 He said Marion County had a formal training agreement that locked employees into specific equipment  
1309 and with several campuses that meant a lot of shuffling people around. He said they ended that and  
1310 went to training on demand and flattened the number of job classifications.

1311 Don said Marion County was similar to Deschutes and had two levels of operation but is not using the  
1312 top level. He said the determination if an employee was a medium and heavy equipment operator  
1313 was half a year of work at that level, but now they do working out of class, which is a 5% bump. He  
1314 said they can also earn working out of class if they are training someone.

1315 Don said because they have diverse numbers, they are getting more skilled employees in the field  
1316 quicker and employees are getting a faster career path developing equipment skills. Don said at  
1317 Multnomah County they set a CDL as the starting point but found they made a barrier for new staff  
1318 and diversity in the candidate pool wasn't there.

1319 He said they started an apprenticeship program for 6 months and then promoted to medium equipment  
1320 operator, which turned out to be successful and increased diversity of staff. He said he entertained  
1321 doing that at Marion County but went with training on demand. He said employee morale went up  
1322 because there are more skilled operators working and less competition for seat time. He said they  
1323 just purchased a Hydra Platform and the crew decided that one employee would be upgraded and  
1324 they would share amongst themselves.



see "Over The Shoulder Topic Index" ongoing WORD file for meetings' topics

- 1325 Don said they don't have union rules for education and seniority. He had one investigation because one  
1326 operator didn't feel that employees were safe. Don said they put all the data into a spreadsheet for  
1327 medium and heavy work, and two supervisors and the safety officer have to sign off on training. He  
1328 said employees can't run equipment until they have the required training and it's been signed off.
- 1329 Don said when they do an action report the defense is usually whether the employee was properly  
1330 trained or not. He said he's not having too many issues with promotions because they stopped using  
1331 the heavy equipment operator (HEO) job class. Don said they had folded the striper into HEO class  
1332 but found they were doing 800-900 hours a year so they're now in the medium equipment operator  
1333 (MEO) class, which received an upgrade because of its threshold.
- 1334 Mike said use outside resources for specialized training. He said they use **Overton Safety Training for**  
1335 **their crane certification** because it requires three day training and a practical examination. He said  
1336 they also send their bridge crew to them for a rigging and signal class. Jim said they also bring in a  
1337 trainer to do CPR/First Aid training.
- 1338 Don said some employees volunteer for training and get their license for things like **herbicide that**  
1339 **county pays for**, and are then sent to future trainings to maintain that license.

## 1340 **Washington County**

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- 1341 Deb said they have **an equipment training committee** and for every piece of equip they have a five  
1342 step training process employees must go through before using. She said they must also put in a  
1343 number of hours each year to stay at level 5. Deb said they light, medium and heavy equipment,  
1344 and once 80% is signed off at level 5, an employee can start training on their license.
- 1345 She said when promotions come up they look at who has 80% and those who are eligible may apply.  
1346 Deb said they contract with a company outside Vancouver to hold boot camp training for lead  
1347 workers. She said they partner with Portland Community College to do project management training,  
1348 which is open to every employee as long as it is approved by their supervisor.
- 1349 She said their equipment training committee meets once a month and not only approves training plans,  
1350 but will also partner up to write plans for new equipment. Deb said they do a lot of work with  
1351 **Oregon's Technology Transfer Center (T2)**, which is free to agencies, including forklift, hazmat,  
1352 and flagging training through them. She said they were using a vendor at a cost but switched to T2  
1353 and employees say they provide better training.
- 1354 Deb said their herbicide applicators go to Chemeketa Community College to get certified. She said they  
1355 are training with FEMA next month.
- 1356 Deb said they have a **training database and anytime an employee wants to see their record** they print it  
1357 for them. She said she receives a copy of the training portion of each employee's evaluation and  
1358 reviews what each employee is looking for, researches opportunities, and reports that to the  
1359 supervisor who will decide if they want to pursue.
- 1360 Deb said she just finished a Spanish class for building inspectors because they deal with so many  
1361 Spanish speaking customers. She said they customized the six week class and created an app for  
1362 their phones or laptops to be used in the field.
- 1363 Dave said they are trying to do more locally and try to have people attend **NW Pavement Management**  
1364 **Association (NWPMA)** meetings and trainings. He said the pavement management work group  
1365 also provides street paver training for employees who need it.
- 1366 Don asked Deb about her position with Washington County. Deb said she is full-time for land use and  
1367 transportation, with 60-70% of her time going to road operations.
- 1368 Don asked if she had a records system that tracks trainings she could share with the group. She said  
1369 they have a learnings content management system database they purchased. Don said PDF's of  
1370 files would work.

*see "Over The Shoulder Topic Index" ongoing WORD file for meetings' topics*

1371 Don asked if employees compete by seniority for positions, if they are getting best people with the skill  
1372 and aptitude. Deb said they still have to go through a skills test to apply so they are weeded out at  
1373 that point. She said they also have a number of hours needed to learn something and if the  
1374 employee is taking longer, supervisors will pull them in and discuss that this might not be working for  
1375 them.

## 1376 **Pierce County:**

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1377 Bryan said there is a block of training that has to happen each year and it's a mix.

1378 He said **HR does sexual harassment and diversity in the workplace training.**

1379 He said when an employee has their yearly performance review they have to fill out their goals for the  
1380 year ahead and then for the five years ahead. He said the county can't always accommodate but  
1381 they can use this as a basis for selection when positions open.

1382 Bryan said they have Equipment Operator (EO) and Heavy Equipment Operator (HEO) positions. He  
1383 said when employees are first hired they come in as an EO and have six months to learn set values  
1384 on gravel roads and infiltration system on pipes, which they must complete in a certain amount of  
1385 time.

1386 He said truck drivers come in as maintenance workers and **must get their CDL within year.** He said one  
1387 truck driver is a trainer and two others are trained. Bryan said the county pays all the way through  
1388 and they've had no failures. He said if they don't get their CDL, they revert back to a maintenance  
1389 worker.

1390 Don asked if some candidates have a CDL in hand. Bryan said consideration will be given for that and  
1391 they will lean that way if the applicant meets other qualifications. In that instance since the employee  
1392 has their CDL, they will do in-house training on equipment (Inductor Vactor, patch truck, etc.) for 40  
1393 hours and hire a local CDL trainer to go through a safety check in with the employee driving and  
1394 operating the truck.

1395 Bryan said they promote when there is a vacancy and will advertise recruitment, and require an oral  
1396 board, interview panel, and skill test when hiring. He said once the register is established, it's used  
1397 for hiring. He said for HEO they do a skill test interview and that builds the register for hiring and out  
1398 of class.

1399 Bryan said they set up free equipment training, and do classroom work and yard training, so when a  
1400 position opens up, employees should have a good idea of what's expected. He said their union is  
1401 very supportive and has a training center. Bryan said they have talked about setting up a group  
1402 equipment-centric training center and they were not receptive, but are still working on it. He said  
1403 once an EO has the required time in, they're bumped up to HEO and receive in-house training. He  
1404 said they have a training coordinator who coordinates all training.

1405 Bryan said new hires receive four hours of policy training with HR and then come to the site for facility  
1406 and tool orientation. He said they go out with the hot patch crew and set up traffic control zones. He  
1407 said they have inverted culverts (one at 40%) at their training center and can put trees in it for  
1408 confined space training.

1409 He said their training coordinator takes all training rosters and enters that information into a database  
1410 where it is tracked and recorded. He said employees can view their training record on a computer,  
1411 kiosk or hard copy.

1412 Bryan said they haven't had too many mishaps that were pointed to as an employee's lack of training.  
1413 Paul said they have a monthly safety meeting and **quarterly BMP training**, as well as seasonal  
1414 training for operators, which is all done in-house. He said they have a biologist who is certified to do  
1415 training, which includes classroom and field time.

1416 Dave said in the field they install BMPs and bring the truck out and try to destroy them to see what does  
1417 and doesn't work. He said they send supervisors to SIGMA training and any assessment teams go  
1418 to IBDB training.

see "Over The Shoulder Topic Index" ongoing WORD file for meetings' topics

- 1419 Dave said there has been concern about hypodermic needles and county staff was under the  
1420 impression that Hepatitis A & B vaccinations were optional. He said they were recently audited and  
1421 discovered that they are mandatory so they are now offering to employees.
- 1422 Don asked if accident investigations are done by their training officer or a review team. Dave said he  
1423 wasn't sure but their safety officer is lead and it would be hard to believe he wouldn't check training  
1424 records to see if that's a component to it.
- 1425 Bryan said the training coordinator will go out to a fender bender or work place incident and document  
1426 incident data and get pictures, which they put into a report that records what happened. He said  
1427 management will then go out to see if there is a training opportunity that should be offered.
- 1428 Bryan said a supervisor will do initial investigation, interviewing persons involved in incident and getting  
1429 background information, but if it's serious then the safety coordinator will also get involved. He said  
1430 they will follow-up with employee interviews to determine the cause.
- 1431 Don said last month Bryan spoke about a **spring BMP hands-on training at their training center** and  
1432 asked if they can share the date when it's scheduled. Bryan said it's not set yet but he has a  
1433 planning meeting tomorrow and hopes to have it set then.

## Topic 58: Organizational Culture #6: Succession Planning

### 1435 Deschutes County:

- 1436 Chris said they have developed **their next level of leadership** within their rank and file so they now have  
1437 opportunities for lead workers to promote to management. He said that's one attempt in how they're  
1438 trying to transition into the future.
- 1439 He said they're also looking at **asset management software** that shows what they should be doing and  
1440 where. Chris said they have an internal process to develop leaders and set expectations to group  
1441 coming up, and try to lead by example, which hopefully helps maintain what they've established over  
1442 time. He said they **don't have formal succession planning but try to create opportunities for rising**  
1443 **stars**.
- 1444 Chris said they want to develop within but can only take it so far and can't promise anyone anything.  
1445 Tom said when they recruit for an entry level position they look at all qualifications and the underlying  
1446 question they like to ask is if they have potential leadership abilities.
- 1447 He said there are operators who have no desire to lead so when they see that in an employee, they try  
1448 to cultivate it so they can fill vacant positions.

### 1449 Marion County:

- 1450 Don said he mostly concurred with Deschutes. He said one of their barriers is the HR department  
1451 doesn't stand behind them regarding succession planning. Don said when an employee decides to  
1452 retire, they **would like to do more early appointments** where the **new employee could shadow**  
1453 **the retiring employee** for a period of time but that goes against county personnel rules. He said he  
1454 is concerned about losing institutional knowledge and this is a barrier.
- 1455 Don said he had a seasoned employee who had passed on leadership opportunities, so he asked him if  
1456 he wanted coworkers to make decisions for all and he's now more engaged. He said he's found that  
1457 crew leaders need to come from inside because of their knowledge of the county road system, but if  
1458 the candidate pool is weak they will open to external recruitments.
- 1459 He said when he applied to Marion County years ago he was the only candidate because no one from  
1460 Marion County was qualified. He said succession planning is important to him and has to keep  
1461 pushing his peer division managers to underscore the importance of that and to take structural steps  
1462 to make happen.

see **"Over The Shoulder Topic Index"** ongoing WORD file for meetings' topics

1463 **Washington County**

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1464 Dave said when they have a position open, employees can apply and even if they aren't hired or don't  
1465 intend to accept, they're put on a list for future recruitments. He said their **primary method of**  
1466 **minimizing the loss of institutional knowledge** is using these lists and he encourages employees  
1467 to apply for positions so their names are on the list. He said baby boomers won't be there forever  
1468 and there have been many conversations about continuity.

1469 Dave said there is high organizational value in succession planning and this has a positive effect. He  
1470 said they had one position that was vacant for a couple of years at the direction of management  
1471 because of budgetary uncertainty, which didn't provide for continuity. He said it's sometimes difficult  
1472 to talk with the chain of command about positions and their level in the organization, so this should  
1473 be addressed early on when it's not a problem and can be handled.

1474 He said they have **no formal succession plan** but informally supervisors and superintendents keep a  
1475 close eye on who's talking about retirement or leaving, and although they can't do anything in  
1476 respect to recruiting, they can do some shifting around.

1477 **Pierce County:**

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1478 Bryan said he agreed with everything and all their challenges are the same. He said in regards to  
1479 succession planning, their public works director has made everyone aware of how many people will  
1480 be leaving in the next five years and the numbers are astounding.

1481 He said **how you plan for has a difficult set of challenges because of the HR rules**, which doesn't  
1482 allow them to fill a position until it is vacant.

1483 Bryan said one thing they've done is **offer supervisory training and will try to do a pre-supervisory**  
1484 recruitment to let them know what the job entails and its challenges. He said this is helpful and lets  
1485 employees know of positions that are opening but doesn't solve the problem.

1486 Bryan said they may not be interested at time, but need to go through the process and throw their hat in  
1487 the ring. He said they have the no formal succession plan other than recruitment and trying to  
1488 propagate from within.

1489 Don asked about their **supervisor training course**. Bryan said it is done periodically when a  
1490 supervisor retires and the position opens. He said they try to get the information out and create  
1491 excitement, and the employee development plan hopefully has helped identify people ahead of time.  
1492 Bryan said they also need to look at performance problems, work history, and crew reception.

1493 **CRAB:**

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1494 Bob said **CRAB is facing the same challenges** and speaking of baby boomers, he's retiring in 99 days.  
1495 He said Washington state small agencies are financially responsible for each retiree's vacation and  
1496 sick leave buy-out, and a quarter of their 16 person staff is retiring in one year so this is a big hit.  
1497 Bob said they also can't double fill so although they can find qualified people, without the overlap  
1498 staff will face challenges with the loss of institutional knowledge.

1499 **Wrap-Up:**

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1500 Don said he may put out a ten question survey to collect data for the next meeting. He asked everyone  
1501 to send anything they'd like to share from today's conversation and to think how we can keep  
1502 leveraging relationships from this program.

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1504 **\*\* End of Meeting #25 \*\***