

# Oregon Traffic Control Devices Committee

December 16, 2004

## **Meeting Minutes**

Teleconference  
ODOT T-Building in Salem and  
ODOT Regions 1, 3 & 4

Members Present: [Robin Lewis](#), Chair, City of Bend; [Eric Niemeyer](#), Vice-Chair, Jackson County; [Charles Radosta](#), ITE/Kittelson & Associates; [Cynthia Schmitt](#), Marion County; [Randall Wooley](#), City of Beaverton; [Ed Fischer](#), Secretary, ODOT State Traffic Engineer; [Rob Burchfield](#), City of Portland; [Joseph Marek](#), Clackamas County; [Alan Hageman](#), OSP

Member Absent: [Joel McCarroll](#), ODOT Region 4

Others Present: Doug Bish, Kevin Haas, June Ross, ODOT Traffic Engineering & Operations Section

### **Introduction**

Chairperson Robin Lewis called the meeting to order at 10:00 a.m. All present members were visibly accounted for in their various locations. The only agenda item for the meeting was the U-turn Study.

### **OLD BUSINESS**

#### **Draft U-turn Feasibility Study**

Ed thanked everyone for being there and for the feedback on the earlier versions of the U-turn Study report. Copies of the response received and June's answers to the comments have been distributed. June sent them around noon the day before.

The committee agreed to go through the comments and then pick up any other issues that come up as a product of the comments.

1. **Comment:** *Only two alternatives should be given. (Randy) (Joe)*

**Response:** *The report has been revised. Alternative 4, which was to change the statute, is now Alternative 2 and the old Alternatives 2 and 3 have been deleted.*

The committee had nothing additional to add.

2. **Comment:** *Provide a better explanation why only a few intersections could be signed "U-turn Permitted" under existing law but we would be comfortable allowing U-turns at most intersections under a new law. "In my mind, under existing law, putting up a "U-turn Permitted" sign encourages the U-turn and potentially creates some liability for the road jurisdiction. Therefore, I would be reluctant to post the sign at most signalized intersections. However, if a new law places the burden on the driver to decide if the U-turn can be made safely, then the driver can evaluate whether the turn can be made in the driver's vehicle under*

existing conditions. The road jurisdiction does not have to make the decision. In that case, I would prohibit U-turns at only a few intersections with known conflicts (such as right turn overlap).

**Response:** Point well made. This comment is paraphrased on pages 7-8 (highlighted) and in the Executive Summary and Conclusion. Please verify that the intent is not changed.

Randy said the lay reader might not perceive why we didn't want to post signs under the current law but were comfortable with not prohibiting U-turns under the proposed law. He thinks June covered it adequately

3. **Comments:** It would be helpful to try to estimate how traffic efficiency may be increased or how out of direction travel may be reduced as well as how safety might be impacted. I'm not sure where we could get such information. (Joe)

It appears that Alternative #4 (Renumbered to #2) is less desirable from a safety standpoint though I do not have statistics to support this. The safest U-turn at a signalized intersection is when it can be done with a green left turn arrow from a single designated left-turn lane and so I get a little nervous thinking about the potential of expanding this. (Alan)

**Response:** Agreed, but the research does not seem to have been done. I am hoping to get some crash data from other states, but we have to be careful that the data is really comparable. We have tried to make general statements because greater detail would require extensive research.

June couldn't find more specific safety data. It's not a big issue with most states that permit U-turns, unlike Oregon. She did just get some information from Idaho that said they haven't had any problem with U-turns. However Boise and Nampa don't permit U-turns at signalized intersections. The data shows that in three years, Boise had 9 crashes at signalized intersections and 21 at non-signalized intersections while Nampa had 9 at non-signalized intersections. Statewide they had 13 at signalized and 146 at non-signalized in three years. Oregon had a total of 138 at all intersections (no breakdown available) in 3 years. The committee agreed that Idaho's data wasn't of much help due to the laws some large cities have prohibiting U-turns. Joe said that trying to explain this to legislators might be difficult so the Idaho data shouldn't be included. Rob said that if people can see a place they want to be able to drive there. Allowing U-turns where you install medians gives them that ability. He thinks U-turns give people the intuitive way to make the movements that they desire to make.

Cindy thinks that allowing U-turns will actually degrade capacity. It slows down peoples maneuvers and she is reluctant to make changes without adequate data to support it. She agrees that the legislature needs fairly black and white terms that won't be confusing.

Eric said U-turns actually increase efficiency because if U-turns aren't permitted, there's out of direction travel and repeated presence at an intersection for many vehicles. He suggested available crash data doesn't make it clear that the U-turn was the problem as opposed to other possible factors.

Ed agreed in general with Cindy that we have to be careful about making conclusions based on insufficient data. He doesn't disagree with Eric's scenario. Intuitively, U-turns should increase efficiency because of out-of direction travel but there isn't data to support that either. He doesn't want to make any conclusions on either safety or efficiency without some study or data that supports it. Any statements will need to clarify that it's opinion which needs extensive research to verify.

Robin asked if under Alternative 1 we are bound to existing standards that require a certain amount of roadway width. June said probably not because they were written under a 1970's OAR that probably needs to be looked at again later under the sign policy. She's said that in her report. Current rules and guidelines

will need to be updated if U-turns are permitted. Robin said that it was physically impossible to make a proper U-turn from a three-lane roadway. Ed said that didn't include all vehicles. Therefore a new law should place responsibility on the driver as to whether the U-turn can safely be made (Alternative 2). Robin clarified that under Alternative 1, we would need to put a sign that says "U-turn Permitted". Ed agreed but said that under current law, it would be illegal for any vehicle to make the U-turn without the sign, whether it was possible for some vehicles to safely make it or not. Ed said he can't see us going anything lower than AASHTO's guidance either. Oregon requires a minimum of 52 feet from outside to outside. AASHTO requires 48 feet.

Randy said that to him the primary safety benefits relate to access management. If we're going to aggressively pursue access management strategy, we need to allow for U-turns.

Cindy said she is curious about the dimensions and when we should or shouldn't allow U-turns. Her impression is that ODOT's policy and guidelines (52 feet for vehicles and 62 feet for trucks) wouldn't apply anywhere on Lancaster Drive in Salem. She doesn't think Clackamas County or Portland have that much room either. She wondered how many intersections are involved where U-turns could be allowed and signing wouldn't be necessary.

Eric said his argument is that we're not allowing U-turns under Alternative 2, just not prohibiting them. Cindy said that if the law is changed she's concerned that she'd have to go out and put up signs where it wasn't up to ODOT's standards. Ed said if the law is changed, it should be left up to the driver. Cindy said she agreed with that as a goal, but traffic engineers would have the obligation to notify the public of those locations that don't measure up. Ed said ODOT's numbers would go away if the law was changed, since they're not entirely scientific. It would be better to go with AASHTO if any numbers are to be used at all. He said the whole point of trying to change the law is to make it different, not just opposite of the current law. The law should be changed to make it the responsibility of the motorist to know his vehicle's capacity and to make the decision whether he can turn safely or not. Road authorities should be taken out of the business of measuring all the intersections.

Joe Marek said that most drivers don't know about current law and make the turn if they think they safely can. His county has had to sign some signalized intersections to prohibit U-turns where an overlapping turn or dual left turns exist, or for other practical reasons. The new law should be more intuitive in regard to how motorists are currently driving. We should work on informing the Legislature so we get a good new law. June has heard from 27 states and of those, only Wisconsin and Oregon have similar prohibitions on U-turns.

**4. Comments:** *Represent implementation costs as a range. (Rob) The cost issue still needs some discussion as well. (Joe)*

**Response:** *The use of assumptions was designed to indicate that the figures could be higher, but we could emphasize this by considering the current estimate of needing to sign 5% of the intersections as the low end of the range and then agreeing on a percentage that can be used as a high end.*

- ✓ *There are 114 signals in the state that are interconnected with Railroad signals. If the 3400 figure for total traffic signals is close, this represents 3.4% of total.*
- ✓ *If we add signals with overlaps, this may be an additional 3%.*
- ✓ *If we add signals where there is a free right turn movement, this may be an additional 3%.*

*10% might be a good upper range. This would give an upper end of \$1,650,000. (Double all costs except administrative costs.)*

Joe said he raised the cost issue because he thinks signing is going to be needed anyway because people are already violating the rule and making the turns where it's not safe to do so. They put signs up in

response to complaints from the sheriff's office or citizens who use an intersection. They don't have reported crashes to date. U-turns seem to be increasing at unsigned locations since the "No U-turn" signs seem to make folks think it's okay to make a U-turn where not posted. He is planning to post more "No U-turn" signs whether or not the law changes.

Cindy said Marion County currently has just a few signs and uses them as a supplement to the law. She thinks the same problem can happen with any law or practice. She doesn't have a good answer other than making a greater effort to educate the public on what all the laws are. She also thinks enforcement is crucial as she's seen vehicles make the turns even when there are signs. She's signing due to public complaints and because she's seen many drivers make bad judgments on U-turns. Eric doesn't expect to see a huge increase in U-turns if the law changes.

Rob suggested that the study shouldn't give a definite cost because there is some uncertainty as to the actual total cost to implement. He thought the range June has included was a reasonable approach.

Joe said that he doesn't expect a large increase in U-turns if the law just confirms what drivers are already pretty commonly doing.

*5. **Comment:** We need time to implement the law. (Rob) The effective date of any new law needs to allow time for each jurisdiction to evaluate its signals and install any needed signing. Maybe January 1, 2007. (Randy)*

***Response:** This is something that can be discussed at the meeting and with the Region Traffic Managers. Right now the report says that we could implement the law by the end of 2006 which suggests an effective date of January 1, 2007. Is this enough time? Are there problems with extending implementation over too long a period?*

The legislative process is usually complete around the middle of July or first part of August. Jurisdictions can start working towards implementation about then. Rob isn't sure how long it will take to review all the intersections. He thinks he'd have 900-1000 intersections to review so he'd like a year from adoption. The currently suggested implementation date is a year and a half. The committee thought that would be adequate time.

*6. **Comment:** More explicit language may be needed in the ORS to clarify that the U-turn must be made in one movement without going over the curb. (Rob) Language could be added that says "The driver of any vehicle shall not turn such vehicle so as to proceed in the opposite direction unless such movement can be made within the roadway safely and without interfering with other traffic", where traffic means motorized vehicles, cyclists, and pedestrians. (Joe)*

***Response:** Exhibit 4, which gives proposed wording for a new statute, has been removed. If the legislature decides to proceed with changing the statute we can provide this guidance. The OTCDC can provide recommended wording.*

Robin asked why the guidance was removed. Ed said it was on the advice of Doug Tindall. Randy said it was probably a good idea to remove any specific draft of the bill. Past experience says that's politic. He thinks it's appropriate to say that the OTCDC has reviewed the draft and had some things that should be reviewed if the bill is actually drafted. One of those would be the effective date, the second would be that the ORS related to signals needs to be modified, and the fact that drivers should use judgment to be sure they remain on the paved roadway. It would be wise to mention things that should be included in any bill but not to actually draft it at this point.

Rob thought the "canned" language in the Uniform Vehicle Code was a little too vague and should be clarified as to how people perform the U-turn maneuver in order to aid in appropriate enforcement.

Eric asked Alan if the current law that allows U-turns at unsignalized intersections and in rural areas outside city limits only requires adequate sight distance has worked okay from an enforcement viewpoint. Alan said there's no problem with it, and that it's a judgment thing. Some things are safe at 3 in the morning when there's no traffic but not at 3 in the afternoon. Language that specifies which lane the move must start from and end in may be important. The problem with using words like "safety" and "safely" is it is subject to interpretation and different judges will see it differently.

Eric asked if language for signalized intersections shouldn't be mirrored for unsignalized intersections. Cindy said it's hard to say what the legislature might see in terms of differences but that she thought rural and urban areas are different in levels of use by pedestrians and cyclists. The same criteria may not be equally applicable between the two environments. Eric said that within city limits at non-signalized intersections where you might have curbs and gutters is the only place within cities that you can make the turns. There's no language in current statute that says the turns are only allowed where the driver doesn't need to drive over the curb.

Ed said he didn't like including language about driving over the curb but he does think there needs to be wording that you must do this without interfering with the right of way of anyone else in the intersection. The point needs to be made that the U-turn must be completed promptly and safely without interfering with other traffic but it should be kept as simple as possible. Rob suggested simple was good but it should also be explicit. He liked Joe's proposed language, "made within roadway", perhaps something like "in a forward motion", and maybe like how passing on the right is described. That could help the driver understand their responsibility and help reasonable enforcement.

Eric said that he understood that a lot more goes on at a signalized intersection than at an unsignalized intersection but he doesn't think that it is going to be all that more difficult at signalized intersections. Rob said he wants it to be made clear that it is a violation if vehicles, especially trucks, go over the curb and cause damage to curbs, pedestrian heads and signs.

Ed agreed with Joe's wording and might modify it to read: "The driver of any vehicle shall not turn such vehicle so as to proceed in the opposite direction unless such movement can be made within the roadway safely without stopping or interfering with other traffic." He said that they would play around with that language suggestion. He also liked Randy's suggestion of preparing a list of items for consideration when the legislation is drafted as opposed to actually suggesting specific wording now.

Rob said he liked the language and suggested, "stopping, reversing, or interfering" be added. Doug said the term "roadway" has a specific meaning, which is the travel lanes, excluding shoulders, etc. so it might not be the best wording. It might include bike lanes but not paved shoulder unless otherwise worded. Eric asked Alan if he'd ever issued a ticket under the current statute where somebody made what he thought was a legal U-turn but violated some other statute in the process. Alan said he couldn't think of anything except violating right-of-way, failure to yield, and if you get hit it's unlawful because you didn't have enough room to make it safely. Doug said there is a statute that you can't drive on a sidewalk. Eric suggested the statute that says that in making left turns a driver cannot do so without yielding to oncoming traffic. He suggested that U-turns could be added to that language. June said it would seem that we would have to look into whether changing the U-turn statute would require changing other statutes as well. Also Randy's suggestion that we specifically include that the OTCDC reviewed the report and would like to be provided opportunity to give input on the language of the law. June will change the report to reflect this.

*7. **Comment:** Will permissive U-turns be allowed? (Eric) Some language should be added to the law to make it clear that the U-turn at a signalized intersection can only be made when the driver faces a green ball or a left-turn arrow. (Randy)*

**Response:** *The OTCDC can discuss the need for inserting language into the statute to clarify the situations when a U-turn can be made. If U-turns are to be permitted at signals with permissive left turns we will need to include the option of making a U-turn when there is a flashing yellow arrow displayed.*

Randy said at this point we just need to point out that the ORS regarding signals would need to be revised to account for U-turns. Ed suggested as well that we could look at wording that says "anywhere a left turn is permitted, a U-turn can be made with the exception of one-way streets", More specific discussion can be held later if the legislature decides to act. Everyone agreed that it would be okay to make a U-turn at signal with a permissive left turn phase.

8. **Comment:** *Why does the current OAR require 3 signal phases for U turns? Will the OAR be amended with the U-turn law? (Eric)*

**Response:** *The OAR was written in 1976 and has not been changed. It is difficult to say why three phases were required, but this is reinforced with the **Traffic Signal Guidelines** that require the left turn to be protected if a U-turn is permitted.*

*If the law is changed, the current OAR would not be relevant. I think it is too soon to say whether a new OAR will be developed or if guidelines or criteria developed through a less formal process would be sufficient.*

Eric said if the law is changed and does not prohibit U-turns, OAR 734-20-0025 would need to be removed or updated.

Randy, (off-topic), pointed out that OAR 734-20-0020 on parking might need some updating as well.

Cynthia, regarding the Executive Summary had a couple suggested wording changes.

First, she's not sure the second and third sentences in the first paragraph applies universally to all jurisdictions. It says:

*"Under existing law, putting up a "U-turn Permitted" sign encourages the U-turn and potentially creates some liability for the road jurisdiction. Therefore, the road jurisdiction is reluctant to post the sign at most signalized intersections."*

In the fourth paragraph, regarding the benefit and cost, the last sentence says:

*"In that case, U-turns would need to be prohibited at only a few intersections with known conflicts."*

Cindy said she would insert at the end of the sentence before the period, "...and at those locations where capacity and safety issues arose", because there will need to be ongoing evaluations at locations where conditions change.

In the next paragraph where it talks about cost:

*"A review of all signalized intersections will be required to determine if there are safety or operational factors that point to the need to prohibit U-turns. U-turns may need to be prohibited at intersections where there is a nearby railroad crossing or where there would be a conflict between the U-turn movement and an adjacent right-turn movement. The cost of implementing a new U-turn law is estimated to be approximately \$924,000."*

Cindy thought it would be good to note that there will be some locations where the roadway is too narrow to accommodate U-turns. She thinks it's good to point out that there will be additional locations where

U-turns aren't permitted at the discretion of the local jurisdiction's traffic engineering professionals. June suggested, instead, using a term such as "engineering judgment", rather than getting more specific.

Ed agreed, saying that he wanted to end the practice of measuring the roadway and put the responsibility on the driver. Cindy could live with that as long as it is open ended enough to permit that discretion at the local level. Note out of sequence: Robin said that she didn't want the Executive Summary, through this paragraph, to direct the local jurisdiction to survey all intersections. Others believed some level of review would be needed. The committee agreed to change the wording to "Some level of review will be required".

Ed noted that part of the advice to the Legislature should be that local jurisdictions should be prohibited from making local laws that prohibit U-turns throughout the jurisdiction such as is done in some cities in other states. Eric agreed, citing a case where Jacksonville actually prohibits U-turns at both signalized and unsignalized intersections. This was news to members. Ed said he'd check with the AG's office on whether local agencies have this kind of local authority.

The committee discussed what the next steps in this process would be:

- ✓ Action Item – June will get a new draft out to all committee members with changes as agreed to. She will also prepare a list of any items recommended to be addressed in any legislation if the law is changed and send this out for committee to review.
- ✓ Action Item – Identify the OARs and the ORSs that may need revision if the law is changed
- ✓ Action Item – Ed will call Dale Hormann at the AG's office and ask if a jurisdiction has the authority to make traffic laws such as Jacksonville reportedly has.
- ✓ If members come up with further comments, they should get them to June within two weeks.

June asked if the OTCDC wants to indicate preference for Alternative 2, changing the law.

Decision: Eric Niemeyer moved to advise the Legislature that the OTCDC supports the second alternative which would change current law. Randy seconded and the committee voted unanimously in favor.

### **Next Meeting Date**

The committee meets on January 21, 2005 at the Marion County Shops.

### **Meeting Adjournment**

The meeting adjourned at 11:30 a.m.