

Sub Group 4 Meeting, Medians Access Management Committee Transportation Building 355 Capitol Street NE, Room 119 Salem, OR 97301 9:00 – 10:30 AM, July 7, 2010 FINAL

Working Facilitator: Del Huntington.

**Participants:** Representative Doherty, Craig Campbell, Harold Lasley, Bob Bryant, Chris Doty, Jim Cox, Doug Bish, Rick Nys, Lainie Smith, Jim Hanks, and Victor Dodier.

## Meeting Purpose

Develop expectations and desired outcomes for reaching consensus on when and where "medians" are installed on state highways as a mitigation measure for a proposed development and in corridor applications. PLEASE NOTE: for the purpose of this discussion, "medians" provide an area between opposing lanes of travel on the roadway and include a diverse set of possibilities including but not limited to; a painted stripe or series of painted stripes, a narrow section of pavement, a Continuous Two Way Left Turn Lane (CTWLTL), a physical barrier, a landscaped strip and a non-traversable (NT) median that prevents motorists from crossing from one side of the roadway to the other. The vast majority of the sub-group discussion focused on NT medians and this type of median treatment is implied in the meeting minutes unless stated otherwise.

## Discussion

Craig Campbell – Craig would like a clear set of standards and thresholds on when and where medians are constructed. The standards should also define when and where median treatments other than NT medians are appropriate. Motorists should have predictability with the travel movements to and from destinations, though this can be confusing when NT medians are installed.

Representative Doherty – Representative Doherty agreed with Craig's comments related to the need for a better understanding of when and where NT medians may be installed, and if the proposed median is the correct solution. There has to be a balance with safety while assuring access to businesses along the corridor. The Representative is very concerned with a section of Highway 99 through Tigard, from I-5 to McDonald Street where a plan has been adopted that will convert the existing CTWLTL to a NT median.

A question was raised in this discussion though unanswered at the present time; can an adopted plan be revised if the existing ODOT median policy is revised through the Access Management Committee process?

Rick Nys – The installation of NT medians appear to be an afterthought as a means to correct existing or perceived problems. Clackamas County has been concerned with the ODOT policy on medians as some county roads may become right-in, right-out only, especially when the median is part of a required mitigation measure as a result of a nearby development.

Doug Bish - NT medians can create severe impacts for development along the corridor, but can improve safety for through motorists as they limit the number of turning and crossing conflicts on the roadway. NT medians can also improve safety for pedestrians as it provides a refuge area crossing the roadway. CTWLTLs provide accessibility for motorists though this median type increases the number of turning conflicts. NT medians require a better planning effort in advance of development. In addition, ODOT should have clearer standards on when and where NT medians may be constructed.

Bob Russell – Bob wants to ensure that a vertical and horizontal dimension to allow for truck traffic is protected and preserved through the corridor. Bob provided an example of a NT median that was constructed on Highway 38 in Elkton, which was eventually removed as it created problems for motorists. Another NT median was constructed on the highway between Stanfield and Hermiston that makes it very difficult for trucks to turn into a major distribution site on the corridor.

Not all NT medians are constructed equal as "mountable" curbs are preferable to a vertical face curb along the median. Landscaping within the median can be a problem if this area is needed for the truck to turn to and from development adjacent to the roadway.

Harold Lasley – Harold understands the need for NT medians, especially along left-turn lanes at intersections. The NT median limits the number of conflicts and turning movements. While some believe that a "Right-turn only" sign on the driveway is sufficient to provide instruction to motorists, and therefore reduce the need for a NT median, Harold believes that the NT median is necessary when safety is an overriding concern as many motorists violate the law and turn left from a driveway regardless of the sign.. (Additional discussion followed that some motorists violate traffic signals, speed limits, etc). NT medians may also be necessary based on crash experience. Harold would like the sub-group to focus on medians within corridors rather than NT medians as a mitigation measure with a proposed development.

Jim Hanks – While NT medians along the corridor may be the # 1 priority, Jim is concerned that the requirement for a NT median as part of a developer's mitigation measures is also important. Jim has been involved in safety for his entire professional career as a traffic engineer, yet safety must be balanced with other needs.

Where NT medians are installed through a corridor, there must be a realization that motorists need to be able to access properties on the other side of the roadway, so frequent turn-around locations are critical for motorists. There should be a hierarchy for median types and an accommodation for additional medians that have been used in other states, such as a double, double yellow painted line. NT medians can become a hazard on highway with speeds over 45 mph. Jim suggested that other median treatments are less expensive to install and less costly to modify if required.

NT medians are often identified as a mitigation measure for development as the mobility standard threshold is exceeded for motorists turning left from the property on the state highway. Based on analysis that Jim has conducted, a vehicle turning left onto a multilane highway will exceed the ODOT volume to capacity (v/c) threshold where the ADT exceeds 6,000 ADT. However, field observations have revealed that this did not accurately represent the condition as the motorist had sufficient gaps in the travel stream to enter the roadway. Jim believes that this is very important as analysis alone may result in an ODOT decision that a NT median is a required mitigation measure to eliminate left-turns, when left-turns may be an acceptable operation.

Jim Cox – There needs to be a better understanding of what is intended with various median applications. Is the goal is eliminate all left-turns? Jim mentioned the apparent dichotomy as he hears comments that ODOT adheres too rigidly to standards, and then he hears other comments that the agency is inconsistent in the application of standards. Jim cautioned that we should not develop standards that are so rigid that they would force ODOT into poor decisions.

Chris Doty – While NT medians can improve safety for motorists, they can become a major concern when the installation is through an area that is already developed with strip commercial land uses. While the highway may be congested during certain times of the day, the highway functions 24/7/365 and the congestion isn't an issue for the majority of the time periods. NT medians are considered as a means to deal with past sins. Strip commercial development areas may not have any shared access, frontage roads, backage roads, or public road connections, and therefore rely on the state highway for access. Chris also stressed that no two strip commercial corridors are alike and therefore ODOT must be very careful when attempting to construct a NT median through a strip commercial corridor as a means to eliminate left-turns to and from the adjacent property.

Chris also agreed with Jim Hanks regarding the way in which left-turns are analyzed by ODOT. He questions if it is appropriate to apply the ODOT mobility standard to private driveways.

Bob Bryant – Bob agreed with comments that Chris provided. Bob also believes that there are few mitigation measures that result in as many safety benefits as the installation of a NT median. There is a need to consider the corridor function of the roadway, local jurisdictions, and the property owners. Bob is concerned that developing "median" standards may result in the state becoming too restrictive. Considering median treatments on developed corridors is very complex and requires ODOT to consider the function and

purpose of the roadway. Bob would like the local jurisdictions to become responsible for more of the decisions.

Lainie Smith – Lainie is concerned with the efficiency of the roadway to support the statewide economy, balanced with access to businesses adjacent to the roadway. Developing median corridor solutions though strip commercial areas is very difficult. Lainie is also concerned that developing median standards does not limit the ODOT Region 1's ability to develop creative solutions, which is critical in complex urban areas like the Portland MPO area.

In regards to mobility standards, there may be a need to develop a corridor mobility expectation rather than a mobility standard at a specific location along the roadway. Lainie also commented that NT medians can provide a refuge for pedestrians when crossing the highway. A new publication "Highway Safety Manual" has recently been published by the Transportation Research Board and should be considered as the subgroup efforts continue, to see the manual includes recommendations and expected outcomes with various median treatments. Also, she noted that the OHP has robust policies regarding medians on new highways and upgrading of highways. She would not want to see these weakened where strip commercial does not already exist.

Del Huntington – As a motorcycle rider, Del is concerned that some NT medians are poorly designed, with vertical curb faces that would not allow a motorcyclist to recover if they are hit. Where NT medians are constructed, they need to be large enough to provide consistency, predictability and visibility. Therefore lighting and landscaping are important though landscaping needs to be balanced with maintaining adequate sight distance along and through the corridor. Common weather conditions in Oregon such as rain, fog and snow can make poorly designed NT nearly invisible, resulting in a significant safety hazard.

Representative Doherty had to leave the meeting for another previous commitment and expressed her satisfaction in the direction that the sub-group is headed. She is pleased to hear that the participants are including all travel modes and agrees that strip commercial corridors require special consideration and creative solutions when median treatments are considered.

## **Additional Discussion**

Can a cost/benefit analysis be used as a measure in considering various median treatments?

As there is a lot of pressure within ODOT to deal with strip commercial corridors, is it possible to develop policies so that the state doesn't encourage new and more strip commercial corridors?

There was a considerable discussion if Urban Business Areas (UBA) and Special Transportation Areas (STA) as allowed under the 1999 Oregon Highway Plan have been

used across the state. If so, have they solved some of the concerns identified in the subgroup discussion? Could a UBA be applied to a strip commercial corridor? It was suggested that this may be a solution if a corridor mobility standard is developed and approved.

If median standards are developed, it should include a review a crashes, crashes types and crash locations throughout the corridor. Analysis of this data should direct staff to the various potential solutions.

Some of the participants are mostly concerned and troubled when NT medians are installed in rural areas. Other comments were expressed that ODOT often is told that small communities along rural highway do not want traffic "flying" through town and a NT median can provide a calming benefit to the through traffic. Bob Russell, in representing trucking interests, stated that many small cities want to add landscaped NT medians as a means to beatify the city and support economic development. Bob has been successful in reaching consensus on design solutions with all of the communities when he has been able to explain the needs of the trucking industry.

When considering a NT median, a process is needed where all property owners are talked with individually to understand how motorists access and traverse across the property, including truck deliveries, garbage collection, etc. Property owners should agree on the objectives and remain "whole" when the median project is completed.

It was learned that a legislative concept is being considered for the 2011 legislature that if passed, would make it lawful to make U-turns at signalized intersections in Oregon, unless signed otherwise. If this becomes law, the practice would be similar to allowable vehicle operations in the states of Washington and California.

## **Action Items**

Jim Hanks will provide an update of the sub-group issues at the next AM Committee meeting on July  $12^{\text{th}}$ .

Del will send participants a list of potential dates to consider for the second sub-group meeting.

Meeting adjourned at 10:30 AM.