Attachment A

Evaluation of Access Management Spacing Standards for Private Approaches

Approaches Not Required to Meet or Obtain Deviations from Spacing Standards

Under OAR 734-051, not all approaches are required to meet access management spacing standards. Before proceeding with an evaluation of an approach, it is important to know whether it is required to meet spacing standards. The following approaches are not required to meet, or obtain deviations from, access management spacing standards of OAR 734-051-4020(8):

- Approaches within the boundaries of a local government where the approach permit authority has been delegated to the local agency (see OAR 734-051-1050).
- Approaches within local jurisdictions that have spacing standards exceeding state standards. In this case, the local standard shall apply (see OAR 734-51-1040(2)).
- Approaches that qualify under "Change of Use" if the applicant and the department agree that that an application meets "moving in the direction of" approval criteria (see OAR 734-051-3020(6)).
- Temporary approaches (see OAR 734-051-4040).
- Special use approaches (see OAR 734-051-4050).
- Approaches within the boundaries of an adopted planning document that establishes spacing standards that differ from the standards of OAR 734-051 (see OAR 734-051-4020(8)(b)(C)).
- Approaches to property with no means of vehicular access other than the proposed approach if the applicant and the department agree on an approach location and mitigation measures (see OAR 734-051-4020(5)).

If the approach qualifies for Change of Use, then a collaborative process is used to determine if agreement can be reached based on the "Moving in the Direction" criteria. See OAR 734-051-3020(8)-(9). .

Temporary and Special Use approaches are approved based on a determination that they can be operated safety.

(*Note: The reviewer may use the standards described in this Technical Bulletin in an advisory capacity when examining change of use, temporary and special use approaches.)*

Spacing standards in special transportation areas management plans, access management plans, corridor plans, interchange area management plans and interchange management plans adopted by the Oregon Transportation Commission take precedence over standards in OAR 734-051. These plans, as adopted, are the established spacing standards for highway segments within the scope of the

document's limits. A review of these plans is important to determine if they establish spacing standards different from those in OAR 734-051-4020.

If none of the above conditions are applicable, the review of the spacing standards should follow the guidance given below.

How to Obtain Data for Selection of Spacing Standard

To select the appropriate spacing standard, the reviewer must obtain the following information for the segment of highway where the approach is located:

- The average annual daily traffic (AADT) on the highway
- The posted speed
- The Oregon Highway Plan classification
- Whether the area is classified as urban or rural

This information will allow the reviewer to select the appropriate standard from the Approach Spacing Tables. Attachment B to this Technical Bulletin is a worksheet to facilitate the determination of the spacing requirements.

Highway Traffic Volumes

The Traffic Volumes and Vehicle Classification website may be used to determine the AADT for a specific highway location. This website, located at http://highway.odot.state.or.us/cf/highwayreports/traffic_parms.cfm, uses ODOT highway numbers rather than the route numbers familiar to the general public.

To determine the ODOT highway number for a specific route, use the map at this link: http://wpdotappl21/TransGIS/. Zoom in and pan, as required, to view the area of the new approach and to display the highway name and ODOT highway number with the proposed approach. To find the mile point of the approach, click the Switch Basemap button and select the appropriate aerial photo to help locate the proposed approach. To display mile points, on the Display tab, select Layer Catalog. Under Highway Network, select mile points to the hundredth value.

With the Oregon Highway number and the mile point location for the approach, go to the Traffic Volumes and Vehicle Classification website. Select the Highway number from the drop-down menu. Enter the beginning and ending mile points that bracket the approach. Click Search. If the search criteria are too tight, no values will be returned. In that case, consider using the mile points about five miles on each side of the site and expand the search as needed. Once data is returned, choose the AADT at the adjacent mile point that is closest, but lower than the mile point for the approach.

Posted Speed

A site visit can determine the posted speed at the approach or the reviewer can check the following website: http://highway.intranet.odot.state.or.us/cf/highwayReports/speed_parms.cfm.

This website uses the ODOT Highway number discussed in the section on Highway Traffic Volumes. The reviewer may also want to document any advisory speeds in the influence area of the approach. A spot speed study could also be conducted if the approach is in a transitional area where speeds are changing, such as at the end of a tight curve where drivers are accelerating.

Highway Classification

The Oregon Highway Plan establishes the state classification of highways. Classifications are available at http://www.oregon.gov/ODOT/TD/TP/docs/ohp/maps.pdf and listed by mile point in Appendix D at http://cms.oregon.gov/ODOT/TD/TP/docs/ohp/d.pdf. Both of these documents also show if a highway is designated as an expressway.

Urban/Rural Classification

A number of factors determine whether an approach is located in an urban or rural area. An area is defined in OAR 734-051 as urban if it is inside:

- An urban growth boundary (UGB); or
- A special transportation area in an unincorporated community; (see http://www.oregon.gov/ODOT/TD/TP/Pages/HwySegment.aspx for maps showing special transportation areas); or
- An urban unincorporated community.

If an area does not meet any of the urban criteria, then it is considered rural for purposes of selecting the appropriate spacing standards. An exception is allowed by OAR 734-051-4010(3). This rule allows urban spacing standards to be used for infill or redevelopment projects in a rural area if all of the following conditions apply:

- The project is on land zoned commercial or industrial,
- The rural area has been developed into a block pattern including a local street network, and
- The posted highway speed is at or below 45 mph.

If the area where the approach is located is determined to be rural, then it must be determined whether the area is an unincorporated community (UIC). A UIC in a rural area has a set of unique spacing standards. The most complete list of unincorporated communities is currently available at this website: www.oregon.gov/LCD/docs/adminrules/div022a.pdf . The Land Use Compatibility Statement portion of the approach application also requests the local government to identify if the approach is in an unincorporated community.

Selection of Approach Spacing Standard from Spacing Tables

The applicable approach spacing standard that is selected from the Approach Spacing Tables using the highway AADT, posted speed, highway classification (including an expressway designation), and urban or rural determination (including an unincorporated community) determined above.

OAR 734-51-4020(8) contains access management spacing tables 3-6. Table 3 is for highways with AADTs under 5,000 vehicles and Tables 4-6 are for statewide, regional, and district/unclassified highways with AADTs of 5,000 or more.

The spacing standards shown in Tables 4-6 may be reduced by half on highways with 5000 or more AADT if the highway is divided or has a non-traversable median so that the approach is restricted to right in/right out or left in/left out only.

Tables 4-6 apply to all highways designated as expressways regardless of AADT.

Measuring Approach Spacing

The spacing distance is measured along the alignment of the highway from the center of the existing or proposed approach to center of the closest public or private connection on the same side of the highway. Spacing must be checked in both directions along the highway from the center of the approach being evaluated. When measuring the spacing, the permitted or unpermitted status of the adjacent driveway is not a factor.

Deviations from Access Management Spacing Standards

In order to approve an approach that is required to, but does not meet spacing standards, a deviations from these spacing standards must be approved by the Region Access Management Engineer (RAME).

Each site is unique and needs to be evaluated based on local conditions. As such, a deviation at one location may not be appropriate for another. All factors that would lead to approving a deviation should be documented in the findings. OAR 734-051-3050(5) identifies the factors the RAME may consider when evaluating a deviation.

A request for a deviation from a spacing standards is ***not*** required if the approach is not subject to spacing standard requirements. See section above titled “Approaches Not Required to Meet or Obtain Deviations from Spacing Standards.”

When evaluating a deviation, the reviewer should consider the two main purposes for the spacing requirement:

- Maintaining safety by giving drivers adequate space to react to vehicles entering and existing the highway at an approach.
- Reducing the workload of driving by limiting the overall potential conflicts a driver must perceive and react to.

Approval of a deviation for an approach must adequately address the safety and highway operations concerns set forth in section OAR 734-051-4020(3). These include:

- Queuing on the highway that impedes turning movements;
- Overlapping left turn movements or competing use of a center turn lane;
- A crash rate 20 percent or higher than the statewide average;
- In the top 5 percent of locations identified by the Safety Priority Index System (SPIS);
- Inadequate corner clearance; and
- Insufficient distance for weave.

Technical bulletins are available that address each of these safety and operational concerns.

In addition to the safety and operations concerns, approval of deviation must also meet one of the criteria listed in OAR 734-051-3050(5).

Approval of deviations for approaches in an interchange area are subject to the criteria of OAR 734-051-3050(6)

Examples where a deviation may be approved include:

- Variable speed conditions. For example, posted speed, speed curve riders, or running speed may create a condition where spacing can be safety reduced. The speed considerations should be documented as a part of this decision.
- Operational needs of the business are inconsistent with the property lines. Often when local jurisdictions established property boundaries in the past, they never considered the concept of approach spacing. As such, there are many properties that may be undersized for the zoning and intended use. For these conditions, it may be appropriate to approve a spacing deviation as long as safety isn't jeopardized.
- Operational character of the highway. For example, where traffic volumes are significantly below capacity and the location of other approaches is such that turning conflicts do not overlap and create left turn movement conflicts.
- Low crash history. If the crash history is not close to the 120 percent average crash rate and the approach is not located near a top 5 percent SPIS site, approval of a deviation may be justified.
- Mitigation. Mitigation that reduces a safety concern caused by the specific circumstances under review may improve safety to a level that would support approval of a deviation.

Other considerations could also be used to justify a deviation from spacing standards, including the number of trips to and from the approach, relationship of the approach to adjacent connections, operational issues on the highway such as queuing, turning lanes, bike/pedestrian issues, driver workload, conflict points per mile, and weaving.

Once a decision is made, the reasons for the denial or approval of the deviation should be thoroughly documented including the existing conditions, proposed conditions, traffic data, engineering analysis, references to standards, and findings.