Appendix 8
Mobility Standards: Mobility White Paper 04

Application of Oregon Highway Plan Mobility Standards

Introduction

Purpose

The purpose of this white paper is to clarify application of the 1999 Oregon Highway Plan (OHP) highway mobility standards for both ODOT staff and consultants.

Caution

This paper is a clarification of current practice, in order to give further guidance to those involved in the preparation of Traffic Impact Study (TIS) reports and to ODOT staff who are responsible for reviewing them. The following discussions provide general information to be applied to typical TIS reports, but is not intended to be exhaustive. Because every development proposal presents a unique set of problems to address, professional judgement must be used along with the information in this paper. Agreement with ODOT should be obtained during the scoping process, prior to proceeding with any analysis that deviates from these parameters.

ODOT Development Review Guidelines

All TIS's need to follow the ODOT Development Review Guidelines, which address the use of a PHF and other analysis parameters (such as from Table 3.3.7 of the Guidelines that lists peak hour factors, minimum lost time per phase, and ideal saturation flow rates). Many of the defaults and suggestions in the Guidelines also can be applied to planning products and project development work.[1] Changes will be made to the Development Review Guidelines to reflect clarifications made in this paper.

Background

Concern was expressed by both ODOT staff and consultants about the lack of clarity on the proper application of the Oregon Highway Plan (OHP) mobility standards (OHP Policy 1F). In response to this concern, the issues raised were discussed within the ODOT Planning and Traffic Management Sections, and this paper was developed. Region input was provided by the Region Access Management Engineers.

[1] The ODOT Development Review Guidelines are available in hardcopy from the ODOT Planning Section or on the Internet at the following link: http://www.oregon.gov/ODOT/TD/TP/DRG.shtml

Introduction, Continued

Contents This paper covers the following topics:

OHP Table 7

Amendment to OHP Table 7

Table 7 in the OHP was revised by OHP Amendment 00-04 on December 13, 2000. The revised Table 7 is found in the document "Amendment to 1999 Oregon Highway Plan Alternate Highway Mobility Standards Metro Area"[2].

First and Second Hour Standards

The December 2000 OHP amendment eliminated the two-hour volume to capacity (v/c) ratios. Separate v/c ratio standards are specified for each of the one-hour periods. The existing first bullet under OHP Table 7 was a leftover from the original Table 7 and is proposed to be stricken from the OHP with the next revision. Each of the hours needs to be analyzed separately, using an appropriate PHF, with the results compared to the respective v/c ratios provided in Table 7.

[2] Alternate Mobility Standards for RVMPO & Metro, and other Oregon Highway Plan amendments, can be found on the Internet at the following link:
http://www.oregon.gov/ODOT/TD/TP/orhwyplan.shtml#Registry_of_Highway_Plan_Amendments

Peak Hour Factors (PHF)

Congestion

- The transportation system must be designed to accommodate the 15-minute peaking in the peak hour. In areas near capacity, the 15-minute flow can cause up to several hours of congested flow. The congestion that results from the 15-minute flow must be accounted for in the analysis of the transportation system.
- Peak 15 minute deficiencies do not necessarily result in additional lanes and significant cost and right of way impacts. Minor mitigation resulting in lesser impacts may be sufficient, such as transportation demand management (TDM) strategies and acceptable operational improvements. If TDM strategies are contained in an adopted plan, a different PHF (to reflect spreading of the demand) may be used for future analysis if agreed to by ODOT during the scoping process.
- Guidance on the application of PHF's is contained in the ODOT Development Review Guidelines.

Development of OHP Tables 6 and 7

The 1999 OHP v/c ratio Tables 6 and 7 originally intended peak hour factors to be used. The analysis that determined the v/c ratio standards used PHF's as an input. To remain consistent with the OHP, any analysis that uses the OHP v/c ratios need to use a PHF.

OHP Tables 6 and 7 Clarification Language

The second bullet under OHP Table 6 (also for a new first bullet for the revised Table 7) needs to have clarification language added. The clarification should read as follows:

Current Language

- *"For the purposes of this policy, the peak hour shall be the 30th highest annual hour. This approximates weekday peak hour traffic in larger urban areas."*

Proposed Language

- ***"For the purpose of this policy, the maximum volume-to-capacity ratio for peak operating conditions shall be evaluated using the highest 15-minute period of the 30th highest annual hour. Weekday peak hour traffic can be used to approximate the 30th highest hour in larger urban areas."***

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Peak Hour Factors (PHF), Continued

Existing PHF's

- Existing year analyses need to use PHF's derived from the count information
- For areas with pronounced peaking characteristics such as industrial sites and schools, other peak 15 minute periods may need examination as well.

Existing PHF - Method 1

The preferred analysis method uses PHF's to estimate peak 15 minute period equivalent hourly flow rates from the peak 60-minute period volumes. The peak 15 minute period with the highest intersection total entering volume (TEV) should be used to determine the PHF's. PHF's are calculated for each approach as follows.

Step	Action
1.	Determine the peak 15 minute period that has the highest intersection total entering volume (TEV).
2.	Calculate the PHF for each approach based on the time period determined in Step 1, by dividing the approach peak 60 minute volume by four times the approach peak 15 minute volume.
3.	In the analysis, apply the approach PHFs from Step 2 to the approach peak 60 minute volumes (usually calculated by the analysis software).

Existing PHF - Method 2

As an option, the traffic count volumes for all movements that occur during the single peak 15 minute period can be used directly in software that multiplies the peak 15 minute period volumes by a factor of four. If this method is used, both the actual 60-minute period hourly volumes and the equivalent peak 15 minute hourly flow rates should be shown on the Existing Traffic flow diagrams, and clearly labeled to avoid confusion.

Step	Action
1.	Determine the peak 15 minute period that has the highest intersection total entering volume (TEV).
2.	For the time period determined in Step 1, enter the peak 15 minute volumes directly in the software

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Peak Hour Factors (PHF), Continued

Existing PHF - Method 2 (continued)

3.	Select software analysis procedure based on the peak 15 minute period
4.	On the flow diagrams show and clearly label both the actual 60-minute period hourly volumes and the equivalent peak 15 minute hourly flow rates, to avoid confusion.

Future PHFs

The future year analyses use the PHF defaults in Table 3.3.7 (see below) of the ODOT Development Review Guidelines unless better information is available. For areas with aggressive TDM strategies contained in an adopted plan, a different PHF (to reflect spreading of the demand) may be used for future analysis if agreed to by ODOT during the scoping process. For areas with pronounced peaking characteristics such as industrial sites and schools, PHF's lower than those shown in Table 3.3.7 should be used.

Signalized Intersections

Intersection V/C Ratio

For signalized intersections, the OHP v/c ratio is based on the overall intersection v/c ratio, not the movement v/c ratio as explained in Action 1F of the OHP. The intersection v/c ratio is also known as the critical v/c ratio, or X_c in the Highway Capacity Manual (HCM). The intersection v/c ratio is not generally affected by the approach green times (except in cases with shared left turns). See HCM equation 16-8 below.

$$Xc = \sum\left(\frac{v}{s}\right)_{ci}\left(\frac{C}{C-L}\right) \qquad (16\text{-}8)$$

where

Xc = critical v/c ratio for intersection;

$\sum\left(\frac{v}{s}\right)_{ci}$ = summation of flow ratios for all critical lane groups i;

C = cycle length(s); and

L = total lost time per cycle, computed as lost time, tL, for critical path of movement(s).

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Signalized Intersections, Continued

Analysis Procedures Regarding Signal Timing

Capacity analysis of signalized intersections should be performed in accordance with the methods and default parameters listed in chapter three of ODOT's Development Review Guidelines, Traffic Impact Studies. ODOT has established the following criteria for traffic impact studies in regards to the timing chosen for the capacity analysis of signalized intersections. ODOT reserves the right to reject any operational improvements that in its judgment would compromise the safety and efficiency of the facility.

Phase splits

A maximum split of at least 13 seconds should be used. Clear documentation of the selected maximum splits for each phase must be provided in the traffic impact study. The total side street splits should not be greater than the highway splits. Except in cases where the analyst is directed otherwise by ODOT staff, the splits should be optimized so as to yield the lowest overall intersection v/c ratio. This optimization should be done for each capacity analysis.

Non-Coordinated Signals

Cycle lengths and phase splits should be optimized to meet an ideal level of service, queuing, and/or volume to capacity ratio for a non-coordinated traffic signal intersection. Unless directed to do so by ODOT staff, the use of the existing timing is not required. The cycle length for the analysis should not exceed 60 seconds for a two-staged traffic signal, 90 seconds for a three-staged traffic signal (e.g. protected highway left turns and permissive side streets left turns), or 120 seconds for a four- or more staged traffic signal. The signal cycle length should cover the pedestrian clearance time for all crosswalks. For information on pedestrian crossings, see *ODOT Traffic Signal Policy and Guidelines.*[3]

[3] ODOT Traffic Signal Policy and Guidelines are available at: http://www.odot.state.or.us/traffic/publicat.htm

Signalized Intersections, Continued

Analysis Procedures Regarding Signal Timing (continued)

Signals in Coordinated Signal System

At the initial scoping meeting for the traffic impact study, ODOT staff will determine whether the analysts should use the existing signal timings for all analysis scenarios or develop optimized timings for the coordinated system. If the existing timings are to be used in the analysis, Region traffic shall provide timing files, timing sheets, or Synchro files of the existing settings. If optimized timings are to be developed, those settings are subject to approval by ODOT; and those conditions become the baseline for all comparisons. The following settings should be optimized for each analysis scenario when the analyst is asked to use optimum coordination settings.

- Cycle length
- Phase length,
- Phase sequence (lead/lag left turns)
- Intersection offsets

The optimum settings must meet the criteria established in OAR 734-020-0480 as it relates to progression analysis while also attempting to find the lowest v/c ratio for each intersection. This OAR only applies when modifications are proposed to a signal which would affect the settings of the coordination plans. Examples of these modifications are changes in cycle length, decreased green time for mainline, additional phases, longer crosswalks, and intersection relocation.

Saturation Flow Rates[4]

The passenger cars per hour of green per lane specified in the ODOT Development Review Guidelines is the ideal (unadjusted) saturation flow for a through travel lane. This value is adjusted downward by many factors (lane width, parking, bus blockage, area type, etc.) to arrive at the adjusted saturation flow.

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[4] Saturation flow rate data are collected on an ongoing basis. See TPAU website for latest information on saturation flow rates (http://www.odot.state.or.us/tddtpau/SysAnalysis.html).

Signalized Intersections, Continued

Field Measurements of Saturation Flow Rates

- Saturation flow rates for signalized intersections should be based on field measurements in accordance with Appendix H in Chapter 16 of the Highway Capacity Manual.
- The adjusted saturation flow is equivalent to a saturation flow field study calculated volume. In other words, if a field study is performed at the critical intersection(s) the resulting saturation flow volume is not adjusted by any of the factors above. All factors should be set to 1.00. Alternatively, the ideal saturation flow could be back-calculated from the field saturation flow and other known saturation flow factors.

Where Field Measurements are not Conducted

Where field measurements are not conducted,

- Outside of Metropolitan Planning Organization (MPO) urban areas, 1800 passenger cars per hour of green per lane (pcphgl) shall be used
- Inside MPO urban growth boundaries, 1900 pcphgl may be used, unless one or more of the following conditions are present, in which case 1800 pcphgl shall be used
    - On-street Parking
    - Greater than 5% trucks
    - Roadways intersect at severe skew angle (i.e. greater than 20 degrees off perpendicular.
    - Accesses are present upstream or downstream (within the functional area of the intersection??)
    - Poor signal spacing or observed queue spillbacks between signals during the peak hour, or
    - Less than 12 foot travel lanes

Software

Any methodology or software that is applied in accordance with the operational method of the most recent edition of the Highway Capacity Manual will be accepted for signalized intersection v/c ratios. SIGCAP 2 is used in planning for relative comparisons between alternatives, not for evaluating the critical v/c ratio to compare to the OHP mobility standard, because it does not utilize a peak hour factor.

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Signalized Intersections, Continued

Future Signals

For future signals, left turns should be assumed to be protected if the criteria for protected left turn phasing contained in the current ODOT Traffic Signal Policy and Guidelines[5] will be met.

Scoping a TIS

It is important to work closely with the Region Traffic Engineer or a designee to scope a TIS involving signalized intersections, to ensure the correct parameters are used and to avoid unnecessary revisions. Any variance from parameters found in this document or the Development Review Guidelines must be agreed to in writing prior to completion of analysis.

[5]Can be found on the Internet at the following link: http://www.odot.state.or.us/traffic/publicat.htm

Mobility Standards for No Build and Build Alternatives

TIS

Traffic Impact Studies (TIS) use the v/c ratios in the OHP as the mobility standard for existing and future no-build and build conditions. In situations where an interchange and interstate freeway needs to be modified, it is necessary to coordinate with FHWA and the developer to work out any issues relative to OHP versus HDM standards.

Project Development & Refinement Studies

No Build Conditions

All no-build alternative work for existing and future conditions will use the OHP v/c ratio as shown in Tables 6 and 7 in the OHP. Both Tables 6 and 7 in the OHP have been amended. The revisions are found in the "Amendment to 1999 Oregon Highway Plan Alternate Highway Mobility Standards South Medford Interchange And Metro Area"[6]. This applies to project development, corridor/refinement studies and Transportation System Plans.

Build Conditions

Since the ODOT Highway Design Manual (HDM) has been published, all future build alternative work needs to follow the HDM v/c ratios (HDM Table 10-1). The HDM v/c ratio will apply to project development work and refinement studies. The clarifications in this white paper also apply to the HDM v/c ratios.

[6] Alternate Mobility Standards for RVMPO & Metro, and other Oregon Highway Plan amendments, can be found on the Internet at the following link:
http://www.odot.state.or.us/tdb/planning/highway/amendments.htm

Revised Development Review Guidelines Table 3.3.7

Default Signal Parameters

Table 3.3.7: ODOT Default Parameters for Use With Signalized Intersection Analysis Methodologies	
Total Lost Time	4 seconds per phase minimum for typical intersections, more for large or complex intersections.
Peak Hour Factor	For future year analysis: • 0.85 for local and collector street approaches • 0.90 for minor arterial approaches, • 0.95 for major arterial approaches, unless better information is available, such as for a school or industrial use.

Ideal Saturation Flow Rate	Field measurement should be consistent with methodology laid out in the HCM.
	Saturation flow rate worksheets must be included in the documentation.
	Where field measurements are not done,
	• Outside of MPO urban areas, 1800 passenger cars per hour of green per lane (pcphgl) shall be used
	• Inside MPO urban growth boundaries, 1900 passenger cars per hour of green per lane (pcphgl) may be used, unless one or more of the following conditions are present, in which case 1800 pcphgl shall be used
	  • Parking
	  • Greater than 5% trucks
	  • Other than ninety degree intersection skew angle
	  • Accesses are present upstream or downstream
	  • Poor signal spacing or observed queue spillbacks between signals during the peak hour, or
	  • Less than 12 foot travel lanes

Mobility Standards: Mobility Paper 99

HIGHWAY PERFORMANCE AND THE 1999 MOBILITY STANDARDS

APPLYING THE MOBILITY STANDARDS TO MINIMIZE CONGESTION

1. Introduction. The 1999 Oregon Highway Plan changed the performance standards for mobility on state highways. The highway mobility standards are applicable to all highway decisions made after adoption of the 1999 Oregon Highway Plan. The subsequent adoption of Oregon Administrative Rules (OAR) Chapter 734, Division 51 on highway approaches, access control, spacing standards and medians (access management rules) incorporated the new mobility standards as one of the criteria in managing access to State highways.

Adoption of the highway mobility standards resolved questions about how to assess the performance of intersections and driveways. This was accomplished by using an objective standard of the volume to capacity of an intersection, rather than delay to drivers. However, questions have emerged about how to apply the new standards.[1] The purpose of this paper is to:

- Discuss how the revised mobility standards impact ODOT's review of local land use and development applications and permitting approaches to the state system;
- Address questions of how to apply the highway mobility standards and the access management rules when affected intersections are already exceeding the V/C ratios or are projected to do so within the horizon study year; and
- Discuss the policy and access management rule provisions for avoiding further degradation of performance where the mobility standards are exceeded and improvements are not possible.

The conclusions of the paper are two-fold:

- **"Don't make it worse."** In reviewing local government development review applications, where the affected intersections are already exceeding the V/C ratios or are projected to do so within the horizon study year, ODOT should request the local jurisdiction to require developers to mitigate their impacts so the intersection does not become worse than it would be without the development. This should be viewed as a general guideline since there will likely be situations where it will not be practical to require mitigation and there will also be situations where a 'don't make it worse' approach is not appropriate due to existing safety problems or other issues. If no mitigation is possible to even meet this "don't make is worse" standard, then ODOT should recommend that the local jurisdiction deny the application.

[1] This paper is not an attempt to answer all questions arising from adoption of the Highway Mobility Standards and the Access Management Rules. For example, the relationship between mobility standards and the Transportation Planning Rules, OAR Chapter 660, Division 12, will be discussed in a separate paper. Other questions will be addressed in the future as the agency develops further clarity on implementation of the policies and rules in the Highway Plan and the administrative rules.

- ***Approval, denial, mitigation under the access management rules.*** *When an approach permit is requested under OAR 734, Division 51, subject to the limitations listed in Section 3.A below, the mobility standards can be used to approve or deny an application or to require mitigation.*

2. Revised Mobility Standards in the 1999 Oregon Highway Plan - Change in Performance Standards from Level of Service to Volume-to-Capacity.

The 1999 Highway Plan mobility standards identify the performance standards for State highways.[2] The 1999 Highway Plan highway mobility policy adopted volume-to-capacity ratios (V/C) rather than Level of Service (LOS) letter grades to measure highway performance. Volume to capacity (V/C) is a more precise and consistent measure and avoids the interpretation and consistency problems experienced with the 1991 Highway Plan policy. The highway mobility standards are expressed in V/C ratios, which are defined as "the peak hour traffic volume (vehicles/hour) on a highway section divided by the maximum volume that the highway section can handle." The closer the V/C ratio is to 1.0, the more congested traffic is. In *ODOT v. City of Warrenton*, LUBA No. 99-153, the Land Use Board of Appeals upheld the V/C ratios as the relevant performance standard for state highways.

3. Use of mobility standards in development review. Development review applications are the land use connection between local governments and ODOT. The applications are notices to ODOT of development proposals that are generally, although not always, accompanied by a land use change (comprehensive plan amendment, zone change or a conditional use permit or variance.) Often there is no approach permit associated with the development proposal.

Where there is a land use change or change of regulation, the Transportation Planning Rule, OAR 660-012-0060, can be used to allege that there is a significant affect on the transportation facility. Where there is not a land use change then ODOT has no direct permit authority to deny or require mitigation but must instead rely on the local government to deny the application or require appropriate mitigation if the state highway is negatively affected. There are generally five types of actions available to ODOT:

- *Respond to the local jurisdiction that the agency has no adverse comments since the land use would not cause the mobility standards to be exceeded and no mitigation is needed;*
- Recommend that the local jurisdiction require mitigation to ensure the highway mobility standards will be met for the affected facility;
- Recommend that the local jurisdiction require mitigation that will keep the intersection at a condition no worse than it would be without the added traffic from the proposed development;

[2] Tables 6 and 7 of the 1999 Oregon Highway Plan, pages 80 and 81.

- *Recommend that the local jurisdiction deny the application due to inadequate public facilities as based on the adopted transportation system plan or local approval criteria;*
- In limited situations, the local government may propose to the Oregon Transportation Commission that it adopt alternate mobility standards that reduce mobility standards and support integrated land use and transportation plans for promoting compact development. Adoption of alternate mobility standards is an option only available in a few narrowly prescribed situations that require major alternative planning efforts.[3]

There are situations where each of these actions may be appropriate. However, if the agency is to be successful in its efforts to influence the effects of growth and development along the state highways, then the actions must be judicious and supportable. For example, recommendations to a local government to deny an application must make a strong showing of negative impacts to the highway and must be tied to a local jurisdiction's ordinances.

Requesting that the local government require mitigation is, in many cases, the most reasonable course of action to pursue. Mitigation to ensure the Highway Plan's mobility standards are met and/or maintained is consistent with the department's policies on access management and system operations. In situations where mobility standards are exceeded and the deficiencies are correctable, but the necessary improvements are not planned, mitigation is also consistent with the Highway Plan. In these latter circumstances, ODOT's objective is to improve highway performance as much as possible and avoid further degradation of performance where improvements are not possible.[4]

3.A Mobility standards and local approval criteria. The highway mobility standards give a clear and objective standard of review that can be used to form the basis of recommendations to local governments. In the development review process, ODOT can request local governments to require mitigation based on the highway mobility standards. In many cases ODOT can also use the approval criteria of local governments as a vehicle for referencing the mobility standards. The salient point is that the mobility standards provide ODOT the ability to buttress its position that local governments should require mitigation.

Local governments vary in the precise wording of their zoning ordinances, but in general have some language about the need for adequate public infrastructure to support development. For example, Deschutes County has the following in Section 19.76.070 of their Site Plan Approval Criteria in their development code: 19.76.070(D) "…location and number of access points to the site…shall be designed to promote safety and avoid congestion on adjacent streets" and 19.76.070(G) "[T]he

[3] OHP Action 1F.3, p 77.
[4] OHP, p. 74.

proposed use shall not be an undue burden on public facilities, such as the street, sewer, or water system." The City of Bend in their General Conditional User Permit Criteria in 10.10.29(3)(a) requires consideration of "…alteration of traffic patterns and the capacity of surrounding streets…" and Site Plan Criteria 10.10.23(8)(g) states the intended use "shall not be an undue burden on public facilities, such as the street, sewer, or water system." A determination or finding about the sufficiency of infrastructure must be done as part of the local government's staff report on the land use application. In these situations ODOT can reference the language from the local ordinance to incorporate the mobility standards (volume-to-capacity ratio) during development review.

3.B Don't make it worse - Recommended actions where V/C ratios are already exceeded. There are two important situations where the mobility standards can be used to ensure the safety and convenience of the traveling public through the development review process. These situations arise when:

- V/C ratios are already exceeded and a land use allowed under existing zoning would ***contribute additional traffic*** to a failing intersection, and when
- A land use application would route its traffic to an ***already failing intersection*** or one that will fail within the designated horizon year even without the proposed development.

These situations often arise where the comprehensive plan allowed for commercial zoning along the highway and development has occurred consistent with those designations. Typically, this is more of a problem in urban areas, particularly where the state highway doubles as a major city arterial.

In instances where the affected intersections are already exceeding the V/C ratios or are projected to do so within the horizon study year, ODOT should request that the local jurisdiction require developers to mitigate their impacts so the intersection does not become worse than it would be without the development. Thus if the OHP V/C standard for an intersection is 0.70 and it's already functioning at 0.85 before the development, it should be at 0.85 after the development. However, this should be viewed as a general guideline since there will likely be situations where it will not be practical to require mitigation and there will also be situations where a 'don't make it worse' approach is not appropriate due to existing safety problems or other issues. If no mitigation is possible to even meet this "don't make is worse" standard, then ODOT should recommend that the local jurisdiction deny the application.[5]

[5] The "don't make it worse" strategy was endorsed by the Planning Business Line Team at their May 2000 meeting.

4. Oregon Administrative Rules Chapter 734, Division 51, Highway Approaches, Access Control, Spacing Standards and Medians (access management rules). The mobility standards from the 1999 Oregon Highway Plan were adopted in OAR Chapter 734, Division 51. The access management rules list the 1999 OHP mobility standards as approval criteria for both private and public approaches. Approval of an application for an approach and a subsequent construction permit are required to construct an approach to the state highway for either new connections or a change in use of an existing connection. This means that when an approach permit is requested, subject to the limitations listed below, the mobility standards can be used to approve or deny an application or to require mitigation.

4.A The authority to implement the mobility standards for approach permits is tempered in two situations:

4.A.1. **Future year analysis.** The highway mobility standards from the future year analysis ***cannot be used as the basis for denial*** of the requested approach(es). Only when the mobility standards are exceeded at the time of the development can the permit be denied. Where the mobility standards will be exceeded at some point in the future, the permit cannot be denied, although mitigation can be required.[6] In other words, an application for an approach permit to the highway near a failing intersection could be the grounds for either denial or mitigation requirements. An application for an approach permit to the highway near an intersection that will fail up to 15 years in the future cannot form the ground for denying an application, but could form the basis for requiring mitigation. Mitigation measures, including access management plans, are discussed in OAR 734-051-0210.

4.A.2. Reasonable Access. Under what circumstances an application for an approach permit can be approved, denied, or mitigated varies depending upon a number of factors, including whether the applicant has a reasonable access to the subject property.

4.A.2.a Where the applicant ***does not have reasonable access*** to its property, considerations in granting a permit are limited to considerations of safety of the traveling public and consistency with the highway classification and highway segment designations of the facility.[7] In these situations, the mobility standards are not a factor in granting the permit. While mitigation can be required, the permit cannot be denied outright without constituting a taking. Where mitigation cannot make the approach safe enough, the permit may be denied but ODOT would then be in the position of having to compensate the owner on the basis of a "taking" of the property.

[6] OAR 734-051-0080 (1)(b)(E) and 734-051-0080 (2)(F).
[7] OAR 734-051-0080 (4)(b)(C) and 734-051-0080(4)(C).

4.A.2.b Where the applicant ***does have reasonable access*** to its property, the applicant has to meet the highway mobility standards, as well as other requirements, to obtain an approach permit.[8] Where mitigation requirements, that may include an access management plan, can be met, the permit can be allowed. However, where the mobility standards or other requirements cannot be met, the permit can be denied.

4.B. Avoiding further degradation of performance under the Access Management Rules. Both the Highway Plan and Division 51 contain objectives for avoiding further degradation of the highway where mobility standards are exceeded. The methodology for achieving the objectives is different between the policy and the rules. The "don't make it worse" strategy discussed above is the recommended approach for development review functions. For approach permits, Division 51 has similar goals where the goal is to not worsen current approach spacing. The provisions for approach permits are governed by specific language in the rules. For example, OAR 734-051-0190(2)(c) defines in-fill development situations where it may not be possible to meet the appropriate access management spacing standards, and states that:

"When in-fill development occurs, the goal is to meet the appropriate access management spacing standards. This may not be possible and at the very least the goal is to improve the current conditions by moving in the direction of the access management spacing standards. Thus, in-fill development should not worsen current approach spacing. This may involve appropriate mitigation, such as joint access…"

In another provision of the rules discussing the future year analysis for zone changes and plan amendments for Traffic Impact Studies, "…the highway mobility standard for the highway segment for future year analysis shall be used to evaluate performance, to improve performance as much as feasible and to avoid further degradation of performance where no performance improvements are feasible."[9] The language of Division 51 will determine under what circumstances the goal will be to not worsen current spacing standards rather than meet the spacing standards requirement.

5. Conclusion. As the State highway system becomes more congested, the mobility standards in the Highway Plan and the access management rules will be useful tools to maintain acceptable highway performance. These tools also recognize that there will be instances where the mobility standards are or will be exceeded and there are no planned transportation improvements. In these instances, both policy and rules establish the objective of improving highway performance as much as possible and avoiding further degradation of highways.

[8] OAR 734-051-0080 (1)(a)(A), (B).
[9] OAR 734-051-0080 (1)(b)(A)-(I) and 734-051-0080(2).

Questions and input from agency personnel involved in implementing Division 51 and the Highway Plan are vital for the successful implementation of these policies and rules. If you have further questions, suggestions or comments, please direct them to Craig Greenleaf, Transportation Development Deputy Director, or to a Region Access Management Engineer or Region Planning Manager.