



Oregon

John A. Kitzhaber, MD, Governor

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DATE: September 8, 2011

TO: Oregon Transportation Commission

FROM: Matthew L. Garrett
Director

SUBJECT: **Agenda D** – Oregon Highway Plan (OHP) Policy 1F (Mobility Standards) Revision

Requested Action:

Approve a request to release the draft Oregon Highway Plan Policy 1F (Mobility Standards) revisions for public review and comment.

Background:

The Oregon Transportation Commission (OTC) and the Land Conservation and Development Commission (LCDC) established a Joint Subcommittee on the Transportation Planning Rule (TPR) and Oregon Highway Plan in response to stakeholder concerns about the TPR and OHP mobility standards. Commissioner Lohman and Commissioner Olson serve on this Joint Subcommittee, along with three members of LCDC.

The joint subcommittee held a series of meetings to gather input on TPR and OHP issues and to develop potential recommendations. The joint subcommittee received considerable testimony that the combination of the TPR and OHP mobility standards is leading to unintended consequences, with two general themes frequently mentioned. One primary theme is that transportation and land use objectives should be better balanced with economic development. Testimony indicated that the TPR and OHP give precedence to transportation mobility in practice. The other primary theme is that transportation requirements can make it more difficult to increase development intensities, contrary to statewide planning goals.

In April 2011, the OTC and LCDC directed the Oregon Department of Transportation (ODOT) and Oregon Department of Land Conservation and Development (DLCD) respectively, to implement the joint subcommittee's recommendations addressing stakeholder concerns.

The TPR and OHP were also considered in the 2011 Legislative Session. The legislature passed Senate Bill 795, which recognizes the work of the two agencies and establishes timeline requirements. Senate Bill 795 requires the OTC to adopt changes to the OHP by January 1, 2012. The bill also requires LCDC to adopt changes to the TPR by the same deadline.

ODOT considered the input received during the joint subcommittee process and earlier stakeholder efforts to draft initial OHP Policy 1F revisions with the assistance of an internal technical advisory



committee. Staff also provided draft materials to the TPR Rules Advisory Committee appointed by LCDC in an effort to coordinate the two work areas and collect broader input on the policy direction. Staff provided the OTC with an overview of the key elements of the revised policies in August and requests that the OTC release the draft revisions to OHP Policy 1F for a formal public review period. Outreach and consultation will include the Area Commissions on Transportation, applicable OTC-appointed advisory committees, key regional and local interest groups, and other interested stakeholders. ODOT also recommends holding a formal public hearing on the draft policies as part of the November 2011 OTC meeting.

ODOT will incorporate feedback during the public review period and prepare final draft language for commission review and action in December 2011.

Attachments:

- Attachment A – Draft Revised OHP Policy 1F
- Attachment B – Draft Revised OHP Policy 1F (with tracked changes)
- Joint Subcommittee on the TPR and OHP Recommendations Report
- Senate Bill 795 (2011)

Additional information and materials are available on the OHP project website at:
<http://www.oregon.gov/ODOT/TD/TP/OHP2011.shtml>

Copies (w/attachments) to:

Jerri Bohard	Joan Plank	Patrick Cooney	Clyde Saiki
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Nancy Murphy	Region Managers	Matt Crall, DLCD	



Oregon Highway Plan Mobility Standards

Oregon Transportation Commission
September 21, 2011



- Background and Context
 - HB 3379
 - Stakeholder Feedback LCDC
 - Linkage to TPR
 - Linkage to Economic Development
 - Joint Sub-Committee



- SB 795
 - Passed by 2011 Legislature
 - Required TPR and OHP amendments
 - Eleven required action areas
 - Completion date by end of 2011



- Proposed Policy Amendments
 - Enhanced background section: multi-modal and additional values
 - Change from “standards” to targets
 - Targets are the start of the conversation not the end
 - Policy Intent Statements from the Director



- Proposed Policy Amendments
 - Alternative mobility targets process enhanced and more flexible
 - Clarify “Avoid Further Degradation” policy
 - Clarify role of targets for Access Management
 - Clarify role of targets for operations and design
 - Propose modifying v/c tables



- OTC Action and Next Steps
 - OTC approval to begin formal public involvement and outreach
 - Outreach will follow ODOT Public Involvement Policy
 - Intend to hold Public Hearing at November OTC meeting
 - Seek OTC adoption of OHP revisions at December meeting

OHP Policy 1F Proposed Revisions

Public Review DRAFT

1999 OREGON HIGHWAY PLAN

HIGHWAY MOBILITY POLICY

Background

The Highway Mobility Policy establishes state highway mobility targets that implement the objectives of the Oregon Transportation Plan (OTP) and other OHP policies. The policy does not rely on a single approach to determine transportation needs necessary to maintain acceptable and reliable levels of mobility on the state highway system. It offers the flexibility to consider and develop methodologies to measure mobility that are reflective of current and anticipated land use, transportation and economic conditions of the state and in a community.

While ODOT measures vehicular highway mobility performance through volume to capacity (v/c) ratios (see Tables 6 and 7) when making initial determinations of facility needs necessary to maintain acceptable and reliable levels of mobility on the state highway system, achieving v/c targets will not necessarily be the determinant of the transportation solution(s). Policy 1F recognizes and emphasizes opportunities for developing alternative mobility targets (including measures that are not v/c-based) that provide a more effective tool to identify transportation needs and solutions and better balance state and local community needs and objectives.

Several policies in the Highway Plan establish general mobility objectives and approaches for maintaining mobility.

- Policy 1A (State Highway Classification System) describes in general the functions and objectives for several categories of state highways. Greater mobility is expected on Interstate and Statewide Highways than on Regional and District Highways.
- Policy 1B (Land Use and Transportation) has an objective of coordinating land use and transportation decisions to maintain the mobility of the highway system. The policy identifies several land use types and describes in general the levels of mobility objectives appropriate for each.
- Policy 1C (State Highway Freight System) has an objective of maintaining efficient through movement on major truck Freight Routes. The policy identifies the highways that are Freight Routes.
- Policy 1G (Major Improvements) has the purpose of maintaining highway performance and improving highway safety by improving system efficiency and management before adding capacity.

1
2 Although each of these policies addresses mobility, none provide measures by which to
3 describe and understand levels of mobility and evaluate what levels are acceptable for the
4 various classifications of state highway facilities.

5
6 The Highway Mobility Policy identifies how the State measures mobility and establishes
7 targets that are reasonable and consistent with the direction of the OTP and Highway Plan
8 policies. This policy carries out Policies 1A and 1C by establishing mobility targets for
9 Interstate Highways, Freight Routes and other Statewide Highways that reflect the
10 expectation that these facilities maintain a level of mobility to safely and efficiently
11 support statewide economic development while balancing available financial resources. It
12 carries out Policy 1B by acknowledging that lower vehicular mobility in Special
13 Transportation Areas (STAs) and highly developed urban areas is the expectation and
14 assigns a mobility target that accepts a higher level of congestion in these situations. The
15 targets set for Regional and District Highways in STAs and highly urbanized areas allow
16 for lower vehicular mobility to better balance other objectives, including a multimodal
17 system. In these areas traffic congestion will regularly reach levels where peak hour
18 traffic flow is highly unstable and greater traffic congestion will occur. In order to better
19 support state and local economic activity, targets for Freight Routes are set to provide for
20 less congestion than would be acceptable for other state highways. Interstate Highways
21 and Expressways are incompatible with slower traffic and higher level of vehicular
22 congestion and therefore, STA designations will not be applied to these highway
23 classifications. For Interstate and Expressway facilities it will be important to manage
24 congestion to support regional and state economic development goals.

25
26 The mobility targets are contained in Tables 6 and 7 and in Action 1F.1. Tables 6 and 7
27 refer only to vehicle mobility on the state highway system. At the same time, it is
28 recognized that other transportation modes and regional and local planning objectives
29 need to be considered and balanced when evaluating performance, operation and
30 improvements to the state highway system. Implementation of the Highway Mobility
31 Policy will require state, regional and local agencies to assess mobility targets and
32 balance actions within the context of multiple technical and policy objectives. While the
33 mobility targets are important tools for assessing the transportation condition of the
34 system, mobility is only one of a number of objectives that will be considered when
35 developing transportation solutions.

36
37 The highway mobility targets are used in three distinct ways:

- 38
- 39 • Transportation System Planning: Mobility targets identify state highway mobility
40 performance expectations and provide a measure by which the existing and future
41 performance of the highway system can be evaluated. Plan development may
42 necessitate adopting methodologies and targets that deviate from adopted mobility
43 targets in order to balance regional and local performance expectations.
 - 44
 - 45 • Plan Amendments and Development Review: Mobility targets are used to review
46 amendments to comprehensive plans and land use regulations pursuant to the

1 Transportation Planning Rule (TPR) to assess if the proposed changes are
2 consistent with the planned function, capacity and performance standards of state
3 highway facilities.

- 4
- 5 • Operations: Mobility targets assist in making traffic operations decisions such as
6 managing access and traffic control systems to maintain acceptable highway
7 performance.
- 8

9 The Highway Mobility Policy applies primarily to transportation and land use planning
10 decisions. By defining targeted levels of highway system mobility, the policy provides
11 direction for identifying (vehicular) highway system deficiencies. The policy does not,
12 however, determine what actions should be taken to address the deficiencies.

13

14 Mobility in the policy is measured using a volume to capacity ratio or v/c. This policy
15 also provides opportunities to seek OTC approval for alternative mobility targets that are
16 not v/c-based.

17

18 It is also important to note that regardless of the performance measure, v/c or other, the
19 Highway Mobility Policy recognizes the importance of considering the performance of
20 other modes of travel. While the policy does not prescribe mobility targets for other
21 modes of travel, it does allow and encourage ODOT and local jurisdictions to consider
22 mobility broadly – through multimodal measures or within the context of regional or
23 local land use objectives. Providing for better multimodal operations is a legitimate
24 justification for developing alternatives to established OHP mobility targets.

25

26 The Highway Mobility Policy will affect land use decisions through the requirements of
27 the TPR. The TPR requires that regional and local transportation system plans (TSP) be
28 consistent with plans adopted by the OTC. The TPR also requires that local governments
29 ensure that comprehensive plan amendments, zone changes and amendments to land use
30 regulations that significantly affect a transportation facility are consistent with the
31 identified function, capacity and performance of the affected state facility. The Highway
32 Mobility Policy establishes ODOT’s mobility targets for state highways as the standards
33 for determining compliance with the TPR (OAR 660-012-0060).

34

35 Policy 1F does not apply to highway design. Separate design mobility standards are
36 contained in ODOT’s Highway Design Manual (HDM). While HDM design standards
37 and OHP mobility targets in Policy 1F may not be the same, ODOT’s intention is to
38 continue to balance statewide mobility and economic development objectives with
39 community mobility, livability and economic development objectives through
40 coordination between planning and design. Where the OTC adopts alternative mobility
41 targets in accordance with this policy, they are establishing an agreement with the local
42 jurisdiction to manage and develop the state system to the expected and planned levels of
43 performance, consistent with the jurisdiction’s underlying planning objectives (as set out
44 in local comprehensive plan policy and land use regulations). However, coordination on
45 exceptions to design mobility standards may still be required.

46

1 ODOT's intention is that the mobility targets be used to identify system mobility
2 deficiencies over the course of a reasonable planning horizon. The planning horizon shall
3 be:

- 4
- 5 • At least 20 years for the development of state, regional and local transportation
6 plans, including ODOT's corridor plans; and
7
- 8 • The greater of 15 years or the planning horizon of the applicable local and
9 regional transportation system plans for amendments to transportation plans,
10 comprehensive plans or land use regulations.
11

12 ODOT measures vehicular highway mobility performance through v/c ratios. The v/c
13 ratio was selected after an extensive analysis of highway performance measures prior to
14 adoption of the 1999 Highway Plan. The review included the effectiveness of the
15 measure to achieving other highway plan policies (particularly OHP Policy 1B, Land Use
16 and Transportation), implications for growth patterns, how specifically should ODOT
17 policy integrate with land use, flexibility for modifying targets, and the effects of
18 Portland metro area targets on the major state highways in the region. V/C based
19 measures were chosen for reasons of application consistency and flexibility, manageable
20 data requirements, forecasting accuracy, and the ability to aggregate into area-wide
21 targets that are fairly easy to understand and specify. In addition, since v/c is responsive
22 to changes in demand as well as in capacity, it reflects the results of demand
23 management, land use and multimodal policies. However, it is recognized that there are
24 limitations in applying v/c, especially in highly congested conditions and in a multimodal
25 environment. OHP policies allow options for other measures, or combinations of
26 measures, to be considered.
27

28 Mobility targets are a measure by which the state assesses the functionality of a facility
29 and are used, along with consideration of other policy objectives, to plan for system
30 improvements. These mobility targets are shown in Table 6 and vary, depending on the
31 category of highway, the location of the facility – within a STA, MPO, UGB,
32 unincorporated community or rural lands – and the posted speed of the facility. Table 6
33 also reflects Policy 1B (Land Use and Transportation) and the State's commitment to
34 support increased density and development activities in urban areas. Through higher v/c
35 ratios and the adoption of alternative mobility targets, the State acknowledges that it is
36 appropriate and anticipated that certain areas will have more traffic congestion because of
37 the land use pattern that a region or local jurisdiction has committed to through adopted
38 local policy.
39

40 Separate mobility targets for the Portland metropolitan area have been included in the
41 policy (Table 7). These targets have been adopted with an understanding of the unique
42 context and policy choices that have been made by local governments in that area
43 including:
44

- 1 • A regional plan that links land use and transportation decisions and investments to
2 support land uses in urban centers and corridors and supports multi-modal
3 transportation options;
- 4
- 5 • Implementation of Transportation System Management and Operations (TSMO)
6 strategies, including freeway ramp meters, real time traffic monitoring and
7 incident response to maintain adequate traffic flow; and
8
- 9 • An air quality attainment/maintenance plan that relies heavily on reducing auto
10 trips through land use changes and increases in transit service.
11

12 The Portland Metro targets have been adopted specifically for the Portland metropolitan
13 area with a mutual understanding that these mobility targets better reflect the congestion
14 that already exists within the constraints of the metro area's transportation system and
15 which will not be alleviated by state highway improvements. The targets contained in
16 Table 7 are meant for interim use only. The OTC expects the Portland Metro area to work
17 with ODOT to explore a variety of measures to assess mobility and to develop alternative
18 targets that best reflect the multiple transportation, land use and economic objectives of
19 the region.
20

21 The mobility targets included in the Highway Mobility Policy must be used for the initial
22 deficiency analysis of state highways. However, where it can be shown that it is
23 infeasible or impractical to meet the targets, local governments may work with ODOT to
24 consider and evaluate alternatives to the mobility targets in Tables 6 and 7. Any variance
25 from the targets in Tables 6 and 7 will require OTC adoption. Increasingly, urban and
26 urbanizing areas are facing traffic and land use pressures due to population growth, aging
27 infrastructure, and reduced revenues for roadway and related infrastructure projects. In
28 response to state funding constraints and the need to balance multiple objectives, system
29 management solutions and enhancement of alternative modes of travel, rather than major
30 highway improvements, are increasingly relied upon to address congestion issues.
31 Developing mobility targets that are tailored to specific facility needs, consistent with
32 local expectations, values and land use context will need to be part of the solution for
33 some highway locations. Furthermore, certain urban areas may need area-specific targets
34 to better balance state and local policies pertaining to land use and economic
35 development. Examples where conditions may not match state mobility targets include
36 metropolitan areas, STAs, areas with high seasonal traffic, and areas constrained by the
37 existing built or natural environment.
38

39 Alternatives to the mobility targets and methodologies in the tables must be adopted
40 through an amendment to the OHP. The OTC must adopt the new targets supported by
41 findings that explain and justify the supporting methodology.
42

43 Policy 1F is not the only transportation policy that influences how the state assesses the
44 adequacy of a highway facility and vehicle mobility is not the only objective. Facilitating
45 state, regional and local economic development, enhancing livability for Oregon's
46 communities, and encouraging multiple modes are also important policy areas that guide

1 state transportation investment and planning. Policy 1B recognizes that the state will
2 coordinate land use and transportation decisions to efficiently use public infrastructure
3 investments to enhance economic competitiveness, livability and other objectives.
4 Economic viability considerations help define when to make major transportation
5 investments (Policy 1G). Goal 4, Travel Alternatives, articulates the state’s goal to
6 maintain a well-coordinated and integrated multimodal system that accommodates
7 efficient inter-modal connections for people and freight and promotes appropriate multi-
8 modal choices. Making decisions about the appropriate level of mobility for any given
9 part of the statewide highway system must be balanced by these, and other relevant OTP
10 and OHP policies.

11
12
13 **Policy 1F: Highway Mobility Policy**

14
15 *It is the policy of the State of Oregon to maintain acceptable and reliable levels of*
16 *mobility on the state highway system, consistent with the expectations for each facility*
17 *type, location and functional objectives. Highway mobility targets will be the initial tool*
18 *to identify deficiencies and consider solutions for vehicular mobility on the state system.*
19 *Specifically, mobility targets shall be used for:*

- 20
21
 - *Identifying state highway mobility performance expectations for planning and*
22 *plan implementation;*
 - *Evaluating the impacts on state highways of amendments to transportation plans,*
23 *acknowledged comprehensive plans and land use regulations pursuant to the*
24 *Transportation Planning Rule (OAR 660-12-0060); and*
 - *Guiding operational decisions such as managing access and traffic control*
25 *systems to maintain acceptable highway performance.*

26
27
28
29
30
31 *Where it is infeasible or impractical to meet the mobility targets, acceptable and reliable*
32 *levels of mobility for a specific facility, corridor or area will be determined through an*
33 *efficient, collaborative process between ODOT and the local jurisdiction(s) with land use*
34 *authority. The resulting mobility targets will reflect the balance between relevant*
35 *objectives related to land use, economic development, social equity, and mobility and*
36 *safety for all modes of transportation. Alternative mobility targets for the specific facility*
37 *shall be adopted by the OTC as part of the OHP.*

38
39 *OTC adoption of alternative mobility targets through system and facility plans should be*
40 *accompanied by acknowledgement in local policy that state highway improvements to*
41 *further reduce congestion and improve traffic mobility issues in the subject area are not*
42 *expected.*

43
44 *Traffic mobility exemptions in compliance with the TPR do not obligate state highway*
45 *improvements that further reduce congestion and improve traffic mobility issues in the*
46 *subject area.*

1 **Action 1F.1**

2
3 Mobility targets are the measure by which the state assesses the existing or forecasted
4 operational conditions of a facility and, as such, are a key component ODOT uses to
5 determine the need for or feasibility of providing highway or other transportation system
6 improvements. These mobility targets are shown in Table 6 and Table 7. For purposes of
7 assessing state highway performance:
8

- 9 • Use the mobility targets below and in Table 6 when initially assessing all state
10 highway sections located outside of the Portland metropolitan area urban growth
11 boundary.
12
- 13 • Use the mobility targets below and in Table 7 when initially assessing all state
14 highway sections located within the Portland metropolitan area urban growth
15 boundary.
16
- 17 • For highways segments where there are no intersections, achieving the volume to
18 capacity ratios in Tables 6 and 7 for either direction of travel on the highway
19 demonstrates that state mobility targets are being met.
20
- 21 • For unsignalized intersections, achieving the volume to capacity ratios in Tables 6
22 and 7 for the state highway approaches indicates that state mobility targets are
23 being met. In order to maintain safe operation of the intersection, non-state
24 highway approaches are expected to meet or not to exceed the volume to capacity
25 ratios for District/Local Interest Roads in Table 6, except within the Portland
26 metropolitan area UGB where non-state highway approaches are expected to meet
27 or not to exceed a v/c of 0.99.
28
- 29 • At signalized intersections other than interchange ramp terminals (see below), the
30 overall intersection v/c ratio is expected to meet or not to exceed the volume to
31 capacity ratios in Tables 6 and 7. Where Tables 6 and 7 v/c ratios differ by legs of
32 the intersection, the more restrictive of the volume to capacity ratios in the tables
33 shall apply. Where a state highway intersects with a local road or street, the
34 volume to capacity ratio for the state highway shall apply.
35
- 36 • Although an interchange serves both the mainline and the crossroad to which it
37 connects, it is important that the interchange be managed to maintain safe and
38 efficient operation of the mainline through the interchange area. The main
39 objective is to avoid the formation of traffic queues on off-ramps which back up
40 into the portions of the ramps needed for safe deceleration from mainline speeds
41 or onto the mainline itself. This is a significant traffic safety concern. The primary
42 cause of traffic queuing at off-ramps is inadequate capacity at the intersections of
43 the ramps with the crossroad. These intersections are referred to as ramp
44 terminals. In many instances where ramp terminals connect with another state
45 highway, the mobility target for the connecting highway will generally signify
46 that traffic backups onto the mainline can be avoided. However, in some instances

1 where the crossroad is another state highway or a local road, the mobility target
2 will not be a good indicator of possible future queuing problems. Therefore, the
3 better indication is a maximum volume to capacity ratio for the ramp terminals of
4 interchange ramps that is the more restrictive volume to capacity ratio for the
5 crossroad, or 0.85.
6

- 7 • At an interchange within an urban area the mobility target used may be increased
8 to as much as 0.90 v/c, but no higher than the target for the crossroad, if:
9
 - 10 1. It can be determined, with a probability equal to or greater than 95
11 percent, that vehicle queues would not extend onto the mainline or into the
12 portion of the ramp needed to accommodate deceleration from mainline
13 speed; and
 - 14 2. An adopted Interchange Area Management Plan (IAMP) is present, or
15 through an IAMP adoption process, which must be approved by the OTC.
16
- 17 • Because the ramps serve as an area where vehicles accelerate or decelerate to or
18 from mainline speeds, the mobility target for the interchange ramps exclusive of
19 the crossroad terminals is the same as that for the mainline. Metered on-ramps,
20 where entering traffic is managed to maintain efficient operation of the mainline
21 through the interchange area, may allow for greater volume to capacity ratios.
22

23
24 ***Action 1F.2***
25

- 26 • Apply mobility targets over at least a 20-year planning horizon when developing
27 state, regional or local transportation system plans, including ODOT's corridor
28 plans.
29
- 30 • When evaluating highway mobility for amendments to transportation system
31 plans, acknowledged comprehensive plans and land use regulations, use the
32 planning horizons in adopted local and regional transportation system plans or a
33 planning horizon of 15 years from the proposed date of amendment adoption,
34 whichever is greater. To determine the effect that an amendment to an
35 acknowledged comprehensive plan or land use regulation has on a state facility,
36 the capacity analysis shall include the forecasted growth of traffic on the state
37 highway due to regional and intercity travel and consistent with levels of planned
38 development according to the applicable acknowledged comprehensive plan over
39 the planning period. Planned development, for the purposes of this policy, means
40 the amount of population and employment growth and associated travel
41 anticipated by the community's acknowledged comprehensive plan over the
42 planning period. The OTC encourages communities to consider and adopt land
43 use plan amendments that would reallocate expected population and employment
44 growth to designated community centers as a means to help create conditions that
45 increase the use of transit and bicycles, encourage pedestrian activity, reduce

1 reliance on single occupant vehicle travel and minimize local traffic on state
2 highways.

3

4 ***Action 1F.3***

5

6 In the development of transportation system plans or ODOT facility plans, where it is
7 infeasible or impractical to meet the mobility targets in Table 6 or Table 7, or those
8 otherwise approved by the Commission, ODOT and local jurisdictions may explore
9 different target levels, methodologies and measures for assessing mobility and consider
10 adopting alternative mobility targets for the facility. While v/c remains the initial
11 methodology to measure system performance, measures other than those based on v/c
12 may be developed through a multi-modal transportation system planning process that
13 seeks to balance overall transportation system efficiency with multiple objectives of the
14 area being addressed.

15

16 Examples of where state mobility targets may not match local expectations for a specific
17 facility or may not reflect the surrounding land use, environmental or financial conditions
18 include:

19

- 20 • Metropolitan areas or portions thereof where mobility expectations cannot be
21 achieved and where they are in conflict with an adopted integrated land use and
22 transportation plan for promoting compact development, reducing the use of
23 automobiles and increasing the use of other modes of transportation, promoting
24 efficient use of transportation infrastructure, improving air quality, and supporting
25 greenhouse gas reduction objectives;
- 26
- 27 • When financial considerations or limitations preclude the opportunity to provide a
28 planned system improvement within the planning horizon;
- 29
- 30 • When other locally adopted policies must be balanced with vehicular mobility and
31 it can be shown that these policies are consistent with the broader goals and
32 objectives of OTP and OHP policy;
- 33
- 34 • Facilities with high seasonal traffic;
- 35
- 36 • Special Transportation Areas; and
- 37
- 38 • Areas where severe environmental or land use constraints¹³ make infeasible or
39 impractical the transportation improvements necessary to accommodate planned
40 land uses or to accommodate comprehensive plan changes that carry out the Land
41 Use and Transportation Policy (1B).

42

43 ¹³ Examples of severe environmental and land use constraints include, but are not limited to, endangered
44 species, sensitive wetlands, areas with severe or unstable slopes, river or bay crossings, and historic
45 districts.

46

1 Any proposed mobility target that deviates from the mobility targets in Table 6 or Table
2 7, or those otherwise approved by the Commission, shall be clear and objective and shall
3 provide standardized procedures to ensure consistent application of the selected measure.
4 The alternative mobility target(s) shall be adopted by the OTC as an amendment to the
5 OHP.

6
7 The OTC has sole authority to adopt mobility targets for state highways. It will be
8 necessary for affected local jurisdictions to agree to and acknowledge the alternative
9 mobility target for the state highway facility as part of a local transportation system plan
10 and regional plan (MPO) as applicable. Findings shall demonstrate why the particular
11 mobility target is necessary, including the finding that it is infeasible or impractical to
12 meet the mobility targets in Table 6 or Table 7, or those otherwise approved by the
13 Commission.

14
15 If alternative targets are needed but cannot be established through the system planning
16 process prior to adoption of a new or updated TSP, they should be identified as necessary
17 and committed to as a future refinement plan work item with an associated timeframe for
18 completion and adoption. In this case, the mobility targets in Table 6 or Table 7, or those
19 otherwise approved by the Commission, shall continue to apply until the alternative
20 mobility targets are formally adopted by the OTC.

21
22 Modifications to the mobility targets could include changing the hour measured from the
23 30th highest hour, using multiple hour measures, or considering weekday or seasonal
24 adjustments. Development of corridor or area mobility targets is also allowed. ODOT's
25 policy is to utilize a v/c based target and methodology as the initial measure, as this will
26 standardize and simplify implementation issues throughout the state. Where v/c-based
27 approaches may not meet all needs and objectives, development of alternative mobility
28 targets utilizing non v-c-based measures, may also be pursued.

29
30 In support of establishing the alternative mobility target, the plan shall include feasible
31 actions for:

- 32
- 33 • Providing a network of local streets, collectors and arterials to relieve traffic
34 demand on state highways and to provide convenient pedestrian and bicycle
35 ways;
 - 36
 - 37 • Managing access and traffic operations to minimize traffic accidents, avoid traffic
38 backups on ramps, accommodate freight vehicles and make the most efficient use
39 of existing and planned highway capacity;
 - 40
 - 41 • Managing traffic demand and incorporating transportation system management
42 tools and information, where feasible, to manage peak hour traffic loads on state
43 highways;
 - 44
 - 45 • Providing and enhancing multiple modes of transportation; and
 - 46

- Managing land use to limit vehicular demand on state highways consistent with Policy 1B (Land Use and Transportation Policy).

The plan shall include a financially feasible implementation program and shall demonstrate that the proposed mobility target(s) are consistent with and support locally adopted land use, economic development, and multimodal transportation policy and objectives. In addition, the plan shall demonstrate strong local commitment, through adopted policy and implementation strategies, to carry out the identified improvements and other actions.

ODOT understands that in certain areas of the state, achieving the established mobility targets will be difficult and that regional and local policies must be balanced with transportation system performance. ODOT is committed to work with MPOs and local jurisdictions on system-level analysis of alternative mobility targets and to participate in public policy-level discussions where balancing mobility and other regional and community objectives can be adequately addressed.

In developing and applying alternative mobility targets and methodologies for facilities throughout the state, ODOT will consider tools and methods that have been successfully used previously for a particular facility and/or within a specific metropolitan area or region. Specific mobility targets may vary from one community or area to another depending on local circumstances. It is the objective of this policy to maintain consistency in the selection and application of analysis and implementation methodologies over time as they are applied to a specific facility or to a system of related facilities within a defined community or region.

ODOT will provide guidance documents and will work with local jurisdictions and others to apply best practices that streamline development of alternative mobility targets.

Action 1F.4

Alternative mobility targets may also be developed for facilities where an investment has been or is planned to be made which provides significantly more capacity than is needed to serve the forecasted traffic demand based on the existing adopted local comprehensive plan and it is possible to preserve that excess capacity for traffic growth beyond the established planning horizon or traffic growth resulting from local legislative plan amendments or plan amendments associated with OAR 731-017.

Action 1F.5

For purposes of evaluating amendments to transportation system plans, acknowledged comprehensive plans and land use regulations subject to OAR 660-12-0060, in situations where the volume to capacity ratio or alternative mobility target for a highway segment, intersection or interchange is above the mobility targets in Table 6 or Table 7, or those otherwise approved by the Commission, and transportation improvements are not planned within the planning horizon to bring performance to the established target, the

1 mobility target is to avoid further degradation. If an amendment to a transportation
2 system plan, acknowledged comprehensive plan or land use regulation increases the
3 volume to capacity ratio further, or degrades the performance of an adopted mobility
4 target, it will significantly affect the facility unless addressed through the language below
5 regarding determination of a small increase in traffic. In addition to the capacity
6 increasing improvements that may be required as a condition of approval, other
7 performance improving actions to consider include, but are not limited to:

- 8
- 9 • System connectivity improvements for vehicles, bicycles and pedestrians.
- 10
- 11 • Transportation demand management (TDM) methods to reduce the need for
- 12 additional capacity.
- 13
- 14 • Multi-modal (bicycle, pedestrian, transit) opportunities to reduce vehicle demand.
- 15
- 16 • Operational improvements to maximize use of the existing system.
- 17
- 18 • Land use techniques such as trip caps / budgets to manage trip generation.
- 19

20 In applying “avoid further degradation” for state highway facilities already operating
21 above the mobility targets in Table 6 or Table 7 or those otherwise approved by the
22 Commission, a small increase in traffic does not cause “further degradation” of the
23 facility.

24

25 The threshold for a small increase in traffic between the existing plan and the proposed
26 amendment is defined in terms of the increase in average daily trip volumes as follows:

- 27
- 28 • Any proposed amendment that does not increase the average daily trips by more
- 29 than 400.
- 30
- 31 • Any proposed amendment that increases the average daily trips by more than 400
- 32 but less than 1001 for state facilities where:
 - 33 ○ The annual average daily traffic is less than 5,000 for a two-lane highway
 - 34 ○ The annual average daily traffic is less than 15,000 for a three-lane
 - 35 highway
 - 36 ○ The annual average daily traffic is less than 10,000 for a four-lane
 - 37 highway
 - 38 ○ The annual average daily traffic is less than 25,000 for a five-lane
 - 39 highway
 - 40
- 41 • If the increase in traffic between the existing plan and the proposed amendment is
- 42 more than 1000 average daily trips, then it is not considered a small increase in
- 43 traffic and the amendment causes further degradation of the facility and would
- 44 follow existing processes for resolution.
- 45

1 In applying OHP mobility targets to analyze mitigation, ODOT recognizes that there are
2 many variables and levels of uncertainty in calculating volume-to-capacity ratios,
3 particularly over the planning horizon. After negotiating reasonable levels of mitigation
4 for actions required under OAR 660-012-0060, ODOT considers calculated values for v/c
5 ratios that are within 0.03 of the adopted target in the OHP to be considered in
6 compliance with the target. It is not the intent of the agency to consider variation within
7 modest levels of uncertainty in violation of mobility targets for reasonable mitigation.
8 The specific mobility target still applies for determining significant affect under OAR
9 660-012-0060.

10
11 ***Action 1F.6***

12
13 When making recommendations to local governments about development permit
14 applications and potential actions for mitigation related to local development proposals
15 and criteria consider and balance the following:

- 16
17 • OHP mobility targets;
- 18
19 • Community livability objectives;
- 20
21 • State and local economic development objectives;
- 22
23 • Safety for all modes of travel; and
- 24
25 • Opportunities to meet mobility needs for all modes of travel.

26
27 Encourage local jurisdictions to consider OHP mobility targets when preparing local
28 development ordinances and approval criteria to evaluate proposed development
29 applications that do not trigger Section 660-012-0060 of the TPR.

30
31 ***Action 1F.7***

32
33 Consider OHP mobility targets as guidance to ODOT's highway access management
34 program. Balance economic development objectives of properties abutting state highways
35 with transportation safety and access management objectives of state highways in a
36 manner consistent with local transportation system plans and the land uses permitted in
37 acknowledged local comprehensive plans.

38
39 When evaluating OHP mobility targets in access management decisions for unsignalized
40 intersections consider the following:

- 41
42 • The highest priority for OHP mobility targets in guiding access management
43 practices is to address the state highway through traffic movements and the
44 movements exiting the state highway facility.

- When evaluating traffic movements from an approach entering or crossing a state highway, the priority is to consider the safety of the movements. While a v/c ratio for a specific movement greater than 1.0 is an indication of a capacity problem, it does not necessarily mean the traffic movement is unsafe. Apply engineering practices and disciplines in the analysis and design of highway approaches to ensure traffic movements meet safety objectives for the program.

Private approaches at signalized intersections will be treated as all other signalized intersections under OHP Action 1F.1.

Action 1F.8

Consider OHP mobility targets when implementing operational improvements such as traffic signals and ITS improvements on the state highway system. The OHP mobility targets are meant to be used as a guide to compare the relative benefits of potential operational solutions rather than as a firm target to be met. The main goal of operational projects is to improve system performance - which may include mobility, safety or other factors - from current or projected conditions.

Action 1F.9

Enhance coordination and consistency between planning and project design decisions whenever possible. Ensure that project development processes and design decisions take into account statewide mobility and economic objectives, including design standards, while balancing community mobility, livability and economic development objectives and expectations. Consider practical design principles that take a systematic approach to transportation solutions in planning and project development processes. Practical design principles strive to deliver the broadest benefits to the transportation system possible within expected resources.

Table 6: Volume to Capacity Ratio Targets for Peak Hour Operating Conditions

VOLUME TO CAPACITY RATIO TARGETS OUTSIDE METRO ^{A,B,C}							
Highway Category	Inside Urban Growth Boundary					Outside Urban Growth Boundary	
	STA ^D	MPO	Non-MPO Outside of STAs where non-freeway posted speed <= 35 mph, or a Designated UBA	Non-MPO outside of STAs where non-freeway speed > 35 mph, but <45 mph	Non-MPO where non-freeway speed limit >= 45 mph	Unincorporated Communities ^E	Rural Lands
Interstate Highways	N/A	0.85	N/A	N/A	0.80	0.80	0.75
Statewide Expressways	N/A	0.85	0.80	0.80	0.80	0.80	0.75
Freight Route on a Statewide Highway	0.90	0.85	0.85	0.80	0.80	0.80	0.75
Statewide (not a Freight Route)	0.95	0.90	0.90	0.85	0.80	0.80	0.80
Freight Route on a Regional or District Highway	0.95	0.90	0.90	0.85	0.85	0.80	0.80
Expressway on a Regional or District Highway	N/A	0.90	N/A	0.85	0.85	0.80	0.80
Regional Highways	1.0	0.95	0.90	0.85	0.85	0.85	0.80
District / Local Interest Roads	1.0	0.95	0.95	0.90	0.90	0.85	0.85

Notes for Table 6

^A 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. Alternatives to the 30th highest annual hour may be considered and established through alternative mobility target processes.

^B Highway design requirements are addressed in the Highway Design Manual (HDM).

^C See Action 1F.1 for additional technical details.

^D Interstates and Expressways shall not be identified as Special Transportation Areas.

^E For unincorporated communities inside MPO boundaries, MPO mobility targets shall apply.

Table 7: Volume to Capacity Ratio Targets within Portland Metropolitan Region

VOLUME TO CAPACITY RATIO TARGETS INSIDE METRO ^A		
Location	Target	
	1 st hour	2 nd hour
Central City Regional Centers Town Centers Main Streets Station Communities	1.1	.99
Corridors ^B Industrial Areas Intermodal Facilities Employment Areas Inner Neighborhoods Outer Neighborhoods	.99	.99
I-84 (from I-5 to I-205) ^C	1.1	.99
I-5 North ^C (from Marquam Bridge to Interstate Bridge)	1.1	.99
OR 99E ^C (from Lincoln Street to OR 224 Interchange)	1.1	.99
US 26 ^C (from I-405 to Sylvan Interchange)	1.1	.99
I-405 ^C (I-5 South to I-5 North)	1.1	.99
Other Principal Arterial Routes I-205 ^C I-84 (east of I-205) I-5 (Marquam Bridge to Wilsonville) ^C OR 217 ^C US 26 (west of Sylvan) US 30 OR 8 (Murray Blvd to Brookwood Avenue) ^C OR 224 ^C OR 47 OR 213 242 nd /US26 in Gresham	.99	.99
Areas of Special Concern^D Beaverton Regional Center Highway 99W (I-5 to Tualatin Road)	1.0 .95	D

Notes for Table 7: Maximum volume to capacity ratios for two hour peak operating conditions through a 20-year horizon for state highway sections within the Portland metropolitan area urban growth boundary.

^A See Action 1F.1 for additional technical details.

^B Corridors that are also state highways are 99W, Sandy Boulevard, Powell Boulevard, 82nd Avenue, North Portland Road, North Denver Street, Lombard Street, Hall Boulevard, Farmington Road, Canyon Road, Beaverton-Hillsdale Highway, Tualatin Valley Highway (from Hall Boulevard to Cedar Hills Boulevard and from Brookwood Street to E Street in Forest Grove), Scholls Ferry Road, 99E (from Milwaukie to Oregon City and Highway 43).

^C Thresholds shown are for interim purposes only; refinement plans for these corridors are required in Metro's Regional Transportation Plan and will include a recommended motor vehicle performance policy for each corridor.

^D Areas with this designation are planned for mixed use development, but are also characterized by physical, environmental or other constraints that limit the range of acceptable transportation solutions for addressing a level-of-service need, but where alternative routes for regional through traffic are provided. In these areas, substitute performance measures are allowed by OAR.660.012.0060(2)(d). Provisions for determining the alternative performance measures are included in Section 6.7.7 of the 2000 RTP. The OHP mobility target for state highways in these areas applies until the alternative performance targets are adopted in local plans and approved by the Oregon Transportation Commission.