



Sub Group 2 Meeting, Access Management Standards

Access Management Committee

Transportation Building

355 Capitol Street NE, Room 119

Salem, OR 97301

1:00 – 3:00 PM, September 9, 2010

FINAL

Working Facilitator: Del Huntington.

Participants: Bob Bryant, Jamie Jeffrey, Shawn Stephens, Harold Lasley, Monte Grove, and Doug Norval. (David Boyd, Region 4 Access Management Engineer joined the call to provide perspective from the field operations)

Meeting Purpose

Review ODOT proposal for reduced AM standards, mitigation measures and mobility standards for highways with less than 5,000 ADT as required by SB 1024.

Summary of Approach Applications Data Base

Harold provided a handout “Analysis of Applications Approved or Denied” and provided a summary on approach application data collected over the past 10 years. (See Attachment I) The main points of the data revealed that;

- Approximately 5000 approach applications have been processed that led to a decision.
- 4776 applications were approved and 206 applications denied for an approval rate of 96%.
- Deviations were required on 52% of the applications.
- Mitigation was required on 10% of the approved applications (The mitigation does not include any proposed improvements on-site and/or off-site identified by the developer such as a traffic signal and/or turn lanes on the highway, but rather, specific, additional mitigation measures required by ODOT)
- The data does not include those applications that did not proceed through to a decision or where a prospective applicant did not pursue an application for any number of possible reasons.
- The data does not include decisions that were modified or overturned during the appeal process.
- The data identifies the number of deviations, but does not include what constituted the need for the deviation. Harold believes most deviations are for

access spacing although inadequate sight distance is often the major concern in rural areas.

- The data does not distinguish if the applicant requested more than one approach to the state highway because an application must be submitted for each approach.
- The data does not identify if the application was due to a “change of use”

Discussion related to Approach Application Data

Data related to alternate access does not include a determination as to whether or not the alternate access was reasonable to serve the site, and does not include information on whether or not the specific applications with alternate access were approved or denied.

The data shows that almost every application is approved, though it does not include the amount of time it took to reach an approval.

Jamie – asked if the data includes information on the number of developers who ask about the process and decide to discontinue the application as the process is too complex, or they understand that an approval is unlikely. ODOT responded that the data base does not include this information. Based on the prior discussions at the AM meetings, Jamie understands that many developers stop the application process and therefore this concern is not identified in the findings. Shawn stated that many developers meet with ODOT District staff and elect not to move forward with a potential development for any number of reasons, or if it is unlikely that an approach(es) application would be approved.

Jamie – “The data base summary makes it appear that everything is working very well. However, we hear that the system isn’t working and many developers become frustrated. It would be interesting to know what they think”. Jamie believes that it would be a good idea to ask some developers to identify their concerns about the approach application process, including sub group participants that represent private development.

Del reported that in the earlier mitigation measures sub group meeting, Victor suggested that gaining an understanding of the number of applications that were due to a “change of use” would be beneficial to determine the impacts and benefits of the new change of use thresholds established by SB 1024.

Revised Standards and Approval Criteria

Harold distributed the “Revised Standards and Approval Criteria, Regional and District Highway – Traffic Volumes Under 5,000 AADT (see Attachment II) and provided an overview of the document.

- Under “Exemptions”, Harold identified that the proposal does not currently include Statewide highways.
- It was recommended that a consideration should be included to acknowledge local plans that may address access standards and spacing criteria.

A question was asked about the 75 left turning trips and the relationship to the volume/capacity (v/c) threshold. David responded that this value represents the approximate v/c threshold identified in the Highway Plan (75 left turning vehicles onto a roadway with 500 vehicles on a two-lane highway, with 250 vehicles in each direction, results in a V/C of approximately 0.80). Therefore a non-traversable median would not be required as a mitigation measure.

A discussion of the SB 1024 requirements identified that “less stringent access management standards, spacing, mitigation and mobility thresholds” are required for highway with less than 5,000 AADT. It is understood that the law included all highways with less than 5,000 AADT, regardless of the classification. The proposal does not currently include Statewide highways and it appears that the existing mobility standard has not been revised.

Harold acknowledged that revising the v/c analysis for private approaches is still on the table and under consideration.

There was considerable discussion on the proposed spacing standards and the concern that an inability to meet the standards would result in the need to process a deviation. It was agreed that additional text was required to identify that;

- mid-block properties with a right of access,
- with no other means of access,
- an approach would be located to optimize spacing and safety, and
- would be approved without a deviation.

Jamie recommended that all driveways and sites should be designed to ensure that motorists enter and exit the highway in a forward movement (do not allow motorist to back up when entering or leaving the highway). In some situations, this may result in the need for more than one approach.

Monte stated that ODOT needs to significantly reduce the need for the high number of deviations that are required to process approach applications. He is concerned that the paper only deals with Regional and District level highways and excludes Statewide highways and Expressways. He also asked if there were any proposals to revise the AM standards for urban highway that exceed 5,000 AADT. ODOT staff responded that Statewide highways are not in the current proposal though additional work is required.

Harold provided an additional handout “ ‘Express’ Approval Criteria” (see Attachment III) though the sub group did not have an opportunity to review due to time constraints.

Action Items

Review the handouts for “Revised Access Spacing for Regional and District Highways with < 5K AADT” and “Express Approval” and provide comments to Del.

The meeting was adjourned at 3:00 PM.

Attachment I – Copy of SB 1024 – Analysis of Applications Approved or Denied

Attachment II – Copy of Proposed Revised Standards and Approval Criteria, Regional and District Highways – Traffic Volumes Under 5,000 AADT

Attachment III – Copy of Proposed “Express” Approval Criteria

Attachment I
Analysis of Applications Approved or Denied

Analysis of Applications Approved or Denied

2000 - 2010

STATEWIDE HIGHWAYS						
	Rural EXP	Rural	Urban EXP	Urban	U/R???	
Applications Total = 1665	Total = 135 Appr=129/11* Denied=6	Total = 902 Appr=863/61* Denied=39	Total = 56 Appr=55/6* Denied=1	Total = 565 Appr=526/99* Denied=39	Total = 7 Appr = 6/0* Denied = 1	
Posted Speed						
≥ 55	106	597	9	54	1	
50	3	32	1	11		
40 & 45	9	148	25	206	1	
30 & 35	4	82	6	235	2	
≤ 25	9	23	14	48		
No Speed Recorded	4	20	1	11	3	
TOTAL	135	902	56	565	7	
						Total
Deviations	56	497	32	431	0	1016
No Deviations	79	405	24	134	7	649
TOTAL	135	902	56	565	7	1665
Alternate Access	16	89	9	172	0	286
Highest % of deviations on statewide hwy's occurs on rural highways: 497/1665 = 30%						
Deviations on urban highways (excl. EXP) = 76% (431/565)						
60% of alternate access was on urban highways, excl. EXP (172/286)						
*Approved with mitigation						
REGION HIGHWAYS						
	Rural EXP	Rural	Urban EXP	Urban		
Applications Total = 625	Total = 1 Appr = 1/0* Denied = 0	Total = 370 Appr = 360/31* Denied = 10	Total = 1 Appr = 1/1* Denied = 0	Total = 253 Appr=240/73* Denied = 13		
Posted Speed						
≥ 55		309		23		
50		9		16		
40 & 45	1	29	1	66		
30 & 35		15		102		
≤ 25		3		46		
No Speed Recorded		5		0		
TOTAL	1	370	1	253		
						Total
Deviations	0	158	1	186		345
No Deviations	1	212	0	67		280
TOTAL	1	370	1	253		625
Alternate Access	0	38	1	65		104
Highest % of deviations on region hwy's occurs on urban highways (excl. EXP): 186/625 = 30%						
Deviations on urban highways (excl. EXP) = 74% (186/253)						
63% of alternate access was on urban highways, excl. EXP (65/104)						
*Approved with mitigation						

Analysis of Applications Approved or Denied

2000 - 2010

DISTRICT HIGHWAYS						
	Rural EXP	Rural	Urban EXP	Urban	U/R???	
Applications Total = 1764	None	Total = 1096 Appr= 1060/104* Denied = 36	Total = 1 Appr = 1/1* Denied = 0	Total = 666 App=642/111* Denied = 24	Total = 1 Appr = 1/0* Denied = 0	
Posted Speed						
≥ 55		698		29		
50		8		4		
40 & 45		242	1	284		
30 & 35		91		271	1	
≤ 25		38		65		
No Speed Recorded		19		13		
TOTAL		1096	1	666	1	
						Total
Deviations		638	1	541		1180
No Deviations		458	0	125	1	584
TOTAL		1096	1	666	1	1764
Alternate Access		95	0	159	0	254
Highest % of deviations on district hwys occurs on rural highways: 638/1764 = 36%						
Deviations on urban highways = 81% (541/666)						
63% of alternate access was on urban highways (159/254)						
"OTHER¹" OR UNKNOWN HIGHWAY CLASS						
	Rural EXP	Rural	Urban EXP	Urban	U/R???	
Applications Total = 928	Total = 21 Appr = 14/0* Denied = 7	Total = 636 Appr = 622/2* Denied = 14	Total = 3 Appr = 3/0* Denied = 0	Total = 21 Appr = 18/0* Denied = 3	Total = 247 Appr=234/0* Denied = 13	
Posted Speed						
≥ 55	16	33	1	1	1	
50		1		0	0	
40 & 45	4	11	1	4	0	
30 & 35		10	1	2	2	
≤ 25		8		0	0	
No Speed Recorded	1	573		14	244	
TOTAL	21	636	3	21	247	
						Total
Deviations	13	12	3	3	0	31
No Deviations	8	624	0	18	247	897
TOTAL	21	636	3	21	247	928
Alternate Access	0	0	0	0	0	0
Low deviation rate on these highways						

Analysis of Applications Approved or Denied

2000 - 2010

Approved with Mitigation								
	Rural EXP R-D-O	S-	Rural R-D-O	S-	Urban EXP S-R-D-O	Urban R-D-O	S-	TOTAL
Posted Speed								
≥ 55	11 - 0 - 0 - 0		43 - 28 - 74 - 2		2 - 0 - 0 - 0	7 - 1 - 3 - 0		173
50	0 - 0 - 0 - 0		4 - 2 - 0 - 0		0 - 0 - 0 - 0	1 - 3 - 0 - 0		10
40 & 45	0 - 0 - 0 - 0		10 - 0 - 20 - 0		4 - 0 - 0 - 0	51 - 19 - 40 - 0		144
30 & 35	0 - 0 - 0 - 0		3 - 1 - 8 - 0		0 - 0 - 0 - 0	34 - 44 - 55 - 0		145
≤ 25	0 - 0 - 0 - 0		0 - 0 - 2 - 0		0 - 0 - 0 - 0	6 - 6 - 13 - 0		27
No Speed Recorded	0 - 0 - 0 - 0		1 - 0 - 0 - 0		0 - 0 - 0 - 0	0 - 0 - 0 - 0		1
TOTAL	11		198		6	283		498
NOTES								
Mitigation is required on 10% of approved applications (498 / 4770)								
65% of mitigation occurs on highway speeds ≥ 40 mph (173+144+10) / 498								
37% of mitigation occurs on highway speeds ≥ 50 mph (173+10) / 498								
22% of mitigation occurs on District urban highways (3+40+55+13) / 498								
57% of mitigation occurs on urban highways (283 / 498)								

Attachment II
Proposed Revised Standards and Approval Criteria,
Regional and District Highways
Traffic Volumes Under 5,000 AADT

Revised Standards and Approval Criteria
Traffic Volumes Under 5000 Annual Average Daily Traffic
(AADT)*

Regional and District Highways

(*ADT based on latest publication of Traffic Volume Tables)

Approval Criteria

The Region Manager shall approve a private approach to the highway under the following conditions:

- Projected left-turn volumes from the approach to the highway are below *75 vehicles per hour (vph) in the peak hour.
- The property has a right of access
- The property has no other direct approach to the highway
- The applicant agrees to provide mitigation needed to address safety problems

If more than one approach is requested for a property, approval of additional approaches will be based on meeting one of the following criteria and the applicant's agreement to provide mitigation needed to address safety problems:

- The spacing standard is achievable for both (all) driveways to the property as well as adjacent properties.
- The applicant demonstrates that the approved highway access and any alternate access to the property does not provide reasonable access to the proposed land use that meets the criteria of ORS 374.310
- Where a property has more than one existing approach to the highway, the applicant agrees to changes that would "move in the direction of" (as defined in OAR 734-051-0040(39)) conformance with existing standards.

For Regional and District Level Highways with traffic volumes under 5000 AADT, the revised spacing standard are shown in the table below. Where the above Approval Criteria are met, the application for the first driveway will be approved based on the Revised Spacing Standard table below, or in situations where there is no other available access to the property and the spacing standards cannot be achieved, the approach shall be located to maximize spacing and safety. The spacing standard will be the same for both urban and rural highways and for commercial and residential applications.

Revised Spacing Standards:

Maximum spacing available to adjacent driveways and road approaches up to:

- | | |
|--------------|--|
| < 25 MPH | - Spacing = 150 feet |
| 30 to 35 MPH | - Spacing = 250 feet |
| 40 to 45 MPH | - Spacing = 360 feet |
| 50 MPH | - Spacing = 425 feet |
| 55 MPH | - Spacing = 650 feet (typically running speed for these areas is 65 MPH) |

Existing Spacing Standards:

Speed:	District Level Highway	Region Level Highway
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	Rural	Urban	Rural	Urban
≤ 25 MPH	400 ft	350 ft	450 ft	350 ft
30 & 35 MPH	400 ft	350 ft	600 ft	425 ft
40 & 45 MPH	500 ft	500 ft	750 ft	750 ft
50 MPH	550 ft	550 ft	830 ft	830 ft
55 MPH	700 ft	700 ft	990 ft	990 ft

Median Exclusion

For Regional and District Level highways under 5000 AADT and projected peak hour left-turn volumes from the approach to the highway that are determined to be acceptable given the character and function of the surrounding corridor, a non-traversable median will not be required as mitigation for a private approach. The exception is where a non-traversable median is needed to mitigate identifiable safety or traffic operational problems, or is made a condition of approval by the local government or a requirement as set forth in their adopted Transportation Plan.

“Move in the Direction of” (as defined in OAR 734-051-0040(39))

A traffic impact analysis (TIA) may be required to evaluate the impact of the approach to local streets and identify mitigation measures. The Region Access Management Engineer (RAME) may waive the TIA if the RAME and the applicant agree on a solution that will “move in the direction of” conformance with existing standards or improve safety factors.

Exemptions

These approval criteria do not apply to the following:

- approaches in an interchange management area (with 1320’ of ramp terminal), the influence area of a public road intersection, expressways and highways in the statewide classification of the Oregon Highway Plan. These facilities are the highest priority. Less stringent standards present a greater risk of loss to public investment in safety and efficient traffic operations.
- Left turn volume from the approach to the highway equals or exceed 75 vph in the peak hour.
- Access management plan, interchange area management plan, facility plan, refinement plan, or other transportation or project plan approved by the local government or the Oregon Transportation Commission, or applicable local ordinances that establish more stringent standards.

How This Helps Applicant: These changes provide the following benefits for the applicant:

- increased certainty of obtaining direct highway access
- reduces need to request a deviations because of lower spacing standards
- eliminates consideration of alternate access as criteria in approving first highway approach.
- Mitigation to address mobility impacts is eliminated.

Potential Negative Impacts/Concerns

- Increase in R/W cost when over time conditions warrant closing of approaches.
- Cumulative effects on safety and operations of increasing access densities over time. For speed 25 conditions, this would be 4 times higher densities.

- More direct highway access has cumulative impacts. Properties develop around use of approaches so when growth does occur and access conditions deteriorate, solutions are more limited and more expensive to implement.
- Diminishes opportunities to promote joint use of approaches
- Missed opportunities to apply access management techniques that would be more effective protecting highway capacity and function in the long run.
- Having spacing standards that are less stringent will result in more turning conflict points in the highway system and may be determined not acceptable in some circumstances .
- Basing decisions primarily on safety means less mitigation of impacts to traffic operations, unless we can make connection to safety. Operational problems and expectation to solve them in projects will likely increase the cost of projects.
- On high use recreational highways, the AADT will be greatly exceeded. So, the impacts to these routes would be much more significant during the peak seasons and the risk for crashes will be higher.

(*) The 75 left turn exiting vehicles per peak hour is the calculated threshold for when a highway with 5000 AADT would fail its mobility standard. The assumptions connected with this are.

1) The 5000 AADT is equally distributed. i.e. 2500 trips in each direction.

2) The 75 left turns out also has 75 right turns or through movements out, for 150 exiting vehicles

3) As such, there is also a 150 entering vehicles, with equal distribution for arriving.

The 150 exiting vehicles with 150 entering vehicles in the peak hour equates to a development of about 3000 trips per day. Based upon a highway AADT of 5000, one would not expect to see these conditions. However, smaller developments could trigger some of these conditions, if the traffic flow is unbalanced and predominately from one direction.

Attachment III
Proposed “Express” Approval Criteria

“EXPRESS” APPROVAL CRITERIA

The following criteria would be used to qualify applications for an express approval process.

No alternative access to public roads and no existing approach to the state highway.

Right of Access to Region or District highway.

No existing approach to the state highway.

Highway ADT is less than 5000 for 2 lanes and 7500 for 4 lanes.

Less than 10 left entering and 20 Right entering during the peak hour.

Applicant proposes a shared access with at-least one neighboring property or

Existing spacing from proposed approach location is more than 150 feet from existing approaches on other properties.

Crash history is below statewide average for type of highway.

Meets Intersection Sight Distance

Consistent with plans.

Rural area not within 1/2 mile of a UGB or City limits which ever is greater.

Right of Access to Region or District highway.

Highway ADT is less than 5000 for 2 lanes and 7500 for 4 lanes.

Less than 5 Residential units or Farm access.

No existing shared access to the state highway.

No existing approach to the state highway.

Applicant proposes a shared access to at-least one neighboring property.

Existing spacing from proposed approach is more than 150 feet from other approaches on other properties.

Crash history is below statewide average for type of highway.

Meets Intersection Distance

Rural Area within 1/2 mile of a UGB or City limits.

Right of Access to Region or District highway.

No alternative access to public roads.

Highway ADT is less than 5000 for 2 lanes and 7500 for 4 lanes.

Less than 10 left entering and 20 Right entering during the peak hour.

Applicant proposes a shared access to at-least one neighboring property or

Existing spacing from proposed approach location is more than 150 feet from existing approaches on other properties on both sides of the highway.

Crash history is below statewide average for type of highway.

Meets Intersection Sight Distance