



Construction Section **A** *Advisory*

TOPIC <i>New Pavement Services Guidance – Pavement Preservation Consideration for Bicycle Travel</i>	NUMBER CO11-01(A)	DATE 08/10/2011
APPROVAL  Jeffrey L. Gower, P.E. Construction Section Manager	EFFECTIVE DATE 08/10/2011	VALIDATION DATE

Topic

This technical advisory provides a notice of the new guidance that ODOT Pavement Services is using for accommodating bicycle traffic on pavement preservation projects. Similar language is included in the 2011 version of the Pavement Design Guide. Please note that additional costs due to accommodating bicycle needs should be funded in accordance with the recent Highway Division Directive, DES 01, "System Preservation, Program Funds". We have generally been following this guidance in past designs, and this new guidance is primarily a clarification.

Advisory Information *(in use by ODOT Pavement Services)*

Background

This guidance does not address pavement widening to accommodate bicycle travel or bicycle lanes, since that decision is not associated with pavement design. This guidance addresses the situation where the roadway is being resurfaced as a pavement preservation project.

Guidance

Overlays

- Overlays, including thin lift overlays, should extend across the entire shoulder.

Inlays

- If shoulder is in poor condition – inlay the shoulder. Use the ODOT condition rating system.
- If the shoulder is 2 feet wide or less – inlay the shoulder.
- Consider inlaying the entire shoulder from a cost, convenience of construction, and travel lane smoothness perspective if the shoulder is less than 4 feet wide.

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- If the shoulder is in fair or better condition and wider than the 4 feet mentioned in the previous bullet – use the following guidance:
 - If there is a significant potential for truck traffic driving on the shoulder, extend the inlay joint a nominal distance beyond the fog line, typically 2 feet. Otherwise, place the inlay joint on the fog stripe. If the project is on a published cycling route, then refer to the “Published Cycling Routes” guidance below and also include the Region Bike/Pedestrian Coordinator to help establish the joint location.
 - Paving smoothness (for automobile travel lane) may be specified in accordance with current guidance without any additional regard for inlay joint smoothness, since Standard Specification Section 00745.60(e) addresses quality of joint and provides for a smooth joint. However, consider if a smooth travel lane can be constructed if the shoulder, or a portion of it, is left in place.
 - Do not place a longitudinal construction joint within a designated standard width bicycle lane.

Chip Seals and Microsurfacing

- Extend these treatments to either the fog line or one foot beyond the fog line to protect it from the plows. Extend the treatment to the edge of pavement if the shoulder needs to be treated based on condition or age.

Published Cycling Routes

- Refer to Appendix P of the Pavement Design Guide for a map of published Oregon cycling routes.
- The ODOT Bicycle and Pedestrian Program has indicated that they would like to adjust the inlay joint position out of the probable bicycle wheel path. Refer to the guidance below from the ODOT Bicycle and Pedestrian Program for the location of the probable bicycle wheel path. If the inlay joint location needs to be adjusted further into the shoulder, specifically and only for the purpose of accommodating the probable bicycle wheel path, inform the ODOT project leader or project manager. Pavement preservation funds are intended to preserve the pavement from further deterioration, but not for recreational improvements.

Probable Bicycle Wheel Path:

“Per Oregon law, bicyclists ride “as far right as practicable.” But what does this mean? On roadways with shoulders, it is dependent on the width of the shoulder. On shoulders 4 feet or wider, bicyclists will generally ride about 2 feet off of the fog line. This area of pavement is ‘swept’ by passing motor vehicle traffic and is normally free of debris. Even on wide shoulders 6 feet or greater, most bicyclists will ride within the swept area. If rumble strips are present bicyclists are forced further

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right – often into debris strewn pavement. Some will chose to ride between the fog line and rumble strip to avoid debris. On narrower shoulders – under 4 feet, bicyclists will ride 1 foot to 18 inches off the edge of pavement. As the shoulder narrows they move into the travel lane.

Other Considerations

- No bicycle consideration should be made where bicycles are currently prohibited or on roads where a separate bike path runs along the roadway.
- On roads with less than 2500 ADT, bicyclists typically ride in the automobile travel lane and these roadways typically do not have shoulders. Give no consideration to bicycles unless local knowledge of bicycle usage or engineering judgment suggests otherwise.
- If the designer believes that the extra width of a treatment, which is required based on this guidance, does not actually improve the travel of a bicyclist on a particular project, consult with the project lead or project manager for an exception to this guidance.

*T*arget Audience

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