



# INDIANA DEPARTMENT OF TRANSPORTATION

*Driving Indiana's Economic Growth*

## Design Memorandum No. 17-02 Policy Change

February 2, 2017

**TO:** All Design, Operations, and District Personnel, and Consultants

**FROM:** /s/Elizabeth W. Phillips  
Elizabeth W. Phillips  
Acting Director  
Highway Design and Technical Services Division

**SUBJECT:** Rural Interstate Shoulder Width

**EFFECTIVE:** Immediately

In an effort to provide broad consistency in the design of interstate shoulders, the Department has completed a benefit-cost evaluation of outside (right) shoulders. The evaluation reviewed the traffic safety benefits of 10-ft and 12-ft right shoulders with consideration of cost and traffic volume. The results showed that the economically viable "break-even" point of a 10-ft vs. a 12-ft right shoulder in relation to mainline traffic exposure is approximately 20,000 AADT.

Effective immediately, the following applies to rural Interstate Added Travel Lanes projects and New Construction/Reconstruction. Where the current year AADT is 20,000 or greater *or* the number of trucks exceeds 250 DDHV, the minimum right paved shoulder width is 12 ft. A design exception is required where the conditions are met and a lesser shoulder width is provided. The table on following page provides additional information and exceptions to this policy.

<b>Current Year Traffic Volume</b>	<b>Number of Proposed Through Lanes (one direction)</b>	<b>Terrain</b>	<b>Left Paved Shoulder Width (ft) (1)</b>	<b>Right Paved Shoulder Width (ft) (2)</b>	<b>Guardrail Offset (ft) (3)</b>
20,000 AADT or the number of trucks exceeds 250 DDHV	3 or more	Level or Rolling	10	12	1

(1) A design exception is required to provide or retain a left paved shoulder width less than 10 ft. Paved shoulders less than 8 ft. will not be considered.

(2) Where a lane is being added to the median side and the remaining pavement is to be resurfaced, an existing 10-ft paved right shoulder may remain without a design exception. Where a lane is being added to the outside and the remaining pavement is to be resurfaced, a design exception is required to provide a paved right shoulder less than 12 ft. wide. Where the remaining pavement is to be reconstructed, a design exception is required to provide a paved right shoulder width less than 12 ft. wide, regardless of median or outside widening.

(3) Where a 12-ft shoulder is provided, the minimum guardrail offset is 1 ft. Where a shoulder less than 12-ft is provided, the minimum guardrail offset is 2 ft. Level Two design exceptions for guardrail offset in conjunction with this memo require the approval of the Highway Design and Technical Services Division Director.