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

(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.