



Highway Safety & Design Engineering Instructions (HSDEI)

Distribution: Assistant Director of Program Development, Chief of Contract Administration, Consultants, Director of Operations, Director of Program Development, District Administrators, District Project Managers and Technicians, Highway Safety & Design Project Managers, Local Transportation Facilities Project Managers, Maintenance Administrator, Program Development Section Managers, Structures Project Managers

Approved: Kevin S. Marshia **Date:** 11/11/11
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Highway Safety and Design Program Manager

Subject: **Minimum Roadway Width of Pavement – Supplemental Guidance**

Administrative Information:

Effective Date: HSDEI 11 – 004 shall be effective from the date of approval.

Superseded HSDEI: Not applicable.

Exceptions: HSDEI 11 – 004 does not apply to resurfacing preventative maintenance projects.

Disposition of HSDEI Content: The content of HSDEI 11 – 004 will be incorporated into a future revision to the Roadway Design Manual and/or other applicable design guidance documentation.

Purpose:

Currently the Vermont Agency of Transportation (VTrans) utilizes the “Vermont State Standards” to determine appropriate lane and shoulder widths for construction, reconstruction and rehabilitation projects. Roadway characteristics such as functional classification, design speed, and traffic volume are considered when determining the lane and shoulder widths, resulting in a range of acceptable widths.

VTrans’ Operations Division is tasked with winter maintenance of all state highways. Our State often experiences extreme winter weather, making these maintenance activities time sensitive and critical. The way in which a roadway is maintained or the type of equipment that is used to perform maintenance does not vary between roadways with different characteristics as described above. As a result, VTrans’ maintenance crews consistently encounter locations where their equipment (plow truck) is wider than the paved lane and shoulder width, requiring the plow to overlap or partially drive in the opposing lane, creating a situation that is unsafe for both the maintenance worker and the traveling public.

The goal of HSDEI 11 – 004 is to define maintenance requirements as a factor when determining a project's geometric values and to recommend a minimum width of pavement in order to provide a manageable working area for maintenance staff while also improving the safety of the traveling public.

Technical Information:

The recommended minimum width of pavement, as listed in HSDEI 11 - 004, is defined as the distance between the roadway centerline and the edge of paved shoulder or obstruction. An obstruction may include curbing, on-street parking, sidewalk bulb-outs, etc. All VTrans-maintained roadways should have a minimum width of pavement of 14 (fourteen) feet for all directions of travel. Note that this is a recommended minimum width and if the "Vermont State Standards" indicate that wider lanes and shoulders are required based on specific roadway characteristics, that width shall govern.

During a project's development the design team shall present to the Town Selectboard the project's design elements, including the proposed width of pavement (travel lanes and shoulders) with corresponding justification. This presentation should occur early in the development process, prior to the preliminary plans stage. If the Selectboard, after this presentation, requests that the width of pavement be reduced below the recommended 14-foot minimum, while still meeting the requirements of the "Vermont State Standards," the Project Manager shall schedule a follow-up meeting. The Town Selectboard, Project Manager, Highway Safety & Design Program Manager, District Transportation Administrator, and Maintenance Transportation Administrator shall attend this meeting. The VTrans representatives will discuss with the Town all factors considered when determining pavement widths, including safety and maintenance requirements, with the goal of the meeting being to agree upon a pavement width that meets "Vermont State Standards" as well as the needs of both the Town and VTrans.

Implementation:

The content of HSDEI 11 – 004 is to be implemented beginning immediately for all projects containing VTrans-maintained roadway, produced and or managed by VTrans, with the exception of resurfacing preventative maintenance projects.

Transmitted Materials:

Not applicable.