

**A Proposal for  
Transportation Research Board  
Synthesis of Current Highway and Transit Practices**

**Title:**

Bridge Rating Practices and Policies for Overweight Vehicles

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**Scope:**

Increased uniformity in permitting of overweight/oversize trucks within and between states is a goal that has long been worked towards by both State permitting offices and industry. Much of that work has been focused on such things as state laws and regulations, permit application processes and enforcement activities. Past reports such as NCHRP Report 80 (1969), NCHRP Synthesis of Highway Practice 68 (1980) and NCHRP Synthesis of Highway Practice 143 (1988) also addressed those same issues. Relatively little attention has been directed towards the contribution of state's bridge rating practices and procedures to the goal of more uniform overweight vehicle permitting. More recent research and reports on this topic, such as Transportation Research Record 1448 (1994) and Transportation Research Circular 498 (June 2000), have tended to concentrate on changes to bridge specifications and development of state-specific permitting software systems.

Bridge rating practices vary between states. Choice of software tools, treatment of non-standard configurations (such as axle gages and multiple-lane configurations), choice of specifications, interpretation of specifications and allowances for in-place dead loads are examples of those areas where variation in practice often exists. The actual extent to which those differences exist and their impact on the goal of more uniform permitting is poorly understood. Identifying and documenting the different bridge rating practices used for overweight vehicle permits would be a very important step towards more uniform permitting.

It is proposed that a synthesis be made in which each state's bridge rating systems, practices and policies are surveyed and documented. This synthesis will allow permitting agencies and industry to efficiently and effectively direct their efforts toward increasing permit uniformity.

**Informational Sources:**

1. Surveys and interviews with personnel from State DOT permitting offices.
2. Surveys and interviews with personnel from State DOT offices who perform bridge rating calculations for permitting overload vehicles.
3. Surveys and interviews with individuals from hauling companies that routinely request permits to move overweight loads. Contacts can be made through the Specialized Carriers and Rigging Association, 2750 Prosperity Avenue, Suite 620, Fairfax, Virginia 22031-4312. Phone: (703) 698-0291.
4. Surveys and interviews with individuals from construction and crane rental companies that routinely request permits to move cranes to and from job sites. Contacts can be made through the Specialized Carriers and Rigging Association, 2750 Prosperity Avenue, Suite 620, Fairfax, Virginia 22031-4312. Phone: (703) 698-0291.