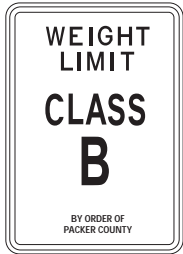


Weight limits protect local roads

Local governments have significant authority to protect their roads from damage by heavy loads. Using the Class B designation and seasonal load limits, they can nearly double the expected life of vulnerable roads. Of course, this benefit must be balanced against the truck access needs of local industry and the community.



The Class B designation, which is well understood by industry, offers considerable protection for roads with poor supporting soils or those not built to withstand heavy loads. This permanent year-round restriction limits vehicle loads to a maximum of 60% of the normal legal load weights—about 48,000 pounds gross vehicle weight for most loads. Local governments have this authority under

Wisconsin Statutes (Sections 349.15, 349.16). In addition, during spring thaw additional, seasonal weight limits may be applied to these roads to further restrict loads.

Reducing load weights by 40% on vulnerable roads can increase pavement life by 88% according to research by the Federal Highway Administration. Even modest reductions of 20% can extend pavement life by over 60%. When pavements last longer the municipality saves money through fewer repairs and delayed reconstruction.

Before making the restrictions, local authorities should be sure the road actually cannot carry the projected loads. It is important to be judicious and not give Class B status to worthless, deteriorated roads. Declaring every municipal road Class B is also a questionable practice.

Experience and local knowledge will usually suggest which roads are vulnerable. Examples include thin pavements of less than 8-12 inches total. Roads that are built on poor soil with high water tables and carry more than a few heavy trucks are also candidates. The road's load capacity can be further evaluated using soil tests, drainage evaluation, a core sample of pavement surface and base, and interviews with maintenance staff.

Contrary to common belief, local limits override all other statutory special weight permits and local authorities are not required to make exceptions. In addition, once weight restrictions are set, public agency vehicles are not exempt from them.

Issuing permits

Once the road is protected, the local government may issue permits for exemptions, especially where a new heavy-hauling industry is anticipated. You can use permit requirements to limit the number of trips, specify maximum vehicle weights, and/or control the times of day and routes used.

You can also require specific industrial road users to pay for road damage repairs through bonds or special assessments. Permitting creates an incentive and establishes a forum where industry and local authorities can negotiate fair use of the community's roads. Good documentation on road conditions, damage potential and economic consequences



Roads with light duty pavements carrying heavy loads will benefit from weight restrictions.

is important. T.I.C. publications on how loads damage pavements and on setting weight limits can help.

Seasonal limits

Spring thaw can cut road strength by 50% or more in some types of pavement, soils and drainage conditions. Setting seasonal load limits can extend the life of weak and aging pavements as well as protecting your investment in new pavements. Limits usually take effect in mid-March and end by early May.

Roads likely to be vulnerable include: asphalt surfaces of two inches or less, total pavements thinner than 12 inches, subgrade soils of fine-grained silt and clay, and areas with high water tables and poor drainage. Look for pavement sections that need frequent patching and repair and consider the amount and type of truck traffic to be carried.

Local governments can establish seasonal weight limits under Chapters 348 and 349 of the *Wisconsin Statutes*. They should be prepared to post signs on protected roads, and should consider how to handle enforcement, exemptions, and communication about affected routes.

For help in protecting pavements ask for copies of the following T.I.C. publications: No. 2 How Vehicle Loads Affect Pavement Performance and No. 8 Using weight limits to protect local roads. See the form on page 7 for how to reach us.

Crossroads

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Wisconsin Transportation Information Center, UW-Madison Department of Engineering Professional Development, 432 N. Lake St., Madison, WI 53706
Phone: 800/442-4615 Fax: 608/263-3160, or e-mail to individuals below.

Don Walker, *director*
Steve Pudloski, *staff*
Mercy Ranum, *program assistant*
Lynn Entine, *writer and editor*
Susan Kummer, *graphic artist*

donald@engr.wisc.edu
pudloski@engr.wisc.edu
ranum@engr.wisc.edu
Lynn Entine Writing & Editing
Artifax