



1.1 Background

In Wisconsin, railroads are responsible for the maintenance of all public railroad-highway crossing surfaces on both local and state trunk roadways, and for keeping these crossing surfaces in a good and safe condition for public travel (s. 86.12 and s. 86.13 Stats.)

While such work may be eligible for safety funding, crossing surface projects do not fare favorably in the benefit / cost analysis compared to warning device projects. Therefore, WisDOT policy is to direct safety funding towards new and upgraded active warning devices at crossings, rather than towards smooth rides for driver comfort. Thus projects for the upgrading, improvement, or replacement of crossing surfaces are usually accomplished as a part of highway improvement projects and are not a priority for use of federal safety funds.

1.2 Maintenance / Repair / Refurbishing

The railroad responsibility for the maintenance and repair of crossing surfaces includes such work as filling potholes, tightening crossing components, removing / replacing defective or worn panels, patching, etc.

Although railroads have the ultimate responsibility for grade crossing maintenance, the state provides a limited amount of funds for the "repair" of crossings on the state trunk system as an incentive for railroads to focus their maintenance efforts on the crossings on these higher function, higher speed routes. State crossing "repair" funds may be available for up to 85% of the costs to work on crossing surfaces on the STH system, not including connecting highways. (See [FDM 17-30-15](#)).

1.3 Replacement

This is replacing a crossing surface with a new surface but not upgrading to concrete panels or rubber if the crossing did not have it before.

1.4 Improvement or Upgrade

This includes the upgrading of a crossing surface from, for example, timber and asphalt to rubber or concrete panels. Such projects are eligible for Safety funds but as noted earlier, safety funds are directed to warning device projects. If such upgrades were within the limits of a highway improvement project, any crossing surface upgrade would be funded as a part of the improvement project, with highway improvement funds.

1.5 Alteration of a Crossing

Case law has defined an "alteration" as a significant change or shift or widening of an existing crossing as a result of highway construction. Such alterations are created by highway improvement projects and the crossing work is funded, at least in part, as a part of the highway improvement project of which it is a part. See [FDM 17-1-1](#) for the full definition of an "Alteration."

1.6 Roadway Improvement (Reconstruction and 3R) Projects

When a railroad crossing is within the limits of a roadway reconstruction project, crossing work that is needed, including work on the surface of the crossing, is accomplished with the roadway improvement and is funded as part of that larger project. More specifically, WisDOT policy is to pay for 85% of the cost of the existing crossing width on state trunk and connecting highways (0% on local, i.e. non-state-trunk roads), plus 100% of the cost of any widening. The work could be a replacement, an upgrade, or an alteration - whatever the project design has determined to be appropriate.

If no work is anticipated at a crossing as a part of a highway improvement project, notification of that "no work" decision is given to the railroad in accordance with s. 86:13 Stats.

If the railroad decides to do work at that crossing for reasons of its own, they are encouraged to coordinate the work with the highway work to minimize disruptions to both highway and rail traffic.

If WisDOT has determined that crossing surface work is needed at a crossing, the railroad is informed. Any needed crossing surface work within the limits of a highway improvement project should be included in state- or federal-aid projects.

1.7 Roadway Maintenance (SHRM and Federal Preventive Maintenance) Projects

Roadway resurfacing typically has minimal impact on railroad crossings. If no work is anticipated at the crossing based on an evaluation of crossing condition during project development, WisDOT is required to send the railroad a notice per s. 84:13(2) Stats. The intent is to ensure high quality, and timely accomplishment of needed crossing work.

1.8 Safety Projects

As noted above, crossing smoothness, ride quality or driver comfort are not priorities for expenditure of WisDOT safety funds - priority is instead given to grade crossing warning device projects.

FDM 17-30-5 Highway Improvement Programs

June 19, 2013

5.1 General

Upgrading or refurbishing of railroad crossing surfaces in conjunction with adjacent highway improvements is generally advisable. The advantages of upgrading railroad crossings with adjacent highway improvements include fewer interruptions to highway traffic, the construction work is coordinated, and the overall highway is improved within the construction limits.

Crossing work on state trunk highways and connecting streets is to be funded similar to the adjacent project, in which case the affected railroad may be requested to share in the cost of the crossing work in a manner similar to that provided in 86.13(5)W.S. Crossing improvements as a part of improvement projects on local roads are the responsibility of the affected railroad, but since such projects usually involve roadway and crossing widening, the cost is generally shared with the public based on the percentage of existing total width versus the percentage of new total width [S86.12 and 86.13(1)W.S.]

See [FDM 17-30 Attachment 15.1](#) for a summary of activities for crossing surface improvements within highway improvement programs.

5.2 Unique Agreement Provisions

When the need of a railroad project as a part of a highway improvement project is identified, the region or the region on behalf of the consultant, sets up the project in FIIPS. See the FIIPS Manual.

Negotiations with the railroad are initiated by the Railroads and Harbors Section (RHS). An agreement (or contract) is required. See [Attachment 5.1](#) for a sample agreement and [FDM 17-20-10](#) and [FDM 17-20-15](#) for procedures.

If there is shared responsibility for the required crossing work, an equitable percentage of the total project costs for the work by the railroad are to be agreed upon for purposes of contract administration.

If the Agreement is acceptable to the railroad (and the interested local government), the contract development process prescribed in TAM 005-1 is followed to conclusion.

LIST OF ATTACHMENTS

[Attachment 5.1](#) Sample Agreement for Highway-Railroad Grade Crossing Surface - Highway Improvement Program

FDM 17-30-10 WisDOT Safety Project

June 19, 2013

10.1 Background

While one half of the Federal Aid Safety Funds are restricted to use on warning devices, the remaining portion is available for the elimination of hazards at railroad crossings which can include separation projects and crossing surface improvement projects, projects to consolidate or close crossings, among others. This "Elimination of Hazards" portion of the federal safety funds are totally within the WisDOT safety program and none are allocated to the OCR Safety Program.

As a practical matter, WisDOT generally does not give high priority to crossing surface improvement projects on an isolated, stand-alone basis in the WisDOT Safety Program. Instead, WisDOT focuses its resources on eliminating other hazards, including separation structures, and leaves surface repairs to other programs and to the railroads, who have ultimate responsibility. It should be noted that federal safety funds can be used only to upgrade the surface type, not to repair crossing surfaces in-kind. See [FDM 17-30-15](#) for information on the STH Crossing Repair Program.

For crossing surface projects in approved programs, it is necessary for the region to prepare the Railroad

Project Submittal Package (See [FDM 17-20-10](#)). RHS will then prepare a proposal letter to the railroad, and later will draft an agreement covering the work.

[Attachment 10.1](#) is an example of an agreement covering surface improvement work by the railroad.

LIST OF ATTACHMENTS

[Attachment 10.1](#) Sample Agreement for Highway-Railroad Grade Crossing Surface - WisDOT Safety Project

FDM 17-30-15 STH Surface Repair Program

March 21, 2007

15.1 Introduction

Projects to repair and improve railroad crossing surfaces on the state trunk highway system are eligible for inclusion in the state-funded program under s. 86.13(5) stats. The objective of this program is to help provide smoother riding surfaces over crossings on state trunk highways, which generally carry larger volumes of higher speed traffic than do other roadways. Crossings on connecting highways are not eligible for funding under this program.

This program usually provides 85% reimbursement of eligible crossing surface costs. The railroad is required to pay not less than 15%. Region design and construction engineering costs and costs for bypass roads, signing and detours are paid for under separate project I.D.s as explained at the end of this procedure.

Crossing work is to be performed by the railroad using its own forces, an approved continuing contractor, or a competitively procured contractor. Projects are selected by the WisDOT on a priority basis with input and cooperation of local government officials and railroad personnel.

Railroad costs are not eligible for reimbursement by the state unless WisDOT has approved the railroad's work plan and estimate prior to construction, the work is included and authorized in the crossing repair program, and a force work agreement has been executed. If funds are not available to accomplish crossing repairs under 86.13(5), other funds may be used if available. If funding assistance is not available, the railroad must perform the work with its own funds.

15.2 Process

[Attachment 15.1](#) summarizes the process to follow for a Railroad Crossing Repair Fund project. [Attachment 15.2](#) is a sample agreement with the railroad for such a project.

15.3 Limits of Cost Participation

15.3.1 Labor or material costs eligible for reimbursement:

1. Labor and employee direct fringe benefits to remove surface materials, track and soil from the crossing area.
2. All new or used materials installed and placed in the crossing area that are required for the crossing, less credits for similar materials recovered.
3. Labor, including employee direct fringe benefits, and company equipment or rented equipment used for repair of the crossing.
4. Traffic control measures including temporary signing, detour expense and cost for flagging.
5. Betterment through the use of welded rail, drains, surfacing panels, geotextile, or other materials recognized and accepted by the Railroads and Harbors Section as necessary for long term longevity and durability at the crossing.

15.3.2 Labor or material costs not eligible for reimbursement:

1. Patching potholes.
2. Removing snow and ice.
3. Overhead and indirect labor costs.
4. Ballasting, leveling, or other work outside the immediate crossing area, unless necessary because of approved crossing work.
5. Replacing speciality track work or signal equipment such as railroad diamonds, turnouts, switch heaters, electric locks etc. outside of the crossing area.

6. Charges to the railroad by the Office of the Commissioner of Railroads (s. 195.60 stats.)

15.4 Charging Costs

Region costs for design engineering and construction engineering are to be charged to Project I.D. 0656-22-85. Costs for temporary bypass roads, signing, detours and necessary paving on the crossing approaches and in the track zone are to be charged to Project I.D. 0656-22-86. Costs for crossing work performed by railroad forces are to be charged to a project I.D. established by the region.

WisDOT staff go to the DTSD website for the current charging policy.

LIST OF ATTACHMENTS

[Attachment 15.1](#) Process for a Crossing Repair Fund Project (No Federal Funds)

[Attachment 15.2](#) Sample Agreement for a Railroad Crossing Repair Fund Project