

Using *Railroad-DOT Mitigation Strategies* SHRP2 Case Study



Enhancing Implementation of Your Section 130 Program

Additional Information on FHWA's Section 130 Railroad-Highway Crossings Program

Administering the Federal Highway Administration's Railroad-Highway Crossings (Section 130) Program is a complex effort, often requiring extensive planning and negotiations between and among state departments of transportation (DOTs), Class 1 railroads, regional\short lines, municipalities, and, in some cases, public utility commissions.

Through the Community of Interest (COI) formed in support of the SHRP2 product, *Railroad-DOT Mitigation Strategies* (R16), case studies and webinars have been developed to clarify and address some of these complexities.

During a series of two webinars on the Section 130 program (recordings of which are available [here](#)), members of the COI raised numerous issues to FHWA regarding the permissible use of Section 130 funding, contracting, and other issues..

This case study provides specific information for practitioners. It is a companion to the case study, "*Leveraging Section 130 Funding through Railroad-DOT Mitigation Strategies*", available [here](#).

That document provides an overview of the Section 130 program, including general information on how Section 130 funds can be used, as well as key strategies to improve project delivery using these funds. It also includes a brief description of Michigan's successful Section 130 program.

Railroad-DOT Mitigation Strategies (R16)

Through the second Strategic Highway Research Program (SHRP2), a series of strategies were developed to improve coordination and collaboration between and among DOTs and their respective railroads.

The resulting product, *Railroad-DOT Mitigation Strategies* (R16), identifies seven areas where performance can be improved, saving money and time while improving safety by accomplishing enhanced and streamlined project delivery.

The Community of Interest (COI) was developed as part of R16 product implementation. The COI represents 20 states, six Class 1 railroads, one regional rail/short line holding company owning numerous railroads, the Federal Railroad Administration, the Federal Highway Administration, the American Association of State Highway and Transportation Officials, and the American Association of Short Line Railroads. Its members meet regularly in person and via webinars and conference calls to share best practices and identify common problem areas.

- **Responsibility and Section 130 funding for updating crossbuck assemblies at passive crossings**

Section 130 funding may be used by states for installing crossbuck assemblies at passive crossings through state-administered programs. States may each administer the Section 130 program differently, so each project may depend on the state's priorities, characteristics of the location, or if any separate agreements are held with the railroad.

- **Using Section 130 funding to replace obsolete signal technology**

The purpose of the Section 130 program is to eliminate hazards at public crossings including roadways, bike trails, and pedestrian paths. If the replacement of obsolete signal technology is required to meet current standards in coordination with a project to improve the safety at a rail crossing by eliminating hazards, it could be eligible for Section 130 funding. Section 130 cannot be used for maintenance and operation activities, however.

Fifty percent of a state's apportionment under 23 USC 130(e) is dedicated for the installation of protective devices at crossings. The remainder of the funds' apportionment can be used for any hazard elimination project, including protective devices.

- **Using Section 130 funding to upgrade a crossing from passive to active signals**

Section 130 funds are eligible to be used to upgrade a crossing from passive to active signals AND to improve current active crossings. It is a state-administered, data-driven program; therefore, a state can decide to prioritize funding for an upgrade from passive to active based on its needs.

- **Using Section 130 funding to create state highway rail grade crossing action plans**

Section 11401(d) of the Fixing America's Surface Transportation (FAST) Act allows for Section 130 funds to be made available "to provide states with funds to develop a state highway-rail grade crossing action plan...or to update a state action plan."



A grade crossing sign, commonly identified as a crossbuck sign is used on each highway approach to every highway-rail grade crossing, alone or in combination with other traffic control devices such as yield or stop signs, or automatic warning devices such as flashing lights or gates that descend to block the road and prevent traffic from crossing the tracks.

Source: Manual on Uniform Traffic Control Devices (MUTCD), 2009 Edition, chapter 8B. Photo of Claremont, CA, intersection courtesy, Michael Loehr



Railroad crossing in Lakeland, FL.

Photo courtesy, Michael Loehr

- Using Section 130 funding to pay for preliminary engineering**

In general, preliminary engineering, right-of-way acquisition, and construction activities are eligible for federal-aid funding. States may have state-specific laws or policies what will prevail.
- Using Section 130 funds to address blocked crossings**

The FAST Act includes provisions that allow Section 130 funds to be used when modifying railroad facilities to address blocked crossings. States determine project eligibility in coordination with their local FHWA Division Office. This is a new eligibility activity with more information on successful practices being researched.
- Contracting requirements when using Section 130 funds**

The FHWA’s regulatory requirements for railroad-highway projects are in Title 23 Code of Federal Regulations (CFR) Part 646. Section 646.2 states that the requirements apply “. . . to Federal-aid projects involving railroad facilities, including projects for the elimination of hazards of railroad-highway crossings, and other projects which use railroad properties or which involve adjustments required by highway construction to either railroad facilities or facilities that are jointly owned or used by railroad and utility companies.”

For preliminary engineering work and services related to these projects, the answers can be found in 23 CFR 646.216(b)(1). It provides FHWA policy for the procurement and use of engineering and design-related services. It is expected that the states and railroads will follow the procedures in 23 CFR 172 regarding the selection of consultants for engineering and design related services. Provisions for cases where a railroad is not adequately staffed are in 23 CFR 646.216(b)(2). FHWA may participate in the costs incurred under a railroad’s continuing or existing engineering services contract as long as the costs are not based on a percentage of the cost of construction (23 CFR 646.216(b)(2)).

For construction, 23 CFR 646.216(f)(1) outlines how construction may be performed, which includes force account work. In general, FHWA’s construction contracting requirements in 23 CFR Part 635 do not apply to railroad-let contracts (prevailing wage rate, Equal Employment Opportunities, FHWA-1273, etc.). Recipients, however, should be aware that FHWA’s Buy America requirements in 23 USC 313 and 23 CFR 635.410 apply to all projects funded under Title 23.6.

Relevant CFR Sections

23 CFR 646.216(b)(1).

As mutually agreed to by the State highway agency and railroad, and subject to the provisions of §646.216(b)(2), preliminary engineering work on railroad-highway projects may be accomplished by one of the following methods: (i) The State or railroad's engineering forces; (ii) An engineering consultant selected by the State after consultation with the railroad, and with the State administering the contract; or (iii) An engineering consultant selected by the railroad, with the approval of the State and with the railroad administering the contract.

23 CFR 646.216(b)(2).

Where a railroad is not adequately staffed, Federal-aid funds may participate in the amounts paid to engineering consultants and others for required services, provided such amounts are not based on a percentage of the cost of construction, either under contracts for individual projects or under existing written continuing contracts where such work is regularly performed for the railroad in its own work under such contracts at reasonable costs.

23 CFR 646.216(f)(1).

Construction may be accomplished by: (i) Railroad force account, (ii) Contracting with the lowest qualified bidder based on appropriate solicitation, (iii) Existing continuing contracts at reasonable costs, or (iv) Contract without competitive bidding, for minor work, at reasonable costs.

23 CFR 646.216(d)(1).

Where construction of a Federal-aid project requires use of railroad properties or adjustments to railroad facilities, there shall be an agreement in writing between the State highway agency and the railroad company.

- **Using contractors to perform Section 130 projects**

See 23 CFR 646.216(d)(1). Both the state DOT and railroad must consult on how highway-railroad projects are accomplished and have an agreement in place. Generally, the provisions for construction in 646.216(f) apply to railroad-highway projects. For construction contracts where the majority of the scope of work provides for highway construction, the requirements of 23 CFR Parts 635 and 636 apply.

- **Independent testing and certification of the crossing work**

In general, the federal-aid program requirements apply, regardless if Section 130 funding is assigned to a particular project or not. Each state administers its own state-specific program and state laws may differ.

23 CFR 646.216(d)(2) contains required provisions for state and railroad agreements. Ultimately, it is what the state and railroad agree upon.

- **Using existing contracts for grade crossings and other services that were competitively bid in accordance with federal regulations**

23 CFR 646.216(f)(1)(iii) (on previous page) allows railroads to use existing continuing contracts at reasonable costs. Since FHWA does not define the term “reasonable cost”, the State DOT and the railroad must reach agreement regarding the use of existing contracts.

- **Using contracts competitively bid by a short line railroad that is part of a larger holding company in accordance with the Federal Acquisition Regulations (FAR).**

See 23 CFR 646.216(b)(1) on the previous page. The FAR has no applicability here. The state DOT and the railroad should determine if the short line’s use of the holding company’s contract is an “existing or continuing contract” per 23 CFR 646.216(f)(1)(iii) (see previous page).

- **\$7,500 financial incentive to close crossings**

The \$7,500 financial incentive for crossing closures is set by Congressional statute in 23USC130(i), which states: “The amount of the incentive payment payable to a local government by a State under paragraph (1) with respect to a crossing may not exceed the lesser of—(A) the amount of the incentive payment paid to the government with respect to the crossing by the railroad concerned under paragraph (2); or (B) \$7,500.”

Increasing the incentive would require Congressional legislative action.

Relevant CRF Sections

23 CFR 646.216(d)(2).

The written agreement between the State and the railroad shall, as a minimum include the following, where applicable: (i) The provisions of this subpart and of 23 CFR part 140, subpart I, incorporated by reference, (ii) A detailed statement of the work to be performed by each party, (iii) Method of payment (either actual cost or lump sum), (iv) For projects which are not for the elimination of hazards of railroad-highway crossings, the extent to which the railroad is obligated to move or adjust its facilities at its own expense, (v) The railroad's share of the project cost, (vi) An itemized estimate of the cost of the work to be performed by the railroad, (vii) Method to be used for performing the work, either by railroad forces or by contract, (viii) Maintenance responsibility, (ix) Form, duration, and amounts of any needed insurance, (x) Appropriate reference to or identification of plans and specifications, (xi) Statements defining the conditions under which the railroad will provide or require protective services during performance of the work, the type of protective services and the method of reimbursement to the railroad, and (xii) Provisions regarding inspection of any recovered materials.

General Information. 23 CFR 140, Subpart I.

This subpart prescribes policies and procedures on reimbursement to the States for railroad work done on Federal-aid projects involving railroad facilities, including projects for the elimination of hazards of railroad-highway crossings, and other projects which use railroad properties or which involve adjustments required by highway construction to either railroad facilities or facilities that are jointly owned or used by railroad and utility companies.

- **Additional federal funding sources that can be used to assist local entities with their new funding responsibilities to maintain the number of crossings improved in a fiscal year**

Federal funds cannot be used for a federal match requirement unless otherwise provided by law [2 CFR 200.306(b)(5)]. Match requirements for Section 130-funded projects must be from a non-federal funding source. Several programs are available to fund rail crossing safety projects other than Section 130 funds that may not have a match requirement depending on those individual program eligibility requirements. These include the Highway Safety Improvement Program (HSIP), Surface Transportation Block Grant Program (STBGP), National Highway Performance Program (HPP), or FRA grants.

- **Information exchange at the regional level between the railroads and their FHWA and FRA counterparts**

FRA has regional offices; contacts are available at [here](#). FHWA has a division office in each state. Contacts are located [here](#).

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Relevant CFR Sections

23 CFR 635.

This part describes the FHWA policies, requirements, and procedures relating to federal-aid highway projects.

23 CFR 636.

This part describes the FHWA policies and procedures for approving design-build projects.

Additional Resources

- **R16 Case Study: Leveraging Section 130 Funding through Railroad-DOT Mitigation Strategies**, <http://shrp2.transportation.org/Documents/R16%20Section%20130%20Case%20Study%20Final%20508.pdf>.
- **R16 Innovation Library**, http://shrp2.transportation.org/Pages/R16_InnovationLibrary.aspx
- **Additional information** on the Section 130 program can be found at https://safety.fhwa.dot.gov/legislationandpolicy/fast/xing_qa.cfm.
- **Highway-Railway Grade Crossing Action Plan and Project Prioritization Noteworthy Practices** (FHWA, 2016) – State highway-rail grade crossing action plans identify specific solutions for improving safety at crossings; focus on crossings that have experienced multiple accidents or at high risk for such accidents; and cover a five-year period. FHWA and FRA developed this model grade crossing action plan for States that wish to update existing State Action Plans or develop a new State Action Plan to address grade crossing safety. <https://safety.fhwa.dot.gov/hsip/xings/fhwasa16075/>
- **FAST Act Railway-Highway Crossings Program Fact Sheet** (FHWA, 2016) – This resource provides a high-level overview of the Railway-Highway Crossings Program provisions under the FAST Act. <https://www.fhwa.dot.gov/fastact/factsheets/railwayhwycrossingsfst.cfm>
- **Other relevant federal code sections noted:** 23 USC 130 (e) and (i); 23 CFR 172; 23 USC 313; 2 CFR 200.306(b)(5)