

FY18 CONSOLIDATED RAIL INFRASTRUCTURE AND SAFETY IMPROVEMENTS (CRISI) GRANTS

Best Practices Debriefing Webinar

Presented by:

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June 18, 2019



Agenda


- 1 FY18 CRISI Program Overview
- 2 Best Practices
 - Project Narrative
 - Statement of Work (SOW)
 - Benefit-Cost Analysis (BCA)
 - Environmental Readiness
- 3 Recap & Reminders
- 4 Q & A



A blue-tinted photograph showing the silhouettes of several people sitting around a long table in a meeting room. They appear to be in a discussion, with one person gesturing. The background shows vertical window blinds.

POLLING QUESTION





FY18 CRISI Program Overview

FY18 CRISI – Program Overview

Grant Purpose

- To fund projects that improve the safety, efficiency, and/or reliability of intercity passenger and freight rail systems

CRISI – Recent & Upcoming Funding Opportunities

Authorization & Appropriations (M)

	FY16	FY17	FY18	FY19	FY20
Authorization	\$98	\$190	\$230	\$255	\$330
Appropriation	—	\$68	\$592.5	\$255	TBD

Status of Funding Opportunities

Year	Available Funding (M)	Status	
FY17	\$65	<input checked="" type="checkbox"/>	Announced awards in February 2019
FY18 (PTC)	\$250	<input checked="" type="checkbox"/>	Announced awards in August and December 2018
FY18	\$318	<input checked="" type="checkbox"/>	Announced awards on June 12, 2019
FY19	\$244	<input type="checkbox"/>	NOFO to be published

FY18 CRISI – Program Overview

Eligible Applicants

- State entities
- Public agencies or publicly chartered authorities
- Local governments
- Amtrak or other intercity passenger rail carrier
- Class II or III railroads
- Any rail carrier or equipment manufacturer in partnership with at least one state entity, public agency, and/or local government
- The Transportation Research Board (TRB)
- A university transportation center engaged in rail-related research
- A non-profit labor organization

**94 Eligible
Applications**

**Total of:
\$756.8 Million**

FY18 CRISI – Program Overview

Eligible Project Criteria

- **Wide Range of Rail Capital Projects**
 - Congestion mitigation
 - Ridership growth facilitation
 - Enhancements to multimodal connections
 - Improvements to short-line or regional railroad infrastructure
- **Railroad Safety Technology**
- **Track, Station and Equipment Improvements for Intercity Passenger Rail**
- **Grade Crossing Improvements**
- **Rail Line Relocation and Improvement**
- **Regional, State, Corridor Planning and Environmental Analyses**
- **Safety Programs and Institutes**
- **Research, Workforce Development, and Training – NEW for FY18**



FY18 CRISI – Program Overview

Non-Federal Match Requirements

- Federal share of total costs **shall not exceed 80 percent**
- First 20 percent of non-Federal match is **limited to cash contributions**
- In-kind contributions will be accepted beyond the first 20 percent

Average
matching
percent of
selected
projects was
57%

Selection Preferences for Matching Funds

- *50 percent or greater non-Federal match*
- *Non-Federal shares consisting of funding from multiple sources, demonstrating broad participation and cost sharing from affected stakeholders*

FY18 CRISI – Program Overview

Evaluation Criteria

- **Technical Merit:** Readiness, private sector participation, consistency with planning documents
- **Project Benefits:** Effects on system performance, safety, integration with other modes, ability to meet demand

Selection Criteria

- **Preference** for higher matching funds from multiple sources, maximized net benefits, and private sector participation
- **Key Departmental Objectives:**
 - Supporting Economic Vitality
 - Leveraging Federal Funding
 - Preparing for Future Operations/Maintenance Costs
 - Innovative Approaches to Safety and Project Delivery
 - Accountability





Best Practices

Best Practices – Helpful Hints

- Read the Notice of Funding Opportunity (NOFO) completely and carefully to understand the criteria for eligibility and selection, and what information each application must include
- FRA has identified three primary areas where applications not selected for funding typically demonstrate deficiencies:
 - Project Narrative
 - Statement of Work (SOW)
 - Benefit-Cost Analysis (BCA)



FEDERAL REGISTER
The Daily Journal of the United States Government

Notice

Notice of Funding Opportunity for Consolidated Rail Infrastructure and Safety Improvements
A Notice by the Federal Railroad Administration on 07/19/2018

PUBLISHED DOCUMENT

AGENCY:
Federal Railroad Administration (FRA), Department of Transportation (DOT).

ACTION:
Notice of Funding Opportunity (NOFO or notice).

SUMMARY:
This notice details the application requirements and procedures to obtain grant⁽¹⁾ funding for eligible projects under the Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program. CRISI Program funding under this notice is provided by the Consolidated Appropriations Act, 2018, (2018 Appropriation). Funding for positive train control (PTC) systems deployment included in the 2018 Appropriation is provided under a different NOFO published on May 18, 2018 (CRISI PTC NOFO). Applicants may apply for funding for PTC system elements under this NOFO as well if such elements are otherwise eligible under the CRISI Program. The opportunities described in this notice are made available under Catalog of Federal Domestic Assistance (CFDA) number 20.325, "Consolidated Rail Infrastructure and Safety Improvements."⁹

DOCUMENT DETAILS

Printed version:
PDF

Publication Date:
07/19/2018

Agencies:
Federal Railroad Administration

Dates:
Applications for funding under this solicitation are due no later than 5:00 p.m. EDT, September 17, 2018. Applications received after 5:00 p.m. EDT on September 17, 2018 will not be considered for funding. Incomplete applications will not be considered for funding. See Section D of this notice for additional information on the

Document Type:

The background of the slide is a blurred photograph of a railway track. The tracks run horizontally across the lower half of the image. Above the tracks, there is a complex network of overhead power lines and support structures, including tall metal poles and cross-arms. The entire scene is captured with a motion blur effect, suggesting a train is moving quickly. The color palette is a monochromatic blue-grey, giving it a professional and industrial feel.

Best Practices – Project Narrative

Best Practices – Project Narrative

Project Narrative Outline

- I. Cover Page
- II. Project Summary
- III. Project Funding
- IV. Applicant Eligibility
- V. Project Eligibility
- VI. Detailed Project Description
- VII. Project Location
- VIII. Evaluation & Selection Criteria
- IX. Project Implementation & Management
- X. Environmental Readiness

- ☑ Structure your project narrative in accordance with the outline specified in the NOFO
- ☑ Include all elements identified in the outline
- ☑ Follow the instructions for each element
- ☑ Adhere to 25-page limit

Best Practices – Project Narrative

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- Indicate if an application for the project has been submitted previously to another Federal grant program – include the program and year

Best Practices – Project Narrative

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- ☑ Briefly describe the project **in 4 to 6 sentences**, its anticipated benefits, and the transportation challenges the project will address
- ☑ **Think of this section of the application as your elevator pitch for the project to the DOT Secretary and FRA Administrator**

Best Practices – Project Narrative

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- ☑ Only include eligible costs
- ☑ Specify each source of non-Federal match
- ☑ Provide details about in-kind match
- ☑ Indicate public- vs. private-sector match
- ☑ Describe the non-Federal funding arrangements
- ☑ Attach funding commitment letters
- ☑ Identify if the proposed match will not be available until a certain date or if funds must be spent by a deadline



Best Practices – Project Narrative

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- ☑ Thoroughly discuss the transportation challenges and benefits
- ☑ Include data to support project benefits
- ☑ Describe how project components are related and will be sequenced
- ☑ Include photographs or diagrams
- ☑ Identify all host railroads, operators, and beneficiaries

Best Practices – Project Narrative

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- ☑ Identify cities, counties, and states where project is located
- ☑ Include a map of the project
- ☑ Identify railroad mileposts
- ☑ For grade crossing projects, include the U.S. DOT National Highway-Rail Crossing Inventory number

Best Practices – Project Narrative

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- IX. Project Implementation & Management
- X. Environmental Readiness

- ☑ Include a separate section in the project narrative focused on how the project meets each of the evaluation and selection criteria
- ☑ **DO NOT** rely solely on the contents of the “detailed project description” section to satisfy this requirement — it is OK to repeat key points in this section
- ☑ Quantify benefits whenever possible

Best Practices – Project Narrative

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- IX. Project Implementation & Management**
- X. Environmental Readiness

- ☑ Highlight applicant’s past experiences managing and overseeing similar projects, including FRA- or DOT-funded projects
- ☑ Describe expected arrangements for project contracting, contract oversight, change-order management, risk management, and conformance with Federal requirements for progress reporting

Best Practices – Project Narrative

Project Narrative Outline

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- X. Environmental Readiness**

- Document environmental work, either initiated or completed



Best Practices – Statement of Work

Best Practices – Statement of Work (SOW)

Federal Railroad Administration
 U.S. Department of Transportation
 August 30, 2016 (final)

CAPITAL COST ESTIMATING

GUIDANCE FOR
 PROJECT SPONSORS

- ☑ Utilize FRA’s Standard Cost Categories as a way to organize the scope of work and budget
 - <https://www.fra.dot.gov/eLib/details/L17452>
- ☑ Ensure consistency among the project narrative, statement of work, benefit-cost analysis, and other application materials

FRA MAIN WORKSHEET								Issue Date 5/4/16	
Grantee Name						Today's Date		8/28/14	
Project Name and Location: Rail Project A, Two cities with rural in-between						Yr of Base Year \$		2014	
Current Phase : Final Design, Ready to Procure Construction						Yr of Revenue Ops		2017	
Standard Cost Category	Unit	Quantity	Base Year Dollars				Percent of Construction Cost	Percent of Total Project Cost	YOE Dollars Total (X000) (from Inflation Worksheet)
			Without Contingency (X000)	Allocated Contingency (X000)	TOTAL (X000)	Unit Cost (X000)			
10 Guideway & Track Elements	Lineal Miles of Guideway	105	1,520,000	140,000	1,660,000	15,810	69%	52%	1,718,100
10.010 Guideway: At-grade exclusive right-of-way	Lineal Miles of Guideway	100	550,000	50,000	600,000	6,000			
10.020 Guideway: At-grade semi-exclusive (allows cross-traffic)	Lineal Miles of Guideway		0		0				
10.030 Guideway: At-grade in mixed traffic	Lineal Miles of Guideway		0		0				
10.040 Guideway: Aerial structure	Lineal Miles of Guideway		0		0				
10.041 Bridges	Lineal Miles of Guideway		0		0				
10.042 Viaduct	Lineal Miles of Guideway		0		0				
10.043 Other Structure	Lineal Miles of Guideway		0		0				
10.044 Unspecified	Lineal Miles of Guideway		0		0				
10.050 Guideway: Built-up fill	Lineal Miles of Guideway		0		0				
10.060 Guideway: Underground cut & cover	Lineal Miles of Guideway		0		0				
10.061 Cut & Cover Guideway Soft Soils	Lineal Miles of Guideway		0		0				
10.062 Cut & Cover Guideway Hard Soils	Lineal Miles of Guideway		0		0				
10.063 Cut & Cover Guideway Vent Soft Soils	Lineal Miles of Guideway		0		0				
10.064 Cut & Cover Guideway Vent Hard Soils	Lineal Miles of Guideway		0		0				
10.065 Unspecified	Lineal Miles of Guideway		0		0				

Best Practices – Scope, Schedule & Budget

- ✓ Organize the scope of work into discrete and logically sequenced tasks
- ✓ Provide appropriate timing for tasks
- ✓ Identify the deliverables required to communicate progress and completion of tasks to FRA
- ✓ Check the budget to ensure numbers are consistent with cost information submitted in forms and other areas of the application

STATEMENT OF WORK

[insert applicant/grantee name]

[insert project name]

[insert NOFA name]

I. BACKGROUND

***Instructions:** The "Background" section of the SOW is intended to provide a consistent frame of reference to the applicable solicitation and funding source of all grants/cooperative agreements awarded funding by the FRA. This section also provides high-level overview information regarding the project and applicant/grantee. Approximately 3-4 paragraph in length.*

II. OBJECTIVE

***Instructions:** The "Objective" section of the SOW is intended to provide a clear description of the underlying transportation problem that the project will address; the work that will be accomplished under the grant/cooperative agreement; the end-state of the project, and the public benefits that the project is intended to achieve.*

III. PROJECT LOCATION

***Instructions:** The "Project Location" section of the SOW is intended to provide information related to the geographic scope of the project, as well as to identify important related intercity corridors or service. The project location should be specific and detailed. Planning projects should note where the project is likely to be deployed.*

IV. DESCRIPTION OF WORK

***Instructions:** The "Description of Work" section breaks the scope of work for the project into discrete and delineable tasks. If the FRA-funded-project is part of a larger effort, describe that larger effort, but link tasks specifically to the FRA-funded portion of the project. Be clear regarding the work to be done in each task and be sure tasks can be linked to deliverables and timelines. Use the guidance below to develop this section.*

Task 1: Detailed Project Work Plan, Budget, and Schedule

Task 1 generally includes the following activities/deliverables: the Grantee will prepare a Detailed Project Work Plan, Budget, and Schedule for the follow-on tasks, which may result in a revised statement of work. The project work plan will describe, in detail, the activities and steps necessary to complete the tasks outlined in the statement of work. The work plan will also include information about the project management approach (including team organization, team decision-making, roles and responsibilities and interaction with FRA), as well as address quality assurance and quality control procedures. In addition, the work plan will include the project schedule (with grantee and agency review durations), a detailed project budget, and an environmental class of action recommendation memorandum (if applicable). If the Grantee



Best Practices – Benefit-Cost Analysis

A blue-tinted photograph showing the silhouettes of several people sitting around a long table in a meeting room. The people are engaged in conversation, with some gesturing. The background consists of vertical window blinds.

POLLING QUESTION



BCA – Overview of Steps

1. Specify your project's base case, alternate case, and timeline
2. Show how your project's alternate case will result in specific effects (i.e., project benefits)
3. Break down effects into the smallest possible sub-elements
4. Assign values to the effects using USDOT's *BCA Guidance*
5. Sum the costs and benefits separately
6. Discount costs and benefits (at 7% rate)
7. Calculate results

BCA – Scope of Analysis

- The base case reflects the status quo — i.e., the world as it exists today
- The alternate case (i.e., “build scenario”) is the proposed project
 - An application for final design or construction should present a single project
 - Multiple projects need multiple analyses
 - Avoided costs of alternatives not taken are NOT benefits
- The timeline must be appropriate for the proposed project
 - Match the useful life of the project, but not longer than 30 years
 - Projects with useful life beyond 30 years will have residual value (bridges in particular) → Calculate with straight line depreciation

BCA – Scope of Analysis

- Examine **only** the differences between the base case and alternate case
- These differences should reflect reality

Examples:

- Intercity passengers will likely change modes if their station is unavailable, while commuters are more likely to divert to another nearby station
- Host railroads will impose speed/weight restrictions before shutting down completely
- Rolling stock will have residual value at the end of its useful life



BCA – Benefits & Costs

- The *marginal* effects of the alternate case are the project benefits
 - Marginal effects can also be undesirable outcomes, which should be included as negative dollar amounts
- The total cost of constructing the project *as well as operating and maintaining (O&M) it for the full timeline* are the project costs
 - O&M costs on new equipment and infrastructure are costs
 - Changes to existing O&M costs are regarded as project benefits (whether positive or negative)
 - Residual value for remaining useful life is a benefit, **NOT** subtracted from costs

BCA – Development

- Provide documentation for inputs, growth rates, and traffic volumes
- Break down marginal effects into the smallest possible sub-elements

Example – Bridge repairs will improve travel times and emissions:

- Removal of slow orders, improving through speeds (travel time savings)
- Reduced wait time at the approaches (travel time savings and emissions from idling)
- Decreased delays at nearby sidings along the corridor (travel time savings and emissions)



BCA – Modal Diversion

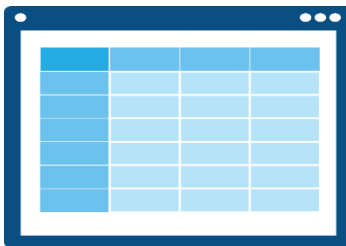
- Modal diversion is a marginal choice; only count marginal benefits
- New/induced users value the service less than existing users (Follow USDOT'S *BCA Guidance*)
- Benefits from avoided rail-to-highway diversion could include:
 - Decrease in highway congestion
 - Less wear and tear on pavement and bridges
 - Lower harmful emissions
 - Improved safety outcomes
- Avoiding passenger revenue losses is a transfer, NOT a benefit



BCA – Guidelines Recap

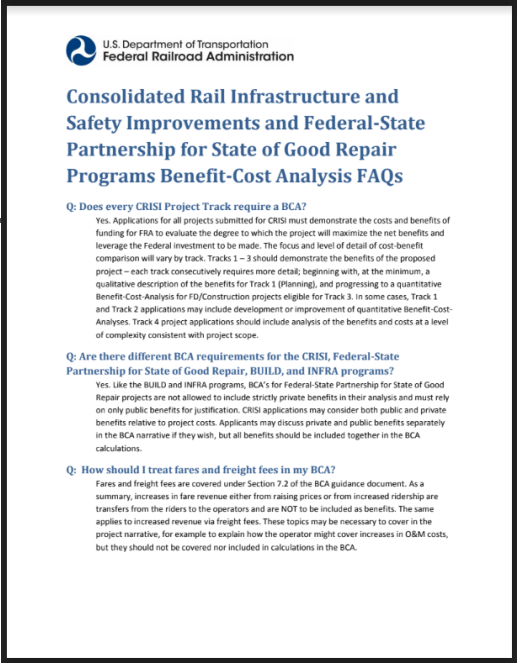
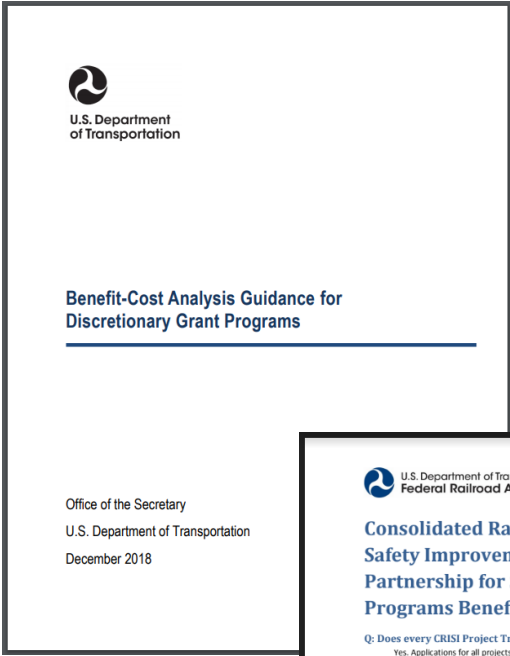
For all CRISI grant applications:


- ✓ Document your assumptions in as much detail as possible
- ✓ If the project has separable elements, report benefits and costs of each sub-project separately
- ✓ If your BCA includes modal diversion, include YOUR passenger counts and Annual Average Daily Traffic (AADT)
- ✓ ***Must include an unlocked Excel spreadsheet that clearly shows your calculations and discounting***



BCA – Guidance / Online Resources

- Follow USDOT’s *BCA Guidance*, available at:
<https://www.transportation.gov/office-policy/transportation-policy/benefit-cost-analysis-guidance>
- For rail-specific examples on how to apply the *BCA Guidance*, refer to FRA’s BCA FAQs available at:
<https://www.fra.dot.gov/eLib/Details/L19367>



A dark, blue-tinted photograph of a railway track receding into the distance under a cloudy sky. The track is the central focus, leading the eye towards the horizon. The sky is filled with dramatic, layered clouds, and the overall mood is somber and contemplative.

Best Practices – Environmental Readiness

Environmental Readiness – NEPA

The environmental process, most commonly referred to as **NEPA**,* is required of all FRA-grant funded projects to document and substantiate our agency's decision to implement the project

- Submit with your CRISI grant application an approved NEPA document, if available and applicable from FRA, FTA, or FHWA
- If there is no previous NEPA documentation associated with the project, you are encouraged to consider the following in the grant application to the best of your knowledge:
 - Known project location and/or possible impacts to the human (e.g., historic, protected populations, noise and vibration) or natural (e.g., wetlands, air, species/habitat, floodplains) environment
 - Anticipated permitting needs (e.g., construction, Clean Water Act Section 404) or coordination/consultation (e.g., State Historic Preservation Officer)

* *The National Environmental Policy Act*

Environmental Readiness – NEPA

- Rely on FRA’s experience and expertise to determine the type of NEPA and level of documentation and coordination appropriate for your project — contact our experts!

Helpful Information Available on FRA’s Website

- FRA & NEPA Documentation: <https://www.fra.dot.gov/Page/P1149>
- FRA Recommended Trainings & Environmental Resources: <https://www.fra.dot.gov/Page/P1152>

This web page provides links to recorded webinars, trainings, and other resources that will be of assistance in preparing NEPA documents for rail projects

An aerial, high-angle photograph of a railway track system. The tracks run parallel to each other, receding into the distance. Overhead power lines and support structures are visible above the tracks. A signal light is positioned on the left side of the tracks. The background shows some buildings and trees, suggesting an urban or suburban setting. The entire image has a blue color cast.

Recap & Reminders

Recap & Reminders

- Always read the NOFO carefully
- Determine what a "successful" project will look like
- Use the checklist with the application requirements in the NOFO as you complete your application
- Address all of the evaluation and selection criteria on which you will be rated
 - By clearly and directly responding to the criteria, your application will be easier to read and evaluate
 - Don't bury key points!



Recap & Reminders

- Verify that all budget figures match corresponding figures cited in different parts of your application package – such as the cover sheet, SOW, Project Narrative, and various forms
 - Numbers in columns and rows should add up properly in budget tables
 - Only include project costs that are expected to be incurred *after* grant selection
- Name key partners, indicate in-place agreements, and include letters of support
- Have an objective “cold reader” — i.e., an individual unfamiliar with the grant application — review your final document before submission

An aerial, high-angle photograph of a railway track system, rendered in a monochromatic blue color scheme. The tracks run parallel to each other, receding into the distance. Overhead power lines and support structures are visible, creating a complex geometric pattern. The surrounding area includes some greenery and buildings, suggesting an urban or suburban setting. The text 'Q & A' is prominently displayed in the center of the image in a white, bold, sans-serif font.

Q & A

A blue-tinted photograph showing the silhouettes of several people sitting around a long table in a meeting room. They appear to be in a discussion, with one person gesturing. The background shows vertical window blinds.

POLLING QUESTION



THANK YOU

Points of Contact:

CRISI Program: Frances Bourne

- Frances.Bourne@dot.gov

Grant Application Processing: Amy Houser

- Amy.Houser@dot.gov

BCA: Nate Vomocil

- Nathan.Vomocil@dot.gov

Environmental Readiness: Andréa Martin

- Andrea.Martin@dot.gov

*To learn more about FRA Competitive Discretionary Grant Programs, visit:
<https://www.fra.dot.gov/grants>*