



Consolidated Rail Infrastructure and Safety Improvements Program (FY 2018) Benefit-Cost Analysis FAQs

Q: Does every Project Track require a BCA?

Yes. Applications for all projects submitted for CRISI must demonstrate the costs and benefits of funding for FRA to evaluate the degree to which the project will maximize the net benefits and leverage the Federal investment to be made. The focus and level of detail of cost-benefit comparison will vary by track. Tracks 1 – 3 should demonstrate the benefits of the proposed project – each track consecutively requires more detail; beginning with, at the minimum, a qualitative description of the benefits for Track 1 (Planning), and progressing to a quantitative Benefit-Cost-Analysis for FD/Construction projects eligible for Track 3. In some cases, Track 1 and Track 2 applications may include development or improvement of quantitative Benefit-Cost-Analyses. Track 4 project applications should include analysis of the benefits and costs at a level of complexity consistent with project scope.

Q: Are there differences between a CRISI BCA and a TIGER or INFRA BCA?

Yes. In the past, TIGER and INFRA/FASTLANE rail project BCA's were not allowed to include strictly private benefits in their analysis and had to rely on only public benefits for justification. CRISI applications may consider both public and private benefits relative to project costs. Applicants may discuss private and public benefits separately in the BCA narrative if they wish, but all benefits should be included together in the BCA calculations.

Q: How should I treat fares and freight fees in my BCA?

Fares and freight fees are covered under Section 7.2 of the BCA guidance document. As a summary, increases in fare revenue either from raising prices or from increased ridership are transfers from the riders to the operators and are NOT to be included as benefits. The same applies to increased revenue via freight fees. These topics may be necessary to cover in the project narrative, for example to explain how the operator might cover increases in O&M costs, but they should not be covered nor included in calculations in the BCA.

Q: Are there any rail-only benefit types to be aware of when developing my BCA?

No. General benefit categories for transportation and infrastructure projects are detailed in the Department's BCA guidance, although how they are applied may vary between modes.

For example, safety benefits for a highway project usually take the form of reduced accidents or reduction of accident severity. For rail, safety benefits usually come in the form of diverting



freight traffic away from trucks and diverting passenger traffic away from personal vehicles, which are both less safe. An increase or decrease in risk-level specific to an activity (for example crude and other hazmat by rail) can be also considered, but can be difficult to quantify.

Q: How do I capture the value of travel time savings accurately?

Follow the directions as outlined in the BCA guidance. Applicants should be aware, however, that there are different values for both local and intercity travel for passenger rail projects. These values are provided in the Department’s Value of Travel Time Savings guidance¹. Additionally, the value of travel time savings listed in the tables of Appendix A are hourly values per person. For passenger rail projects, the applicant should provide documented ridership demand forecasts to support the calculations of the total amount of travel time saved for the project.

Q: How should agglomeration effects be handled?

Agglomeration effects are an important class of benefits, especially in passenger and freight rail, but they are often very difficult to quantify. In general, agglomeration effects should be handled qualitatively and only treated in the BCA narrative sections. If an applicant has sufficient local data at the necessary level to attempt to quantify these types of benefits, they may do so, but they are also strongly cautioned to make sure that they are indeed capturing new benefits not covered under other subheadings. Double counting of benefits is not allowed. If private or local data is used to justify benefits, please include that data in an appendix to the BCA.

Q: How should I treat state of good repair projects in my BCA?

At the time of publication, there is no accepted methodology for quantifying state of good repair benefits. If the applicant believes that such benefits may result from their project, they should discuss those benefits qualitatively in the BCA narrative.

Q: How should I treat standard cost categories? Are there rail-specific O&M categories FRA would expect to see in a CRISI BCA?

Standard cost categories should be treated as directed in the official BCA guidance. In general, there are no general O&M cost categories that apply only to rail projects, and all O&M costs associated with the project should be included.

If a project is a new construction, all ongoing costs that are required to maintain the project over its lifetime should be included in cost calculations. However, for projects that will rehabilitate, modify, or improve existing track, equipment, structures, or facilities, etc., there are often O&M cost reductions or increases as a result. In these cases, only the *net* effect on O&M costs should be included, as a benefit or disbenefit.



Q: Is there a rail-specific benefit-cost ratio (BCR)?

No. Please refer to Section 6 of the BCA guidance for instructions on how to properly calculate a benefit-cost ratio.

¹ <https://www.transportation.gov/office-policy/transportation-policy/revised-departmental-guidance-valuation-travel-time-economic>