

## 12.0 Ohio Rail Investment Programs

The federal Passenger Rail Investment and Improvement Act of 2008 requires a long range investment program for current and future freight and passenger rail infrastructure needs be included in each state rail plan. The long range investment program is to be comprised of a list of future rail capital projects expected to be undertaken or supported in whole or in part by the state. The program should also include a funding program for projects and the anticipated public and private benefits associated with each project.

In addition to the long range investment plan, Ohio has also developed a short-term rail investment plan which is comprised of those projects which ORDC has approved for grant or loan assistance from available state or federal funding programs. These projects have been evaluated with regard to their transportation and other benefits. Similar to the long range program, the short-term program will also change over time as additional projects are proposed and evaluated, and new funding sources are made available.

### 12.1 Long Range Investment Program

The State of Ohio has identified its long range investment program to be those projects necessary to implement the 3C corridor passenger rail project, the \$98 million TIGER award for the CSX National Gateway Project, as well as its annual allocations for its freight rail grant and loan programs and its allocation of federal highway safety funds for railroad-highway grade crossings. The projects Ohio has identified to carry out this plan are listed on the long range plan in **Appendix C**.

Ohio recognizes that projects included in its long range investment program will be revised as necessary based on future project identification, evaluation, timing, and allocation of state resources. As potential state and federal funding sources are identified, and the project development methodology described in this chapter is applied to newly identified projects, the projects will be added or revised as appropriate.

### 12.2 Ohio's Short-Term Rail Investment Program

Rail projects included in the initial Ohio Short-Term Rail Investment Program are listed in **Appendix D**. This listing does not include all safety projects or all ODOT Logistics and Distribution Projects.

The projects listed have been approved for assistance based on an evaluation of their respective benefits and the availability of funding. Current short-term projects are being funded either from ORDC's Rail Assistance Program or from flexible funding available from the federal ARRA stimulus program.

### 12.3 Benefits Calculator

Ohio is in the process of developing a quantitative tool capable of monetizing the benefits of rail projects. The intent of this tool is to evaluate the public benefits of public investments in rail projects. Using the tool, the costs of a project can be compared to the monetized benefits to determine whether the project represents an efficient use of public funds. The tool uses a net present value methodology of assessing benefits, such that a stream of future benefits are discounted to a current time period using an assumed discount rate. The tool is primarily intended to evaluate and prioritize rail projects against other rail projects. It represents a planning or a sketch level assessment. For major projects, a more detailed analysis would likely follow. The tool would also not provide the sole means by which to evaluate or prioritize rail projects. Projects would be assessed by a range of other criteria, including qualitative assessments and consistency with ODOT and ORDC policies for funding. The tool could also provide a means by which ODOT and ORDC staff members can discuss

the quantitative benefits of projects to stakeholders, such as the Ohio legislature or other government entities, such as the federal governmental and local officials.

The nature of the benefits that are quantified, as well as many of the data sources that are used in the model, are based roughly on the U.S. Department of Transportation's Notice of Funding Availability for TIGER Discretionary Grants published on June 17, 2009, in the U.S. Federal Register Vol. 74, No. 115. The TIGER grant application guidelines are assumed to represent the most current views of the USDOT on evaluating rail projects. In general, benefits are quantified along the following criteria:

- **State of Good Repair:** The tool considers the extent to which projects return transportation infrastructure to a state of good repair. Of particular emphasis is to estimate the project's impact on the future costs of maintaining transportation infrastructure.
- **Economic Competitiveness:** The tool considers the extent to which the proposed project promotes the efficiency of the transportation system. These benefits include changes to logistics costs, including the likely impacts on transportation operating expenses as well as inventory carrying costs. Where applicable and appropriate, the model also considers employment and economic growth that would result from projects.
- **Safety:** The safety benefits of proposed projects are monetized. Generally, the model assesses project implications for risks of death, injury, and monetary loss. The changes in risks are multiplied by monetary values applied to death, injury, and average monetary loss per accident.
- **Sustainability:** Impact of projects on air emissions are assessed and monetized. Changes in pollutants are forecasted and multiplied by the costs of the pollutants.

There are assumed to be six broad categories of rail projects that public agencies would be asked to be fund. The six categories are as follows:

- **Branch Line Rehabilitation and Acquisition Projects:** These projects involve the purchase or upgrade of lightly used rail lines. Work could include upgrading/replacing rail, replacing ties, and repairing/upgrading bridges, as well as a variety of other projects. The purposes of these projects can include: ensuring continued service on the rail lines and upgrading rail lines to accommodate 286,000 lb gross weight cars, upgrading tracks to a higher FRA track classification.
- **Grade Crossing Projects:** These are projects aimed at improving or eliminating highway-rail grade crossings.
- **Terminal Development:** These projects include the construction of new rail facilities. These could be facilities to transfer freight between modes, such as an intermodal container terminal, a bulk/break bulk transfer facility, or a rail/marine transfer terminal, or they could be projects aimed at providing rail access to new or existing business.
- **Mainline Capacity Enhancement Projects:** These projects expand the capacity of densely used rail lines, either to handle more trains per day or to handle a broader range of train speeds/services over the line. Work performed can consist of adding additional tracks, passing sidings, or upgrading the dispatch system on the line. Mainline capacity enhancements are often performed in conjunction with the establishment or expansion of passenger rail service.
- **Commuter Rail Service:** These projects represent the establishment or expansion of commuter rail service within a metropolitan area.
- **Intercity Passenger Rail Service:** These projects represent the establishment or expansion of rail service between metropolitan areas.

An approach has been developed to assess the benefits of each of these project types. The logic of the benefits assessment tool could also be adapted to other project type if necessary.

As of the completion of this rail plan, a preliminary benefits assessment tool has been developed. It is anticipated that it will undergo beta testing. After testing, it is anticipated that the state will consider revisions to the tool to further meet the needs of project development staff in order to evaluate projects in the future.