**Section 800.120 Project Analysis**

a) Economic Analysis

1) The Department will gather background, historical or projected cost and revenues on the line, including on-line and off-line costs, maintenance expenditures, and administrative overhead. Current or proposed operation including service frequency, crew size and engines are incorporated.

2) The Department will use shipper-provided information to estimate the impacts due to loss of rail service or benefits of new or improved rail service, including actual and projected car loadings, employment impacts and transportation costs.

3) The Department will use the information obtained in Section 800.120(a)(2) to determine the total benefits to be realized from the proposed project over a project life of at least five years which reflects a minimum service or use commitment required for State investment.

b) Engineering Analysis

1) The Department will perform a detailed field inspection of the project. It will sample track condition (a minimum of 5 samples per line) and assess each switch, crossing, and structure on a line. It will use the railroad's published engineering standards or appropriate AREA specifications (1985-86 Manual For Railway Engineering, Vol. I & II and Portfolio of Trackwork Plans, American Railway Engineering Association, Washington, D.C. 1985. This incorporation by reference does not include any subsequent amendments or editions) where required.

2) The Department will distribute shipper surveys to every shipper on a line to determine existing and projected transportation needs for which State assistance is requested. This proprietary information will be used to determine impacts of the loss or failure to provide service. Based on the inspection, the Department will develop a physical description of the project, including track, switches, crossings and structures, emphasizing the condition and load bearing capability of the components.

3) The project description will be used to estimate the necessary construction, rehabilitation and/or improvement costs to bring the line up to (or maintain) the appropriate Federal Railroad Administration (FRA) safety class standards (49 CFR 213 (1985)). The Department will perform or verify engineering cost estimates to determine the estimated cost of the project for necessary construction or rehabilitation. The development or verification shall include, as applicable, the land that must be acquired, the lineal footage of track to be constructed, improved, or rehabilitated, material items needed, number of units of materials, unit cost of materials, total materials costs, net salvage value of materials to be replaced, labor cost to install materials, special equipment costs, and the total net cost.

4) Based on these estimates the Department will determine the cost component of the benefit/cost analysis by calculating the capital investment required to implement the project, less the residual value of the project material after the project life has been realized.

c) Comparison of Economic Benefits to Project Costs

The Department will determine a project's eligibility based on a benefit/cost ratio. Failure of benefits to exceed costs will render a proposed project ineligible.

d) The applicant may respond to the preliminary review by providing additional benefit and cost information.