



RESEARCH PROJECT CAPSULE [19-4SS]

January 2019

TECHNOLOGY TRANSFER PROGRAM

The Impact of the Louisiana Rail Infrastructure: A System Analysis and Plan

JUST THE FACTS:

Start Date:
October 4, 2018

Duration:
15 months

End Date:
January 3, 2020

Funding:
SPR: TT-Fed/TT-Reg

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Sponsored jointly by the Louisiana
Department of Transportation and
Development and Louisiana State
University

POINTS OF INTEREST:

Problem Addressed / Objective of
Research / Methodology Used /
Implementation Potential

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PROBLEM

In order to best plan for future investment in Louisiana's rail system, an impact analysis is required to understand how to best incorporate rail infrastructure into the state's multimodal transportation vision.

This research will describe the current state of Louisiana's rail system and the potential for further development. It will identify key corridors that should be targeted for investment based on factors such as benefit/cost analysis, safety, and congestion mitigation.

OBJECTIVE

The objectives of this research include an updated mapping of Louisiana rail infrastructure with associated freight flow data; updates to the state rail plan per the Passenger Rail Investment and Improvement Act (PRIIA); determining funding sources for rail; and quantifying the current economic impact of rail in Louisiana.

METHODOLOGY

The research team will use descriptive analytics from a variety of data sources, including waybill data from rail companies (as available and appropriate so as to protect proprietary information). The data will be analyzed to identify and understand the strengths, weaknesses, opportunities, and threats to Louisiana's rail system.

The research team will review state rail plan guidance from the Federal Railroad Administration to make sure that all PRIIA requirements are met. The team will also review Louisiana's statewide transportation plan and freight mobility plan to make sure that the updated rail plan is integrated and consistent with the state's multimodal transportation vision.

The key performance assessment methods that will be used are "best practice" and "benchmarking." Best practice deals with technical efficiency, wherein a general assessment can be estimated through the ratio of selected outputs and inputs. Benchmarking focuses on key performance indicators, allowing deeper analysis of corridors for evaluation of existing operational and management processes.

IMPLEMENTATION POTENTIAL

This research will integrate and be consistent with the latest statewide transportation plan and freight mobility plan. It will provide a basic update of the state's existing rail plan, incorporating recommendations from the Federal Railroad Administration. Impact assessment of the existing rail corridors will account for projected economic and transportation growth, industrial outlook by sector, and demographic changes.



Figure 1
Louisiana railroads