

SHORT LINE RAILROAD Benefits Analysis (2024)



Supporting short line railroad capital improvements with a fully-funded grant program benefits both the general public and TN industries.

PUBLIC BENEFITS:

- Create shipping industry opportunities and jobs
- Enhance road safety by averting additional highway traffic
- Reduce emissions by lowering total vehicle miles traveled

SHIPPER AND SHORT LINE RAILROAD INDUSTRIES BENEFITS:

- Maintain shipping industry competitiveness
- Stay efficient and control costs (limit mode switches/reroutes)
- Improve fuel efficiency (train moving a freight ton is up to 4x more efficient than truck—a 75% decrease in GHG Emissions).

SYSTEM GOALS:

A 2021 study found a total investment of \$297M would:

- Upgrade Class 1 and Class 2 ties.
- Enhance rail tracks and bridges for 286k loadings.

FUNDING STATUS:

- Tennessee's Transportation Equity Fund (TEF) tax previously brought in \$13M annually → **currently \$3M**.
- TDOT unveiled a one-time funding allocation for short line rail authorities in 2021 → **total of \$85M**.
- Current funding gap of **\$210M** remaining → **plus recurring O&M costs of \$14M every 20 years**.

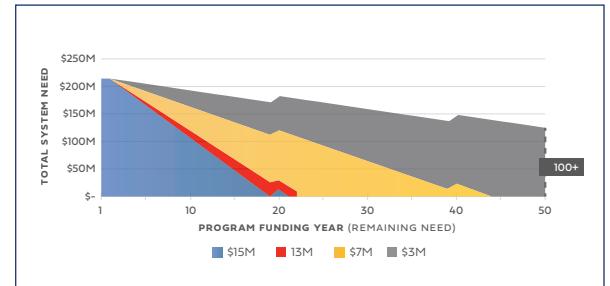
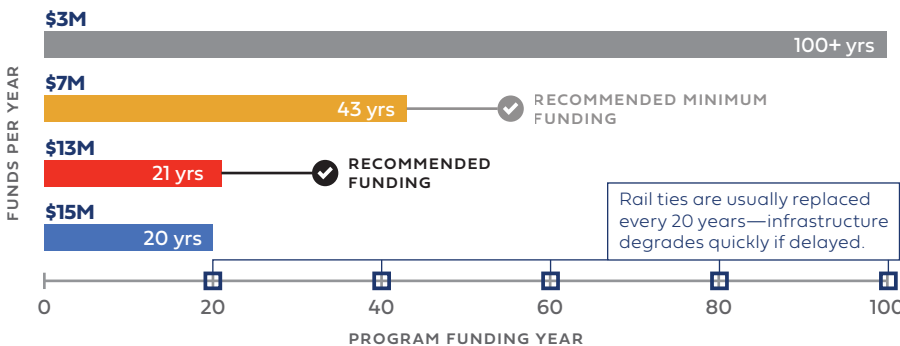
If not fully funded, freight rail lines may increase service rates as a way to transfer maintenance costs to cargo owners and shippers. Deferred rail infrastructure maintenance may eventually degrade safety, efficiency, and reliability, resulting in reduced levels of service for freight rail. This may force cargo owners and shippers to move their freight via other modes (such as truck) or to close their operations in the State and relocate somewhere else.

Estimated Public Benefits over 20 years of Increased Rail Funding (assume \$15M annually) Resulting from potential diversion from rail to truck:



Shipping Cost Savings.....	\$13.4M to \$26.7M
Highway Congestion Cost Savings.....	\$2.2M to \$4.3M
Pavement Maintenance Cost Savings.....	\$1.5M to \$2.9M
Highway Crash Cost Savings.....	\$1.3M to \$2.5M
Emissions and Noise Cost Savings	\$0.6M to \$1.3M

PLANNING-LEVEL FUNDING ALLOCATION:



With tie replacement costs, estimated at \$14M every 20 years, the time needed to upgrade the system to 286k would take 100+ years.

Funding at \$13M per year, the system is fully upgraded in 20 years with tie replacements in year 21.

Funding at \$7M per year, the system is fully upgraded in 41 years, including tie replacements at year 20. Adding tie replacements for year 40 would require funding to continue through year 43.

FUNDING RECOMMENDATION:

Fully fund the TEF at \$13M ANNUALLY → a \$10M increase.
System upgrades completed in under **20 years**

At a minimum, fund at **\$7M annually** (a \$4M increase). Lower annual funding will mean system upgrades take 40+ years—and result in expenditures needed for multiple tie replacement cycles to maintain the system's safety and reliability.

THE RECOMMENDED FUNDING SUPPORTS A STRONG SHORT LINE RAIL INDUSTRY THAT PROVIDES:



ECONOMIC BENEFITS (creates nearly \$40M in Economic Benefits to the general public and TN industries over 20 years)



ECONOMIC IMPACTS (supports over \$51M of economic activity annually that could be at risk if Short Line Rail service is reduced)