Eastern Connecticut Corridor Rail and Transit Feasibility Study: Fact Sheet

Purpose:

The Connecticut Legislature directed the Connecticut Department of Transportation (CTDOT) to conduct a feasibility study for expanding passenger rail service and ground transportation options in southeastern Connecticut. This effort, referred to as the Eastern Connecticut Corridor Rail and Transit Feasibility Study (ECRTS), investigates the feasibility of and market for the following transportation improvements:

- Extending the Shore Line East (SLE) rail service to the State of Rhode Island (RI) via the Northeast Corridor (NEC)
- Establishing a new passenger rail service from the City of New London to the City of Norwich
- Establishing a new passenger train station in the Town of Groton and the Borough of Stonington
- Extending other ground transportation systems in the eastern region of the state and providing improved connectivity between such systems and rail lines

The purpose of a feasibility study is to examine high-level existing and future conditions to determine the viability of potential new and expanded service; it is the first step in a data-driven decision-making process.

The Study Area:

The feasibility study's geographic area is a mix of urban, suburban and rural communities, spanning ten municipalities in two states through which the proposed rail service passes. This region has struggled with a structurally slower pace of job creation relative to established benchmarks (State of Connecticut and NEC) and its economic base is significantly less diversified compared to the larger NEC. Findings from the study's transit market analysis indicate an impending need for enhancements in public transit services, specifically bus and paratransit.



Legend

 Existing Amtrak Station Only
Existing Shore Line East/Amtrak Station
Existing Shore Line East Rail Line
Potential Shore Line East Extension
Transit Routes
Possible Conversion to Passenger Rail
Northeast Corridor (Amtrak)
Study Area Town

Existing Rail and Transit Service



ransi

Existing commuter rail service connects New London to other Connecticut municipalities west of New London via CTrail's SLE, which is anticipated to have service reduced in Fall 2023. Amtrak also operates intercity passenger rail service from southern Virginia to Boston, Massachusetts, stopping at New London, Mystic, and Westerly stations along the NEC.

The largest regional destinations are also served by a network of local bus, intercity bus, and ferry options that operate with one hour or longer headways, limited service in the mornings/evenings, and no Sunday service. However, Southeast Area Transit District (SEAT) is anticipated to reinstate Sunday service, extend hours of operation, and implement new routes in 2023/2024.







Findings: Public Outreach

Feedback received from public meetings, a survey, and topic-specific working groups (WG) demonstrate an appetite for increased public transportation service in the region, namely expanded hours of operation and increased frequency of service. Overall, the results of the public outreach effort presented substantial public support for enhanced and expanded transit and rail solutions in Southeast Connecticut.



Findings: New Passenger Rail Service Feasibility

The study examined the feasibility of implementing passenger rail along three corridors with existing track infrastructure. Each of the rail corridors, except for New London to Norwich via the Palmer Line, require crossing the Thames River Bridge, which is a federally regulated and navigable channel. The complexities of moveable bridge operations and Amtrak's future scheduling along the Thames River Bridge are key feasibility constraints. Only one additional train per hour in either direction across the bridge is feasible.

To serve the most people, businesses, and other regional destinations, the only two alignments studied further are the **Palmer Line and NEC**.



Findings: Improved Transit Service

Transit strategies, using fixed route and demand response service types, that could improve mobility in the study area include:



Increasing the frequency and travel speed along high-ridership routes, such as 30-minute frequency connecting New London/Groton and Norwich.



Implementing new routes to expand access to cost-burdened renters, creating a one-seat ride connecting the US Navy Submarine Base and Electric Boat, and providing competitive transit options during tourist seasons such as through seasonal service to Mystic.



Expanding hours to include earlier service, later service, and Sunday service on select routes. This may improve access to jobs, grocery stores, medical facilities, faith-based organizations, and other commercial activities.



Upgrading bus stop infrastructure at high-volume stops.

Findings: Potential Benefits to Expanding Public Transportation Services

Economic

Improving rail and transit services could offer an avenue for poverty reduction and improved economic outcomes for the study area, possibly providing better access to higher-paying jobs at a regional level.

Rail infrastructure improvements could encourage transit oriented development (TOD) across a considerable footprint of underutilized and vacant land from Norwich toward New London and Groton if zoning regulations are modified to enable TOD.

Environmental

If roadway congestion persists or worsens over time, improved rail and transit service to regional destinations could result in modeshift. In turn, the modeshift could result in an estimated 8,400 ton carbon dioxide reduction with transit service and fleet decarbonation strategies or a 20,000 ton reduction with rail strategies in both corridors.

Rail and bus enhancements could result in the abatement of up to 53 million vehicle miles traveled per year. That's almost 2,000 trips around the globe!

Public Health

Reduced travel by personal vehicle could result in decreased traffic congestion, wear-and-tear on roadway infrastructure, localized air pollution, and traffic fatalities.

The Federal Government recognizes areas that are overburdened and underserved as disadvantaged communities in this region.

In addition to low-income communities, areas of Montville, Norwich, Groton, and New London have legacy pollution, health, housing, and workforce development burdens that may be alleviated by improved rail and transit options.

At a high level, implementing additional commuter rail service along the NEC and new service along the Palmer Line could be possible given further analysis of the corridors' conditions. However, implementation could face significant challenges including but not limited to funding availability (both capital and operating), upgrades to track, structures, grade crossings, and the construction of new stations/reconstruction of existing stations to be compatible with operating equipment and to meet Americans with Disabilities Act (ADA) requirements.

Study Area Rail Corridor Capital and Operating Cost Estimates

	Corridor	Estimated Cost	
Est. Capital Costs (One Time)	SLE	\$245+ Million	
	Palmer Line	\$636+ Million	
Est. Operating Costs (Annual)	SLE	\$51 Million	
	Palmer Line	\$33 Million	

The service levels achieved by potential future rail service along the Thames River Corridor could be matched via transit solutions independent of pursuing commuter rail service. Raising SEAT's level of service along the Thames River Corridor could enhance connectivity for current and future residents, employees, and visitors, and it could be more cost- and schedule- effective to implement.

Study Area Transit Capital and Operating Cost Estimates

	Strategy	Estimated Cost
Est. Capital Costs	Standalone Bus	\$9 - 10 Million
(One Time)	Bus with Rail	\$9 - 10 Million
Est. Operating Costs	Standalone Bus	\$12.3 Million
(Annual)	Bus with Rail	\$11.7 Million

Conclusion

Fransit

Rail

Though strategies to improve rail and transit service in southeastern Connecticut are presented, they are preliminary findings. Further steps would be needed to advance project development, including additional study, planning, permitting, design, and funding. If one strategy or a combination of strategies were to be identified as viable upon further study and/or availability of funding, that strategy could move forward independently and be incrementally phased. Each strategy listed could be implemented, if feasible, as an individual project and proceed through the project lifecycle stages below. This phased approach would require further study and any next steps are currently unfunded.

