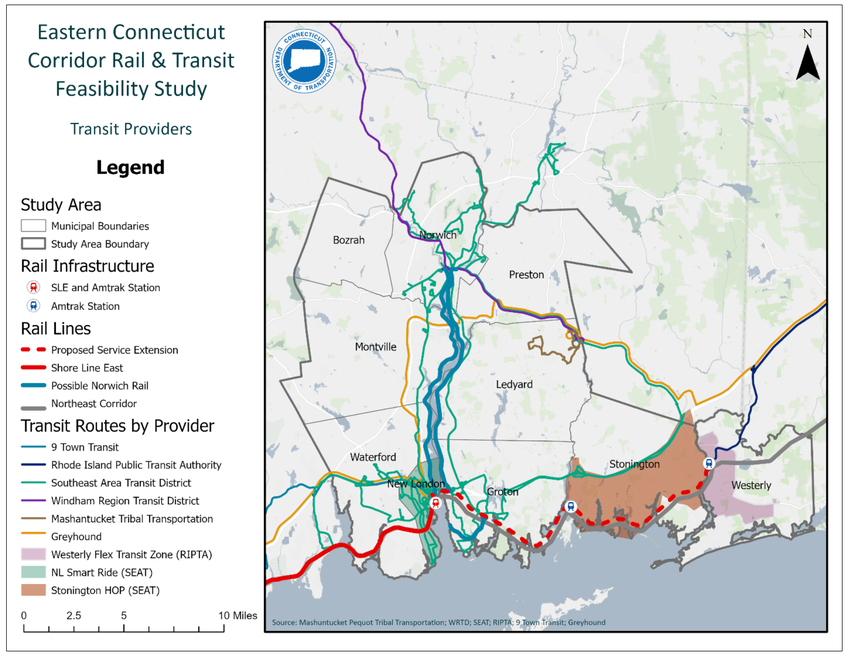
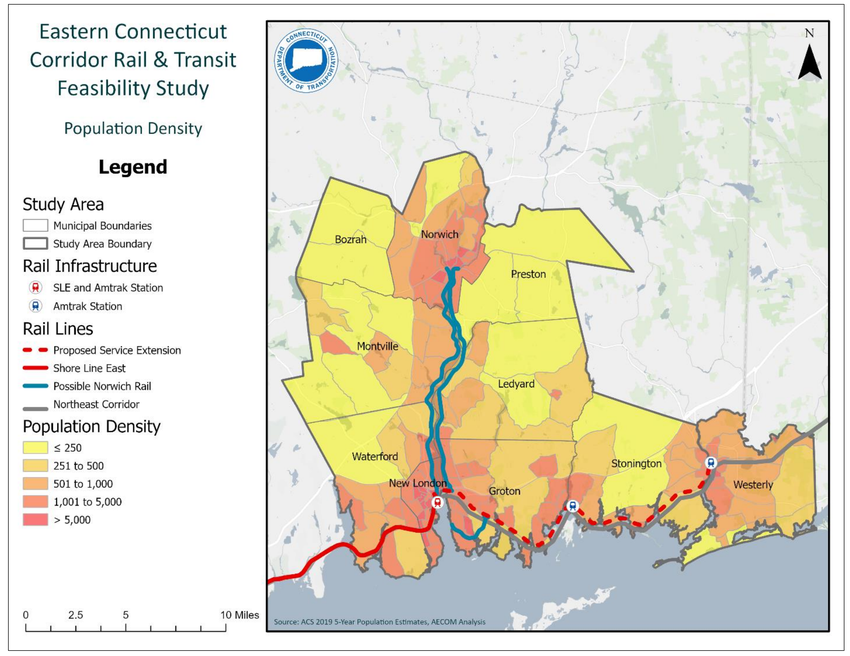
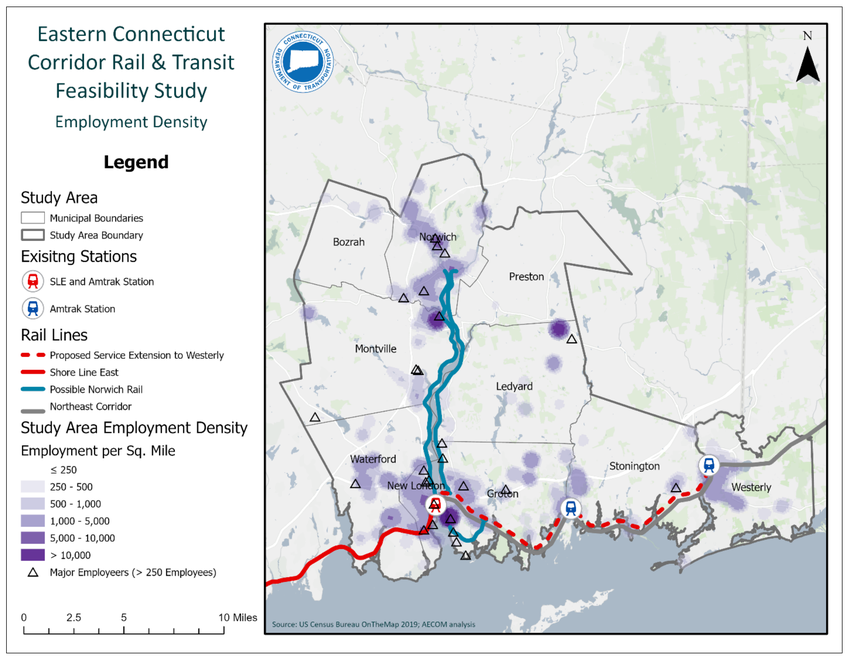
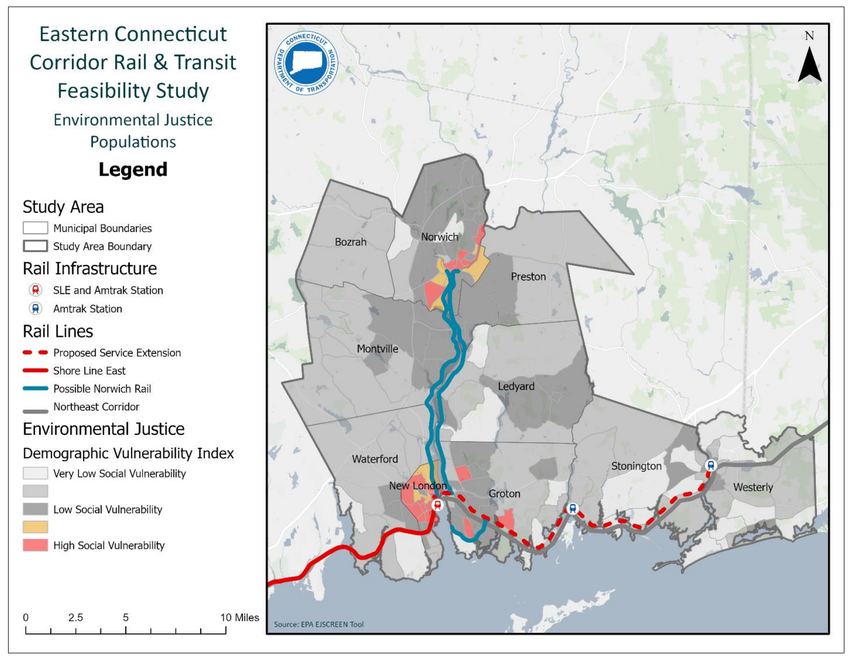
Transit Market and Engagement Findings









Feedback from public engagement efforts identified that existing public transportation options:

- Do not run frequently enough
- Have limited service on weekdays and especially weekends
- Do not provide fast service between regional nodes

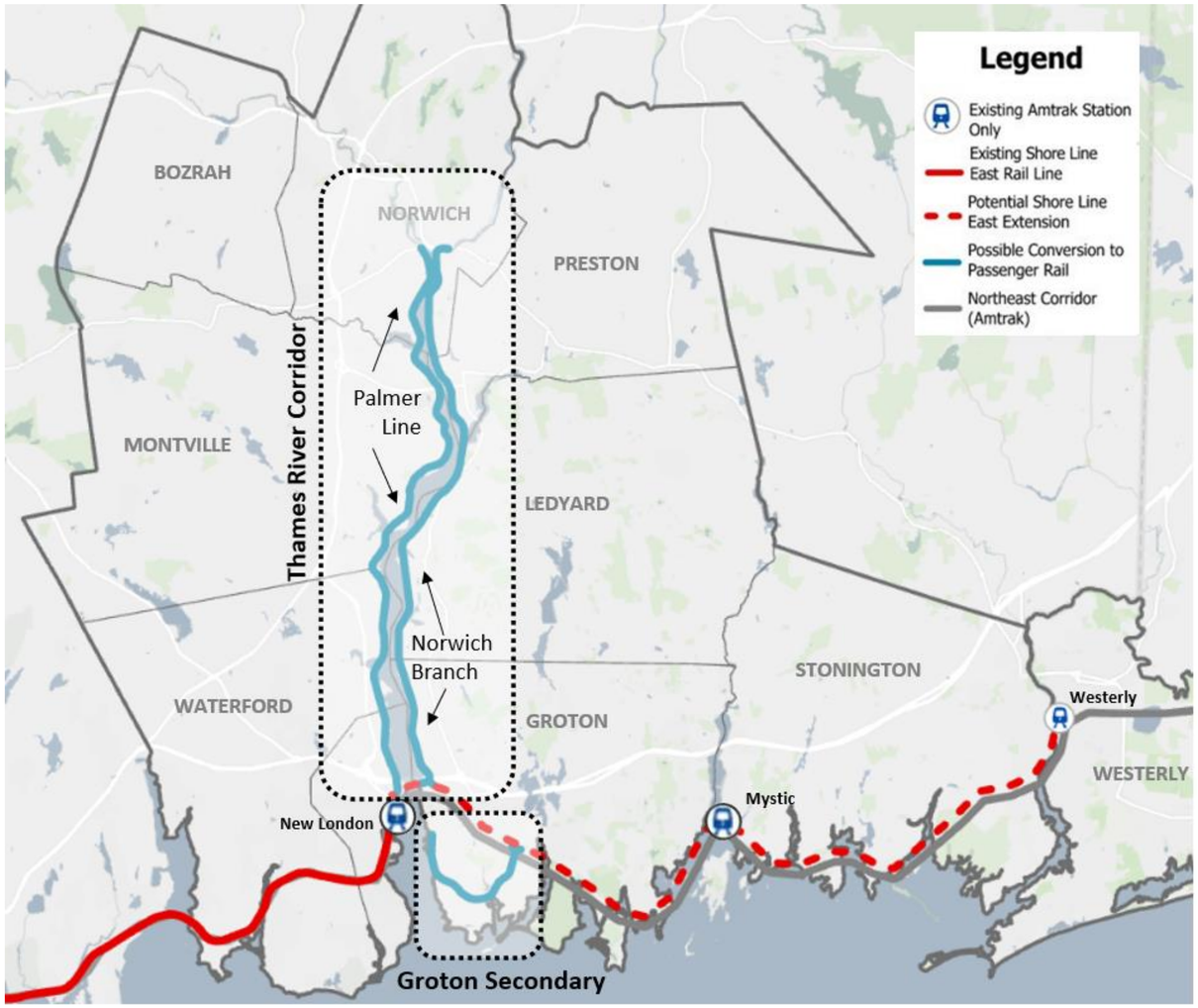
Study Area residents vocalized concern about:

- Congestion and traffic
- Lack of parking
- Affordable housing availability in the face of population/job growth
- Accessibility of high-paying jobs

Outreach Effort and Engagement Insights

	Engagement	Topics	Findings
Steering Committee	4 Milestone Meetings	• Project goals • Framework for future decision-making	• Receive feedback on drafts • Provide up-to-date information
Working Groups	Customer-focused, municipal, rail, and transit stakeholders	• Equity and customer needs • Economic development and station siting • Rail data, alignments, projections • Ground transportation options and connectivity	• Demand for more weekend service, longer service hours, increased frequency, more efficient routes, and better connectivity • Limited funding is a barrier, especially for operations • Microtransit has been embraced • Potential station locations congruent with future development
Major Employers and Anchor Institutions	15-20 Individual Interviews	• Transit demand • Employee TDM benefits • Parking • Employee travel patterns • Future plans	• Transit issues: infrequent service, limited hours, geographic gaps in system coverage • Appetite for rail, bus, and ferry options • Job growth with limited affordable housing is a concern
General Public	2 in-person meetings, 1 virtual meeting, and Public survey	• Input on proposed transit and rail improvements • Survey of where people live, common travel destinations • Desirable additions to the transportation network	• Concern about environmental, community and parking impacts • Value safety and economic growth/access to jobs • Expressed interest in more frequent transit, corridor electrification, and extending transportation services across the state

Preliminary Feasibility Assessment



The Study examined 4 rail alignments along 3 corridors to determine the feasibility of implementing passenger rail service.

- **All lines are technically feasible** for operations
  - Cost to upgrade infrastructure along the Palmer Line and Norwich Branch is comparable
- Thames River Bridge is a **key constraint**
  - Due to existing operations and Amtrak's future scheduling, only **one additional train per hour** in each direction can be accommodated east of New London
  - Service along the Norwich Branch, Groton Secondary, and SLE Extension each require passage over the bridge

To serve the largest transit market, passenger service along the **Palmer Line** and **NEC** were studied further

Recommended for Future Study:

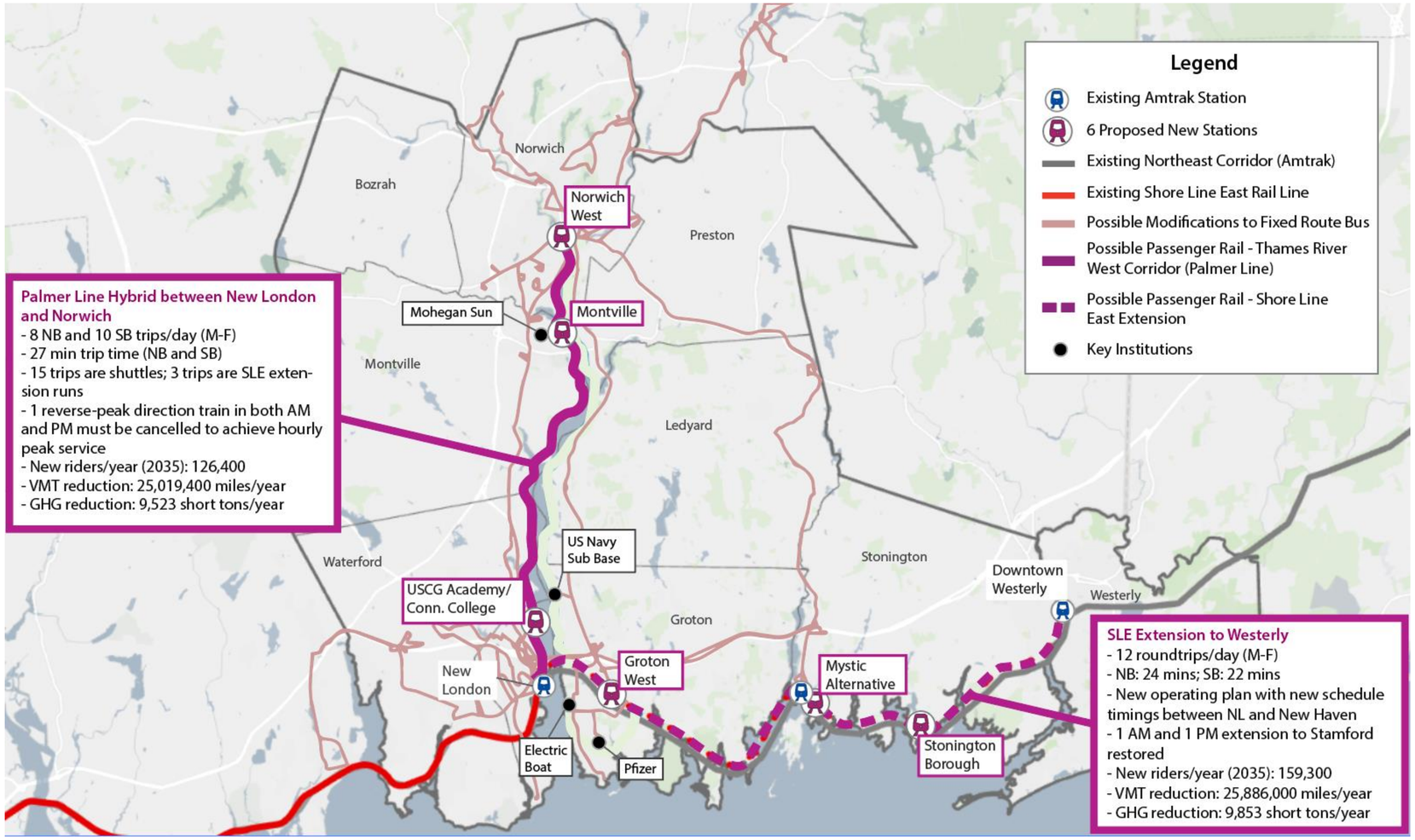
Addressing Regional Transportation Needs

→ **Short Term Strategies** → *Improving transit service could increase access to jobs, housing, and regional destinations more immediately.*

→ **Long Term Strategies** → *Implementing passenger rail service could take 7+ years to achieve, provided further study, funding, and permitting.*

Rail Service Plan

Passenger Rail Operations: Palmer Line & NEC



Rail Strategies total a capital investment of over **$1 billion** (2023 dollars).

NEC/SLE Extension

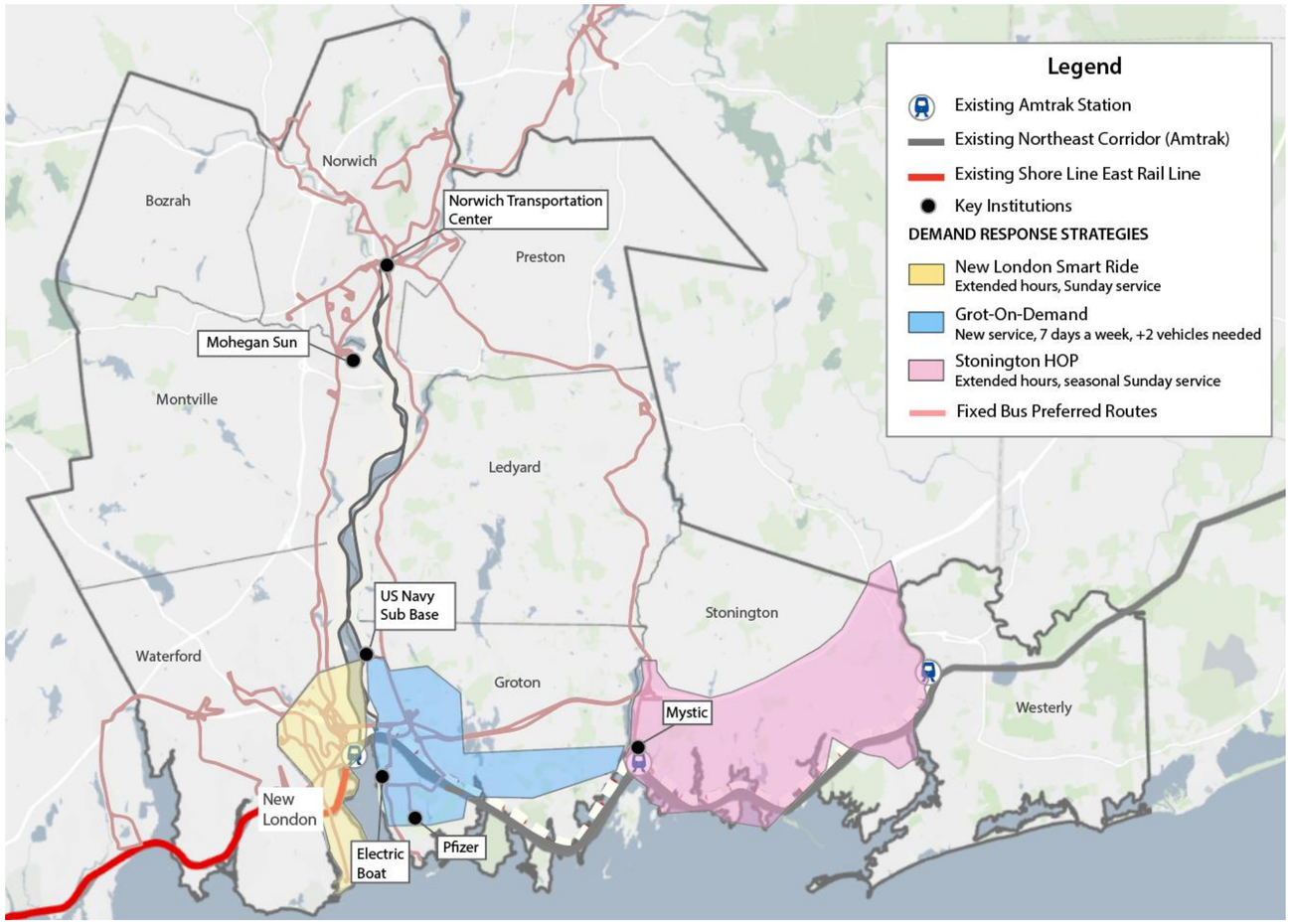
- Construction of 3 new stations with high-level boarding platforms
- A high level platform and track work would be needed in Westerly
- New trainset would need to be procured
- Track upgrades and electrification needed
- $243+ M Estimated Capital Costs
- $52 M Estimated Annual Operating Costs

Palmer Line

- Substantial improvements to rail infrastructure such as track, structures, and grade crossings
- 3 new train stations
- Yard space would need to be constructed
- New trainset would need to be procured
- $636+ M Estimated Capital Costs
- $43 M Estimated Annual Operating Costs

Transit Service Plan

SEAT Fixed Route & Demand Response Strategies



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.

Standalone Bus Strategies
Strategies independent of Rail
(*pictured above)*

Annualized Operations Cost, 2023 Dollars:
$12.3M (+48%)

Bus + Rail Strategies
Rail complementary strategies *(alignments change to serve stations, Sunday service implemented, duplicative service removed)*

Annualized Operations Cost, 2023 Dollars:
$11.8M (+42%)

Policy and Infrastructure Upgrades
Bus stops, vehicle procurement, roadway improvements

Capital Cost, 2023 Dollars:
$9-10M

Transit Oriented Development Analysis (TOD)

Compared to benchmark cities, the Study Area has:

- lower median income
- less job growth
- smaller share of professional jobs
- seen a smaller improvement in poverty

The Study Area has a housing affordability problem:

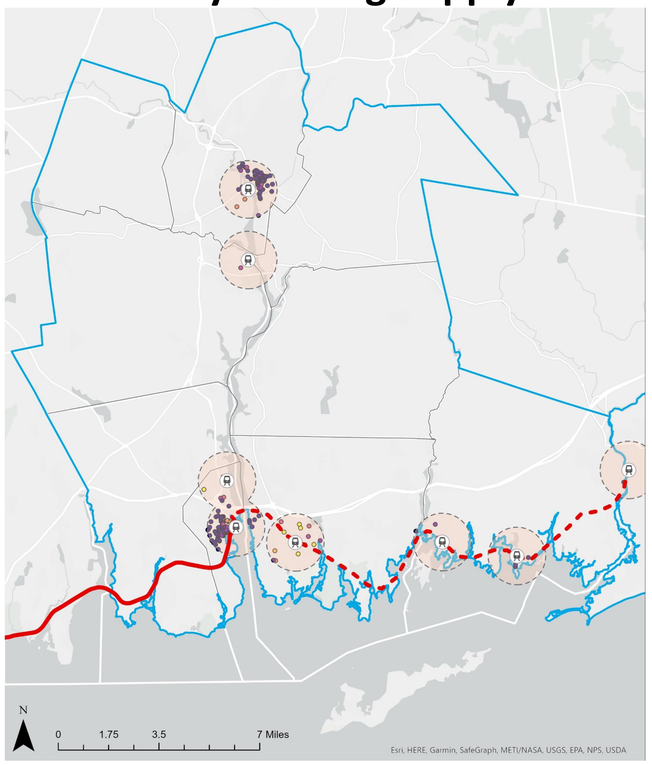
- 44% of all renters are cost-burdened (paying more than 30% towards housing)
- 25% of jobs pay a salary that make homeownership unattainable

Investment in rail and transit could be a catalyst for TOD and improving economic outcomes

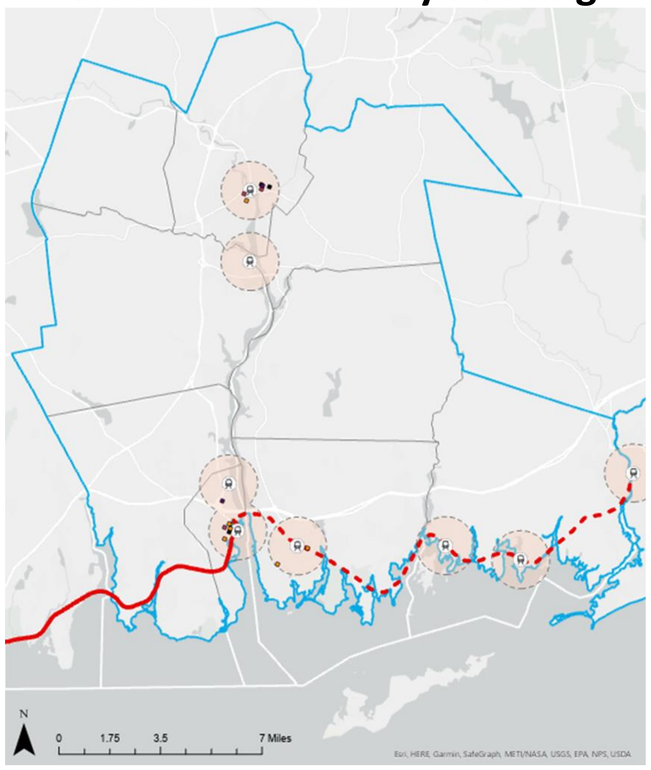
The Thames River Corridor is a good candidate for TOD with associated changes to zoning to enable it.

- Nearly 1,000 vacant housing units within ½ mile
- Demographic propensity for transit ridership (those living within ½ mile)
    - Young
    - Earn lower income
    - 70% of households are renters
    - 25% of renters don't have a vehicle

Multifamily Housing Supply



Affordable Multifamily Housing



Rail Construction Economic Impact

Investment in rail-related construction in these corridors is estimated to create:

4,500 jobs	$860M sales	$340M earnings
	2023 dollars	*2023 dollars*

Project Lifecycle

Additional steps in the project development lifecycle would be needed before any transit or rail strategies could be implemented. *The project development lifecycle for rail is depicted below.*

Systems Planning (1-2 years)	Project Planning (1-2 years)	Project Development (1-4 years)	Final Design (2-6 years)	Construction (2-6 years)	Operation (ongoing)
• Existing Conditions Analysis • Visioning and Goal Setting • Feasibility Study	• Feasibility Study • Draft Purpose and Need • Preliminary Environmental Review • Alternatives Analysis	• Environmental Documentation • Identify Funding • Inclusion in the Long Range Transportation Plan • Survey • Preliminary Engineering	• Right of Way Acquisition • Permitting • 60%, 90%, & 100% Design • Specifications and Cost Estimates • Project Agreements	• Stations • Infrastructure • Site Preparation • Construction • Substantially Complete • Construction Close Out	• Maintenance and Operation of the System • State of Good Repair • Identify Areas of Improvement

If one strategy or a combination of strategies were to be identified as viable upon further study, that strategy could move forward as an independent project, proceed through the project lifecycle stages, and be incrementally phased.