

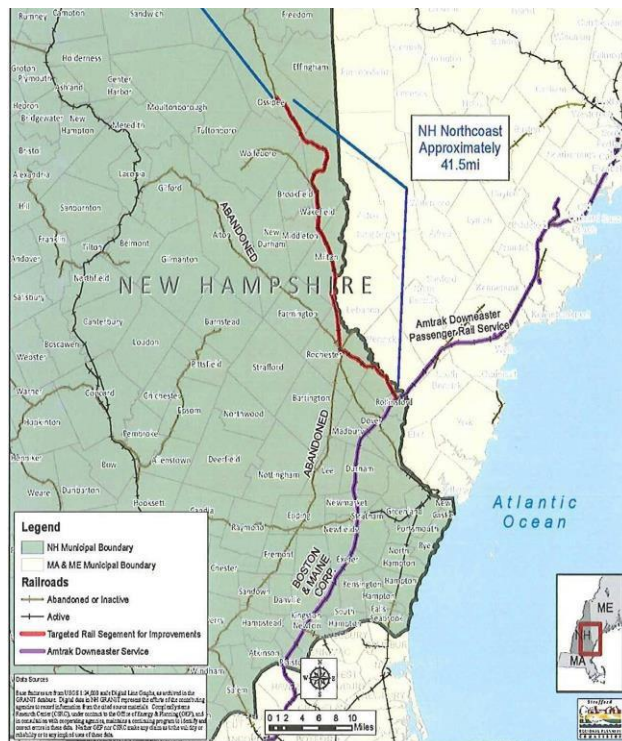
**New Hampshire Northcoast Railroad (NHN)
Bridge & Culvert Repair Projects
Senate Capital Budget Committee
May 2023**



New Hampshire Northcoast Corporation (NHN)

Who We Are and What We Do

- 42-mile short line railroad (Rollinsford, Somersworth, Rochester, Lebanon, ME (1/2 mile), Milton, Wakefield and Ossipee). Part of old “Conway Branch” of former B&M.
- Connects with CSX (formerly PanAM) main line in the south and the rail corridor owned by State of NH to the north from Ossipee to Conway.
- Hauling freight for more than 160 years
- Passenger service and Ski Train discontinued in the early 1960’s.
- 1986 & 1993 - the line was purchased in two sections from the B & M by Boston Sand & Gravel Co. and became the NHN (New Hampshire Northcoast Corp.) short line railroad.



New Hampshire Northcoast Corp. (NHN) Freight Facts

- Largest freight commodities are **concrete sand** - Ossipee Aggregates Corp., Ossipee and **propane (LPG)** - Eastern Propane Co., Rochester. NHN also currently hauls **steel rebar and recycled waste oil**.
- **Annual total** (100-ton) freight cars: approx. **6,150 cars** / 615,000 tons/yr.
 - **Concrete Sand:** export avg. **5,200 cars** / 520,000 tons/yr. from Ossipee
 - 33% tons/yr. to trans-loading facility in North Rochester, NH
 - 67% tons/yr. to concrete plants in Boston, MA
 - **Propane:** import avg. **650 tanker cars** / 65,000 tons/yr.
 - **Steel Rebar:** import avg. **220 cars** / 22,000 tons/yr.
 - **Recycled Oil:** export avg. **80 cars** / 8,000 tons/yr.
- Present volume moves approx. 615,000 tons/yr. (that's 6,150 100-ton rail cars)
- **In trucking terms: equivalent of 40,000 trailer or tanker round trips per/yr.**



NHN's North Rochester Trans-Loading Facility

Services Eastern Propane Co. and Ossipee Aggregates Corp.



Rail Freight Reduces Truck Volumes, Highway Maintenance Costs & Carbon Emissions - Increases Highway Safety

- **NHN tracks closely parallel NH Rt 16 and the Spaulding Turnpike, the two arteries to NH's "Northeast Kingdom" for truck, commuter and tourist traffic.**
- **One railroad car hauls the equivalent of approx. 3.3 trailer/tanker trucks**
- **NHN current freight volumes eliminate 40,000 round trips of heavy trailer/tanker trucks each year from NH highways.**
- **Over the past 37 years, NHN trains have moved 26 million tons of freight,**
- **Taking 1.6 million heavy truck trips off NH highways and bridges, which:**
- **Dramatically increases fuel efficiency and decreases carbon emissions,**
- **Greatly improving highway safety and significantly reducing wear and tear and the related NH highway maintenance costs.**

Maintaining NHN's Track Infrastructure

A Public-Private Partnership



- Since the 1980's, NHN has partnered with private businesses, municipalities, and the state & federal governments to fund the maintenance and rehabilitation of the NHN track infrastructure.
- NHN spends \$250,000 - \$1,000,000 per year on track repairs.
- **95% of the rail & ties have been replaced since 1986.** Railroad ties have a 25- to 40-year life-span, which require a constant replacement cycle.
- **NHN has 49 grade crossings (intersecting with 41 public and 8 private roads) of which 35 (71%) are signalized.**
- Since 1990, NHN has continuously upgraded all signalized crossings using federal programs administered by NHDOT and funding participation from businesses and municipalities.

NHN-State-Federal Funding

Recent Track Maintenance Partnerships

- **2017 Capital Budget Match Appropriation** - \$1.8 million critical track rehabilitation - replaced ties, rails & ballast and signalized & upgraded several crossings (**50/50 funded by NHDOT & NHN**).
- **2019 Capital Budget Match Appropriation** - \$1.8 million critical track rehabilitation – replaced ties, rails & ballast and signalized and upgraded public crossings. (**50/50 funded by NHDOT & NHN**).
- **2021 Capital Budget Match Appropriation** - \$500,000 for critical bridge and culvert repairs (**50/50 funded by NHDOT & NHN**). *Extended for two seasons due to contractor and supplier disruption due to Covid shutdown;*
- **Canal Street Signalization**, Somersworth paid for with **state, federal, NHN and local private funding**.
- **Acton Ridge Road Signalization and**
- **Crossing Realignment**, Wakefield - paid for with **federal, NHN and state monies**.
- **Market Street Bridge**, Somersworth - paid for by **NH, Maine & NHN**.



2013 - 2015 Federal TIGER Grant

- 2013 - NHN awarded a federal TIGER grant for a \$2 million rehabilitation project. (\$1.4 million - Federal; \$450,000 - NHN; \$150,000 - State of NH)
- 9,000 new and relay ties, a linear mile of relay rail, 2 crossings & ballast for track bed.
- Repair of 20-year-old major washout north of the Ossipee sand pit.
- This washout repair **opened up hundreds of acres of private land for potential rail customers and economic development in Ossipee.**
- **Restored connectivity** of the rail corridor from Ossipee to Conway, which is owned by State of NH.



Washout Repair 2015 TIGER Grant



NHN Track Maintenance & Costs

- NHN maintains: 247,000 ties, 84 linear miles of rail, 49 crossings, over 100 culverts, 33 bridges, retaining walls, and 42 miles of rail bed and ballast.
- The 13,500 replacement ties installed in the prior 2018 and 2020 State/NHN funded projects represented only 5.5% of NHN's total ties.
- Tie and steel costs have soared due to inflation; quality has gone down – life expectancy is less.
- Unexpected major repairs costs have been entirely borne by the railroad:
2014 sinkhole in the retaining wall along Salmon Falls in Somersworth **shut down the northern 2/3 of the line for 5 weeks** (freight had to be unloaded onto trucks in Rochester, and then transferred back to rail cars in Rollinsford).
Emergency repair - \$260,000 in direct repair costs to NHN



2023 NHN Capital Request

Bridge, Culvert and Emergency Repairs

- In September 2020, NHN was awarded a \$4.5 million federal CRISI grant through the USDOT and the Federal Railroad Administration (FRA) for critical infrastructure, including rail, tie and ballast replacement, crossing upgrades, increasing off-track propane car storage capacity. Permitting delays have pushed construction into 2024 and 2025.
- The CRISI grant addresses the single most dangerous and expensive of NHN's 33 bridges at Haven Hill Rd. in Rochester by raising it from 11 to 14 ft at a cost of nearly \$1 million. This bridge has been struck dozens of times through the years, **most recently in November 2020, July 2021 and April 2022. (see photos)**
- NHN's share of the 4-year CRISI grant project is \$2,000,000 with \$100,000 contribution from its largest customer, Eastern Propane. This project will constrain both NHN's maintenance budget and operation schedule over the next several years.
- **However, the deterioration of NHN's 32 other bridges requires crucial repairs in the immediate and short-term time-frame (see photos), according to the FRA mandated annual bridge inspections. These funds would also address the worst of the 92 160-year-old granite box culverts, which are also inspected regularly (see photos).**
- **NHN is respectfully requesting \$250,000 in state funds (NHN contributes \$250,000 in match money) to address bridge, culvert and emergency repairs in the 2023 capital appropriations cycle.**

NHN Bridge Photos

Haven Hill Road Bridge – Rochester



Examples of NHN Bridges Requiring Abutment, Pedestal and Repointing Repairs



Examples of NHN Bridges Requiring Abutment , Pedestal and Repointing Repairs



Emergency Culvert Repair - 2018

Required Wetlands & Army Corps Permits: \$80,000

Before & After

