



Empowering Communities theRPC.org

Julie LaBranche STCVA Project Manager/ Senior Planner Seacoast Transportation Corridor Vulnerability Assessment

2021 NH Climate Summit May 26, 2021

Seacoast Transportation Corridor Vulnerability Assessment (STCVA)

• A partnership between:

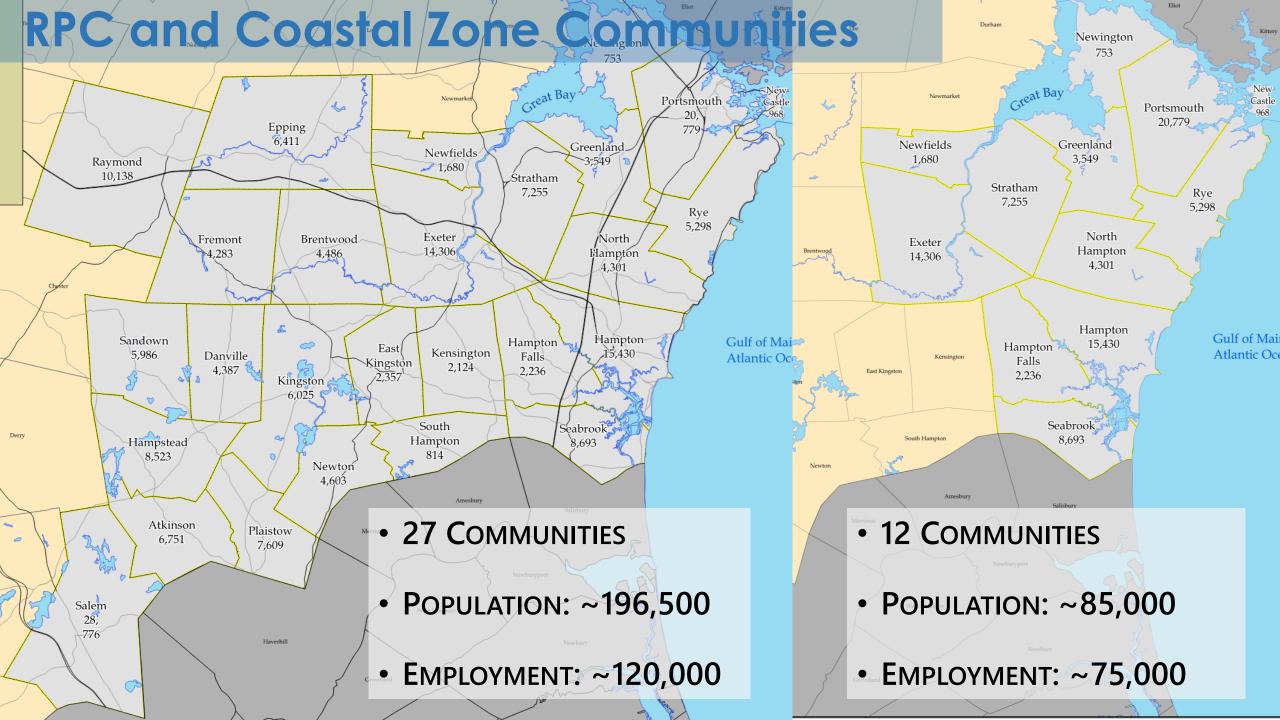
Rockingham Planning Commission NH DES Coastal Program NH Department of Transportation University of New Hampshire 10 NH coastal municipalities

• Funded as a 2019 NOAA Project of Special Merit

This project was funded, in part, by NOAA's Office for Coastal Management under the Coastal Zone Management Act in conjunction with the New Hampshire Department of Environmental Services Coastal Program.







Seacoast Transportation Corridor Vulnerability Assessment (STCVA)

Project goals are to:

- Assess the impacts of projected sea-level rise on the seacoast transportation network
 - $\circ~$ 1.0', 1.7', 4.0' and 6.3' sea-level rise at 2050

(Tides to Storms and consistent with 2020 NH Science Summary)

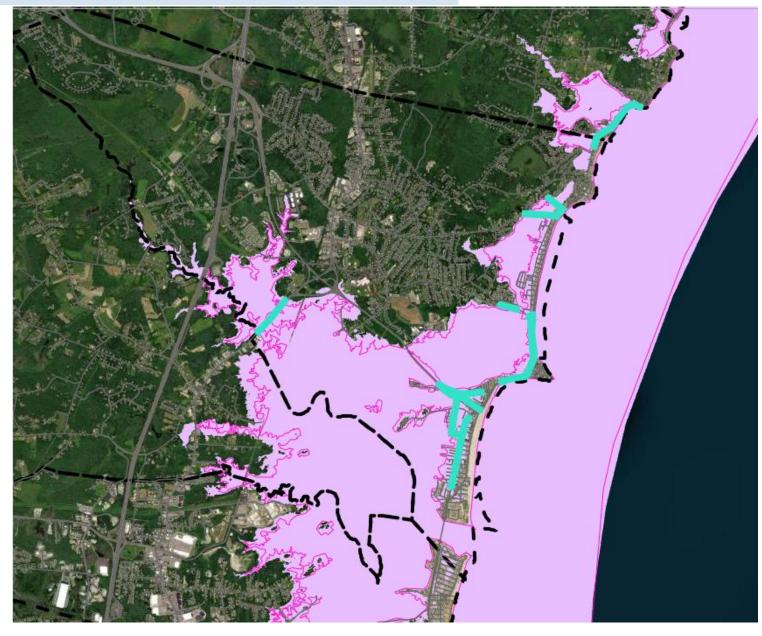
- Evaluate changes in traffic volume, travel patterns, road capacity, road conditions
- Identify priority sites impacted by flooding
- Identify adaptation and resilience strategies for priority sites
- Improve RPC/MPO decision making processes

Regional Travel Demand Model

- Travel Demand Model demographic data employment, population, travel volume
- Uses demographic data aggregated into zones to estimate future travel in the region
- Model attempts to find most efficient path for all trips between aggregated zones
- Many, but not all, (local) roads are included
- Focused on impacts on primary travel corridors

Regional Travel Demand Model Results





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Seacoast Transportation Corridor Vulnerability Assessment (STCVA)

- Corridor Advisory Committee gather municipal expertise and experiences
- Understand NHDOT and municipal roadway network management, policies and planning decisions
- Inform state and local hazard mitigation planning efforts
- Inform coastal region climate adaptation and resilience planning

Importance of Resiliency Planning

MPO's purpose is to plan for the long-term needs of the regional transportation system

- Provides the means for people to access social, economic, and environmentally valuable/desired locations
- Current science indicates that planners need to account for sea-level rise to maintain access to those locations in coastal NH

Planning a Resilient Transportation System helps to

- Reduce the likelihood of systemic disruptions to roadway functions
- Increase the capacity to absorb these disruptions and still function
- Ensure that all have the ability to access the transportation system during disruptions
- Reduce the time that is needed to return to normal functioning

STCVA Transportation Planning Outcomes

- Enhance understanding of risks to transportation network from climate change
- Identify critical links and impacts of closures on overall transportation network
- Develop improvement concepts and costs to better understand scope and scale of building a more resilient system
- Improve use of resiliency factors in the project selection process
- Provide data and analysis for other planning and project development efforts.
- Define policies that can facilitate a more resilient transportation system
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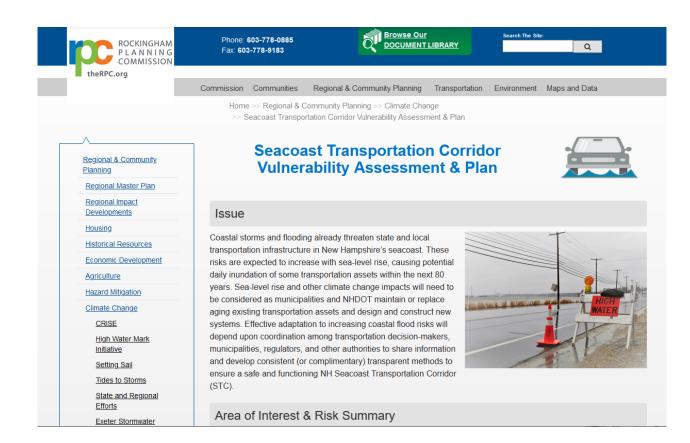
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https://www.therpc.org/regional-community-planning/climate-change/STCVA