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## Agenda

	Project Summary	15 Minutes
	Transportation Network Impacts	15 Minutes
	Conceptual Adaptation Options	15 Minutes
	Community Feedback	45 Minutes

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## Seacoast Transportation Corridor Vulnerability Assessment (STCVA)

- Funded as a 2019 NOAA Project of Special Merit
- A partnership between:
  - Rockingham Planning Commission
  - NH DES Coastal Program
  - NH Department of Transportation
  - University of New Hampshire
  - 10 NH coastal municipalities

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

Logos for NOAA, NH DES, and NH Department of Transportation are shown at the bottom.

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## STCVA Goals

- Assess the impacts of projected sea-level rise on the seacoast transportation network (1', 1.7', 4', and 6.3' sea-level rise scenarios).
- Evaluate changes in traffic volume, travel patterns, road capacity, road conditions due to SLR
- Identify & prioritize sites impacted by flooding for further evaluation
- Identify adaptation and resilience strategies for priority sites
- Improve RPC/MPO decision making processes

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## STCVA Transportation Planning Outcomes

- Enhanced understanding of risks to transportation network from climate change
- Critical links identified and impacts of closures on the transportation network assessed
- Improvement concepts and costs developed for priority locations to better understand scope and scale of building a more resilient system
- Improved resiliency factors for the general project selection process
- Data and analysis available for other planning and project development efforts.
- Policies defined that can facilitate a more resilient transportation system


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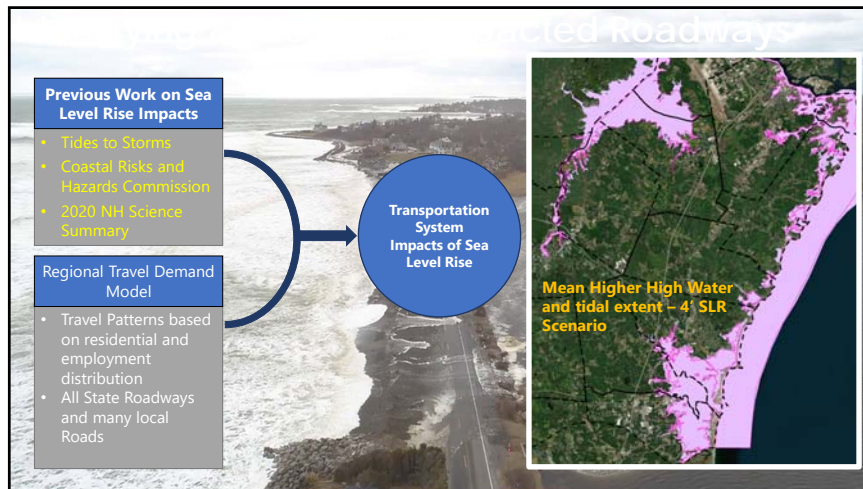
## Data Accuracy

- Based on Light Detection and Ranging (LIDAR) data from 2011
- LIDAR data has roughly  $\pm 6''$  vertical accuracy
- Horizontal accuracy is roughly 13' – We know the point is somewhere within a 26' diameter circle
- Important to recognize when examining edges and smaller sites

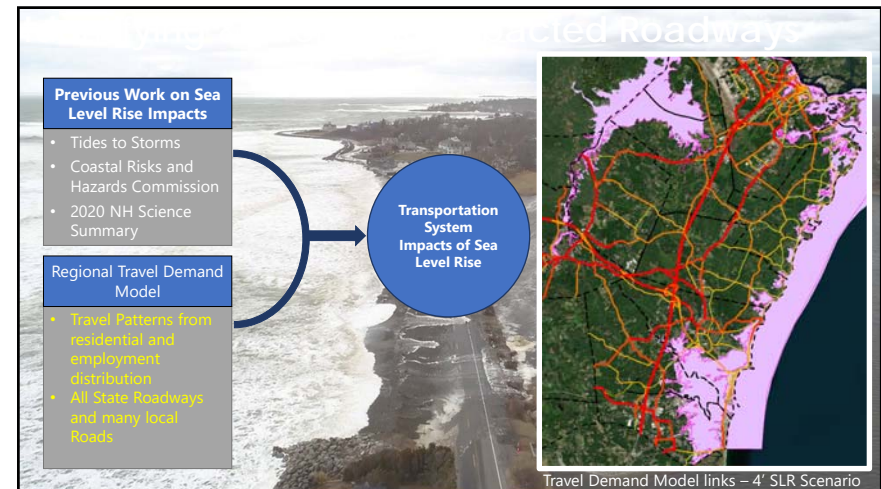


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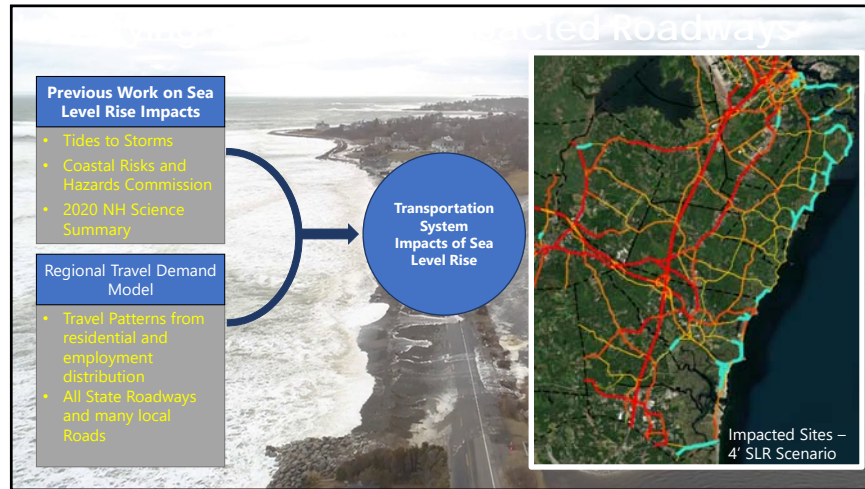


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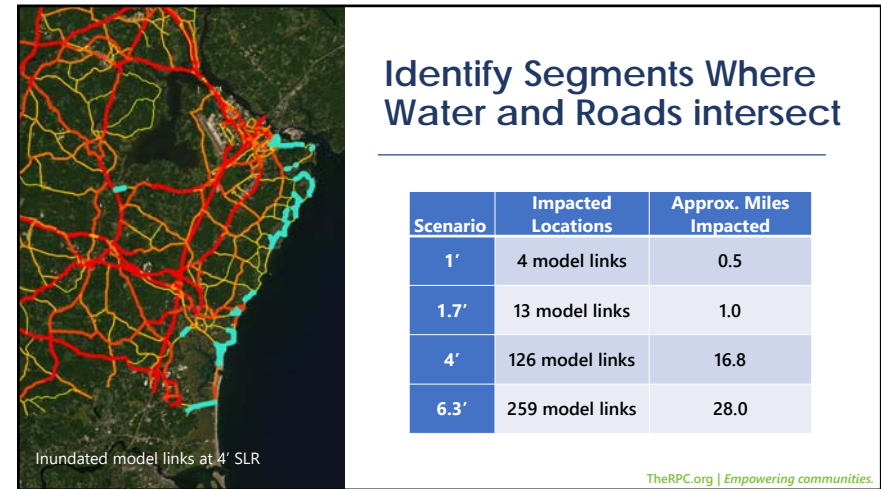


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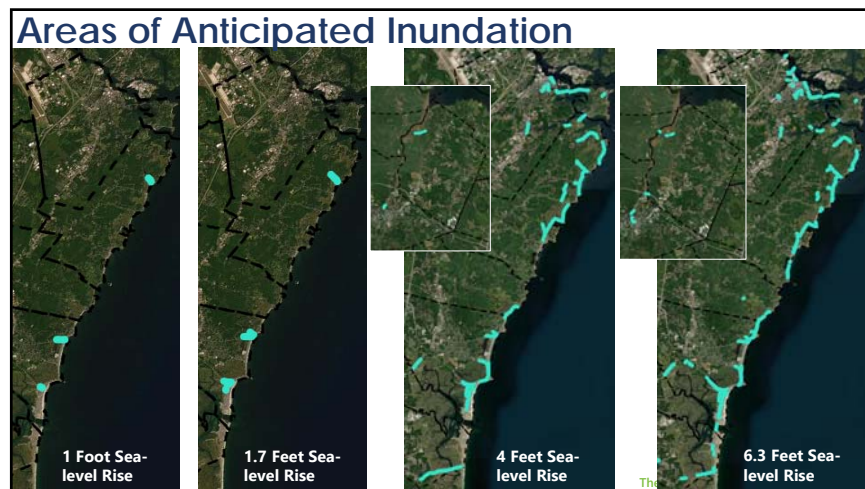




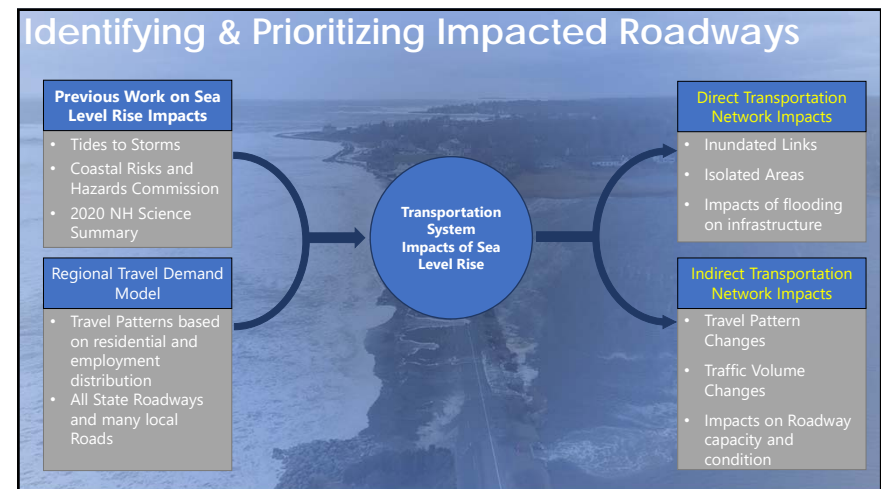
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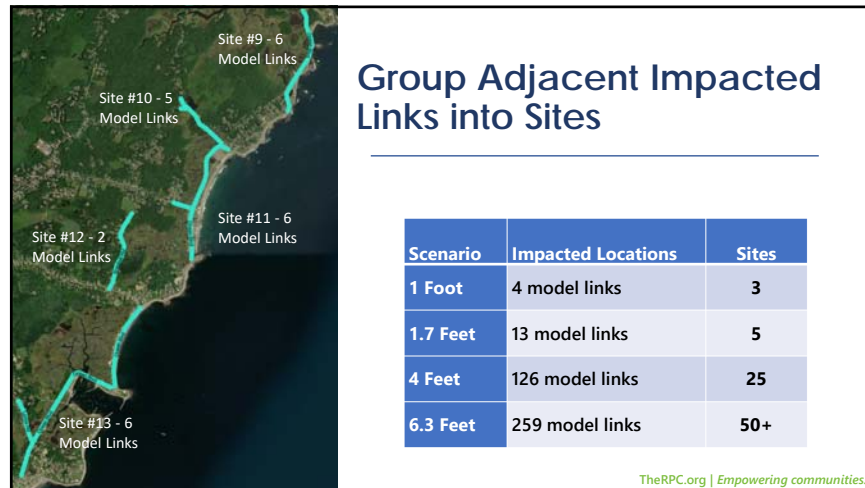
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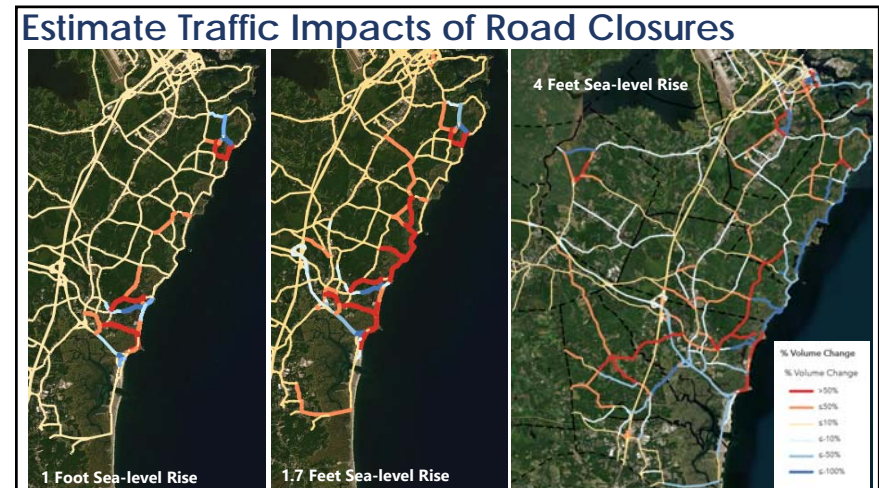
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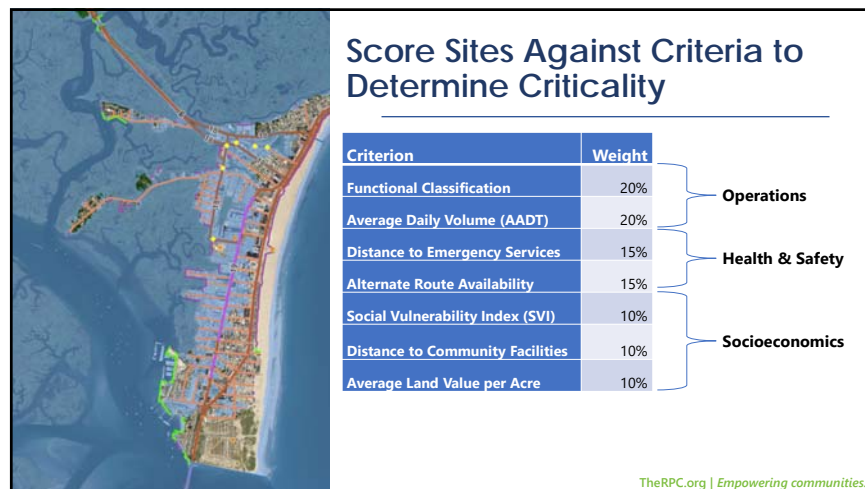
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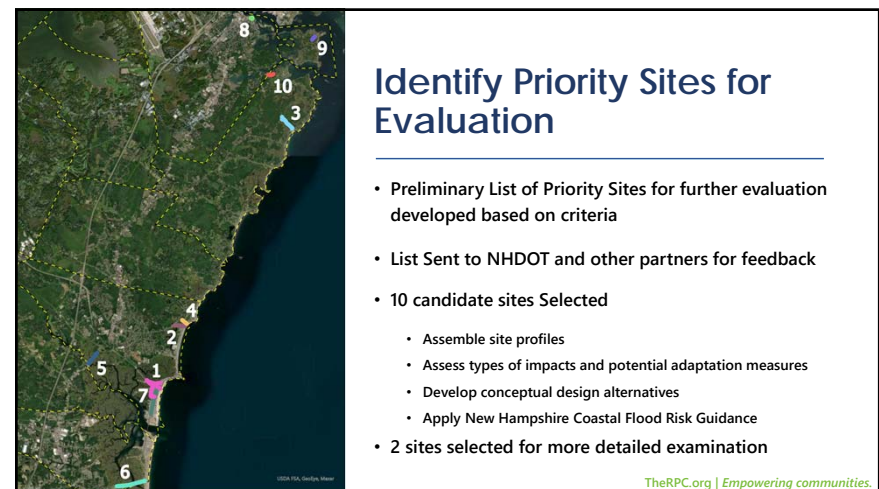
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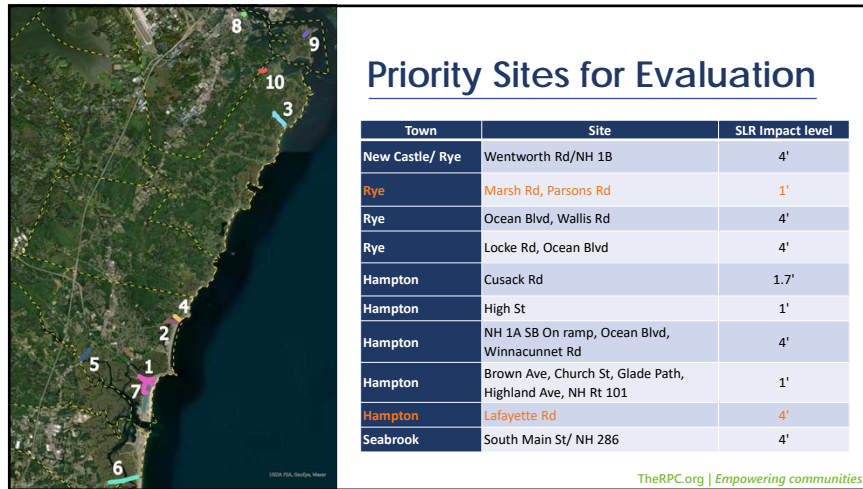


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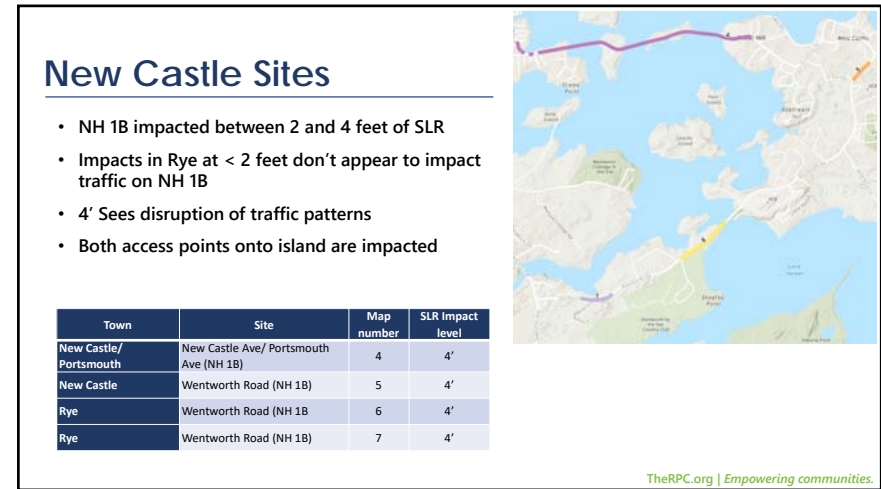


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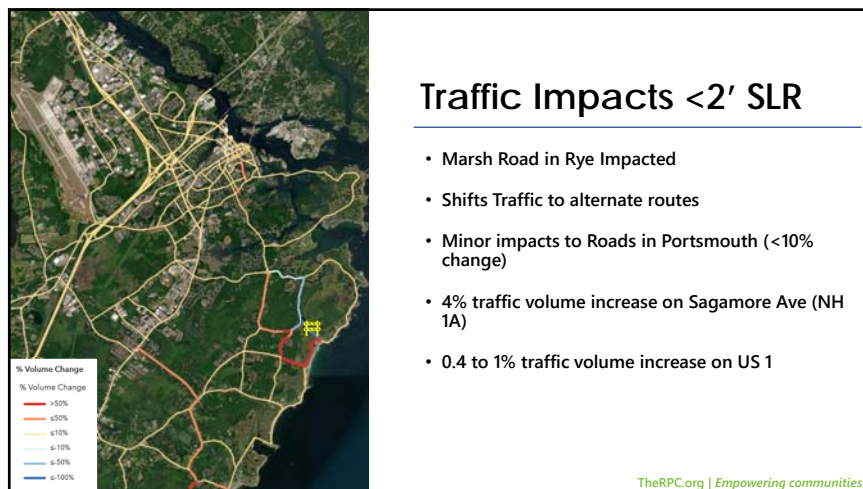




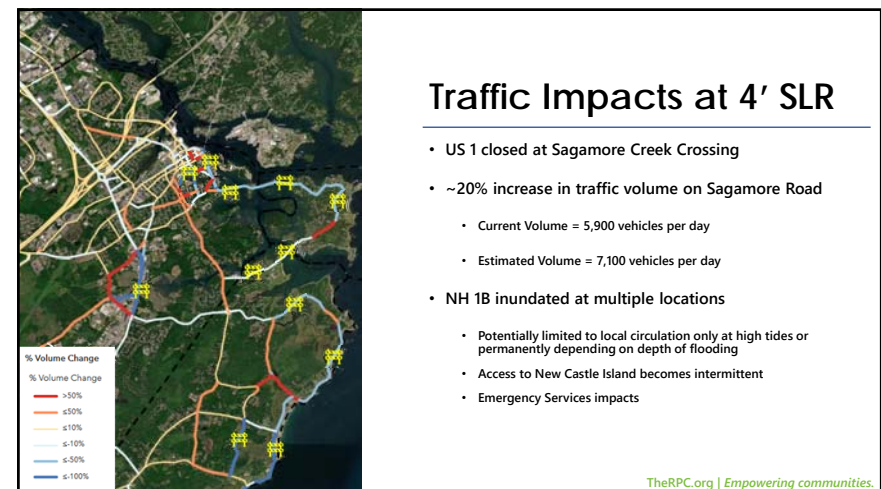
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## Actions Considered



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## Actions - Based on Coastal Flood Risk Guidance

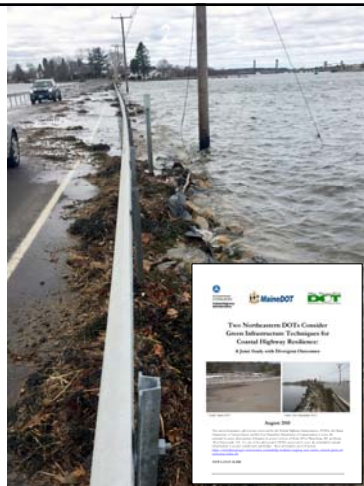
	Level of Risk for Coastal Flooding	Tolerance for Flood Risk
<b>No Action</b>	Very Low to Low	High
<b>Avoid</b>	Very Low	Medium to Very Low
<b>Accommodate</b>	Moderate	Medium
<b>Resist</b>	High	Low to Very Low
<b>Relocate</b>	High	Low to Very Low

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## New Castle/ Portsmouth Ave

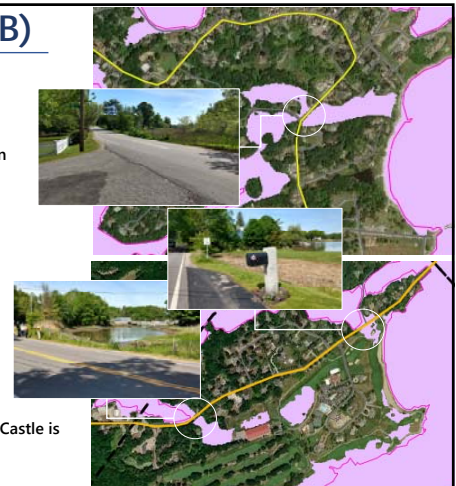
- **Accommodate**
  - Reconstruct with materials less susceptible to changes in moisture levels. Accommodates SLR up to pavement surface
  - Causeway or Bridge – Not a viable option given short distances impacted
  - Detours – Alternate route also impacted
- **Resist**
  - Raising Causeway or Bridging
  - NHDOT evaluating causeway options (New Castle 29614)
- **Retreat/Relocate**
  - Not desired – Evacuation Route for New Castle
  - Retreat may be necessary at higher SLR



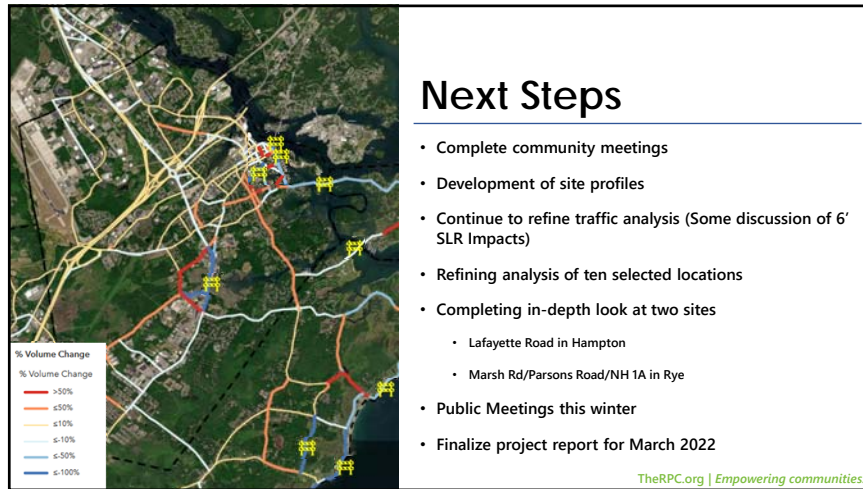
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## Wentworth Road (NH 1B)

- **Accommodate**
  - Reconstruct with more resilient materials
  - Evaluate utility of larger culverts
  - Causeway or Bridge – Not a viable option given short distances impacted
  - Detours – No alternate routes
- **Resist**
  - Roadway could be raised and rebuilt above expected SLR levels. This could require increased shoulder area – potential wetland impacts
  - Berms would simply shift the flooding elsewhere
- **Retreat/Relocate**
  - Not Desired – At least one access way to New Castle is required
  - Retreat may be necessary at higher SLR



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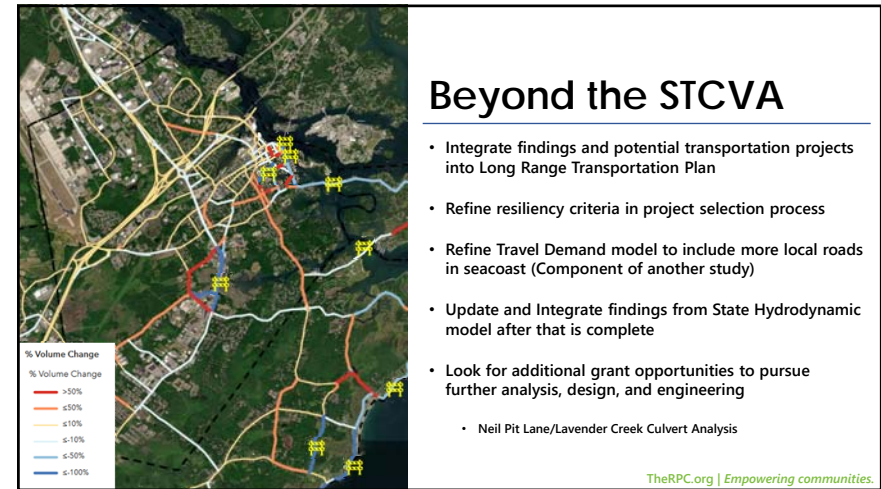


## Next Steps

- Complete community meetings
- Development of site profiles
- Continue to refine traffic analysis (Some discussion of 6' SLR Impacts)
- Refining analysis of ten selected locations
- Completing in-depth look at two sites
  - Lafayette Road in Hampton
  - Marsh Rd/Parsons Road/NH 1A in Rye
- Public Meetings this winter
- Finalize project report for March 2022

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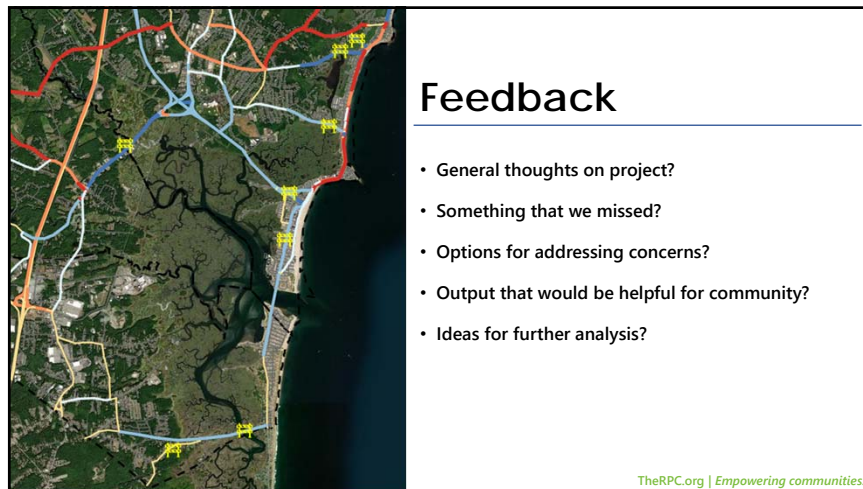


## Beyond the STCVA

- Integrate findings and potential transportation projects into Long Range Transportation Plan
- Refine resiliency criteria in project selection process
- Refine Travel Demand model to include more local roads in seacoast (Component of another study)
- Update and Integrate findings from State Hydrodynamic model after that is complete
- Look for additional grant opportunities to pursue further analysis, design, and engineering
  - Neil Pit Lane/Lavender Creek Culvert Analysis

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## Feedback

- General thoughts on project?
- Something that we missed?
- Options for addressing concerns?
- Output that would be helpful for community?
- Ideas for further analysis?

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## For More Information

<https://www.therpc.org/STCVA>

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