# SEACOAST TRANSPORTATION CORRIDOR VULNERABILITY ASSESSMENT AND PLAN

## **ADVISORY COMMITTEE MEETING #1**

# Friday, March 13, 2020 from 9:00-11:00AM

#### **Discussion Notes**

**Participants:** Julie LaBranche (RPC), Tim Roache (RPC), Kirsten Howard (NHDES), Christian Matthews (RPC), Dave Walker (RPC), Nathalie Morison (NHDES), Joe Titone (Seabrook), Kevin Lucey (NHDES), Ben Sweeney (NHDES), Connie White (New Castle), Andy Brubaker (Hampton Falls), Ann Scholz (NHDOT, on the phone), Roger Appleton (NHDOT, on the phone), Michael Tully (North Hampton, on the phone), Steve Couture (NHDES, on the phone), Jennifer Perry (Exeter, on the phone), Sherry Godlewski (NHDES, on the phone)

Clarification questions from presentations:

- Andy: Are there any considerations for Seasonal Volumes of traffic?
  - Dave: most of the analysis will be based on average annualized traffic, but we are well aware that traffic volumes increase in the summer; model calibrated for early October which captures school traffic and shoulder season traffic

#### Discussion:

- From your perspective in your own roles/organizations/municipalities, what challenges are you dealing with or concerned about related to chronic flood risks (vs. episodic storm event disruptions):
  - Andy B (Hampton Falls) we have a small piece of Rte 1 corridor that turns into a major backlog of traffic in the summertime; current navigation apps (like Waze) has drastically increased traffic along the corridor and back roads; how will this issue impact back roads that people are currently using to avoid traffic on Rte 1?
  - Joe T (Seabrook) need to safe evacuation routes during emergency situations; if Hampton evacuated during high tide with wave issues they would be coming south or along 101; also need to factor Salisbury evacuations; Seabrook becomes the conduit to reach Rte 1 and 95
  - Connie W (New Castle) at high tide with a storm, can't get off the island; causeway from Portsmouth is flooded and the roadway by BG's boat house also floods regularly; access is a big issue
  - Jennifer P (Exeter) Exeter is on the extreme edge of risk area so we may not have the exposure that others communities do; however, Exeter routes are heavily used during Seabrook drills because we have to keep people off 101; a lot of the routes that may not be affected by flooding are still being heavily trafficked which is a safety concern; 101 where it crosses the Squamscott river is a critical point that needs to be paid attention

to; railroads cross through this area also; rail facilities are elevated but not sure to what degree; maps show that sea-level rise are bisecting those facilities

- Roger A (NHDOT) from an operational perspective, if we get to daily flooding/closures, we run into a draw on our forces for those recurring events; need to consider pre-deployment of resources or permanent resources; state detour routes try to keep traffic on state routes only; could be difficult at certain points or require long detours that may not be followed easily and burden town roads more without much guidance; coordination needed to figure out best routes that may include town roads; potential for agreements to be made between the state and the towns; state route detours can be very long and people may not want to follow them or they will take whatever route their GPS will tell them
- Andy B (Hampton Falls) really agree with the GPS issue; is there is any potential from state/regional level to develop a model/plan/simulation that would give us many of the options that GPS algorithms are giving people in their cars to see where potential offloading from major routes may occur?
  - Dave W (RPC) travel demand model to some degree is looking at this; looks to find shortest path between two points; if a particular road is impacted/congested it will look for alternatives that are efficient; if things get less efficient it pushes trips further away; wonder if we could figure out where people are going now if there is a current bottleneck to inform the issue; maybe we can leverage existing problem to help us understand how traffic may be impacted in the future by sea-level rise
  - Andy B (Hampton Falls) people don't always follow state detour routes whether or not it's appropriate; emergency planning has to address that issue at the same time; Hampton Falls is dealing with issues of culvert repair so water can be moved away from or under roadways; Rt 88/Exeter Road bridge will likely no longer be usable at some point
- Kevin L (NHDES) with tidal culverts you are managing bidirectional flow; may want to control tidal flow, but also need to think about how to get freshwater flows out without compromising natural resources; tide gates raise a whole host of technology, operations, maintenance issues; brave new world in terms of how these structures get permitted/paid for
- Kirsten H (NHDES) the percentage % of service time that roads are available is decreasing over time, but they will still be serviceable until they aren't; what are the decisions frameworks that need to exist to decide how long we should continue to service infrastructure and when to decide when to decommission certain infrastructure
- Julie (RPC) funding some of the alternative strategies is going to be expensive;
  projected cost of improving the roadway network is going to require further analysis;
  will likely be costlier if every town goes about transportation improvements on their own versus if we approach it as a region

## What gaps/needs need to be met in order to address what we know about coastal flood hazards?

- Tim R (RPC): needs to be agreement at state/regional level on question of tolerance;
  what are we going to tolerate in terms of disruption and from there where do we fortify,
  where do we abandon; hope this study will inform and help get conversation started
- Andy B (Hampton Falls) funding; Hampton falls is strapped for money; it's a major deal for the Town to get resources to repair a single project; regional approach would be helpful; data needs to be integrated on a regional level
- Kevin L (NHDES) we have a statewide database of stream crossing assessments; lacks prioritizing; how do we take culverts that have been evaluated and prioritize that list to identify high priority projects
- Julie L (RPC) Tides to Storms and Climate Risk and the Seacoast (C-RiSE) projects that RPC completed identified culverts that are now freshwater culverts that will become bidirectional (tidally influenced) culverts in the future that won't function properly; important sites to pay attention to from a resources management and hydraulic standpoint; will require major modification
- Mike T (North Hampton) need enhanced communication between NHDOT and NHDES; challenges with current project to fix RTE 1A culvert right next to Beach Plum; if we can't figure out small projects now, how are we going to tackle the bigger challenges
- Roger A (NHDOT) in a lot of areas, there aren't easy solutions; need to start understanding true costs associated with projects; for example, the project Mike mentioned doesn't have the appropriate grade to outflow; costs in some cases may not be worth the investment
- Tim R (RPC) our tolerance may not be where our wallets are
- Connie W (New Castle) interested in priorities that come out of this project; so New Castle can develop a well-informed emergency management plan based on those priorities
  - Ann S (NHDOT) Causeway feasibility study is expected to be completed by end of December 2020
- Kirsten H (NHDES) big need is to figure out what projects to do where and which ones to prioritize, especially those that the benefits will outweigh the costs; very few silver bullets out there
- Julie L (RPC) increasing factor of stormwater management and increased precipitation; most communities are dealing with a double whack when it comes to flooding; drainage infrastructure is undersized and the combination of freshwater and tidal flooding overwhelms are system; stormwater management needs to be a part of the infrastructure management conversation