

Questions, Comments and Responses

## Transportation Resilience Planning with the Vermont Travel Model

James Sullivan - james.sullivan@uvm.edu

## Q1. Have there been any modifications to the original code for calculating the Network Criticality Index since it was transferred to the statewide travel demand model?

### A1. Yes, we’ve made quite a few improvements to the code since its incorporation into the statewide travel demand model. For example, the subarea module, which distributes the travel demand within an analysis zone amongst the network nodes within the zone, was improved. The distribution of demand was changed from being uniformly divided amongst all nodes in the network, to being focused only on those nodes where trips can realistically begin and end (excluding features like highway ramps) and then being divided proportionally by those nodes with more inhabitable structures near them. Additionally, we incorporated the capability of the procedure to operate with a user-selected traffic assignment stopping tolerance, allowing the procedure to be sped up if computing times become unacceptable.