There are questions on both the border metric and mathematical model below so please read through the entire PDF to review all questions.

Please list the MSAs, States, or Territories that you represent

ADDITIONAL BORDER METRICS

FEMA is working to identify whether and how proximity to the United States' international borders impacts jurisdictions' risk of terrorism, and to consider various methods of calculating and differentiating border-related terrorism risk. Please provide responses to any or all of the questions below by providing specific information and data (included data sources) to validate your responses, where available and applicable:

- 1. How does a jurisdiction's proximity to a land or water border influence a jurisdiction's risk of terrorism?
- 2. How do seaports, airports, or other transportation hubs influence a jurisdiction's risk of terrorism? How do different modes of international travel affect the risk of terrorism in different ways?
- 3. What border- or travel-related data points do you recommend FEMA include in the model? Note that any data used in the methodology must be national-level data (covering all states or Metropolitan Statistical Areas) and from reputable sources, preferably federal data sources, therefore providing a consistent basis for comparison.
- 4. Do undocumented immigrants have an impact your jurisdiction's risk from terrorism? What data are you using to measure its impact?
- 5. Currently, the Isolation element of the risk methodology is part of the Border Index. Should FEMA continue to keep Isolation under Border Index, move it as a separate Index under Vulnerability, or move it to a separate component (Threat or Consequence)?
- 6. Would you recommend a different measurement or calculation to determine the vulnerability of an isolated Metropolitan Statistical Area, state, or territory?

MATHEMATICAL MODELING

FEMA uses a composite index construction in which individual data elements (e.g., population, population density, commuters) are combined to create one value (e.g., population index), and then multiple indices are combined to create a single scaled value (e.g., risk score). Please provide responses to any or all of the questions below to help FEMA as it considers alternative methodologies for calculating relative risk:

1. Do you know of other risk or relative comparison models that compare the relative relationship between different entities (e.g., states, territories, MSAs) that you would recommend FEMA review and consider as an improvement or alternative to the current methodology?

2. In the Vulnerability and Consequence components, each data element is normalized using the maximum value. For instance, the Gross Domestic Product (GDP) index is determined by first dividing each state's GDP by the GDP of the state with the highest GDP (e.g., California). California's normalized GDP value is 1.0, and all other states will be something less than 1.0. Do you recommend other methods of normalization within the included data elements, other than max normalization? If so, why?

3. Do you recommend a certain mathematical relationship between Threat, Vulnerability and Consequence? Currently, the Consequence component has twice the influence of the same data value in either the Threat component or the Vulnerability component. Do you think this relationship between the component values is appropriate? If not, what alternate relationship would you recommend?