

Task 3.3: Assessing Economic Vulnerability and Investment Strategies Targeting Flood-Prone Communities

July 24, 2014

New York, NY



Deliverables

- Tool for assessing local economic vulnerability and investment in resiliency measures in Nassau, Suffolk, and Westchester County
- Report on economic vulnerabilities related to climate change on communities in Nassau, Suffolk, and Westchester County, including a discussion of areas of typical economic assets at risk

Progress

- Review of existing tools/approaches completed
- Compilation of data layers nearly complete
- Development of integrated assessment tool ongoing
- Evaluation of IMPLAN potential ongoing

Review of Existing Tools/Approaches

- CVAT – NOAA Coastal Services Center
- CVI – Nature Conservancy
- Surging Seas – Climate Central

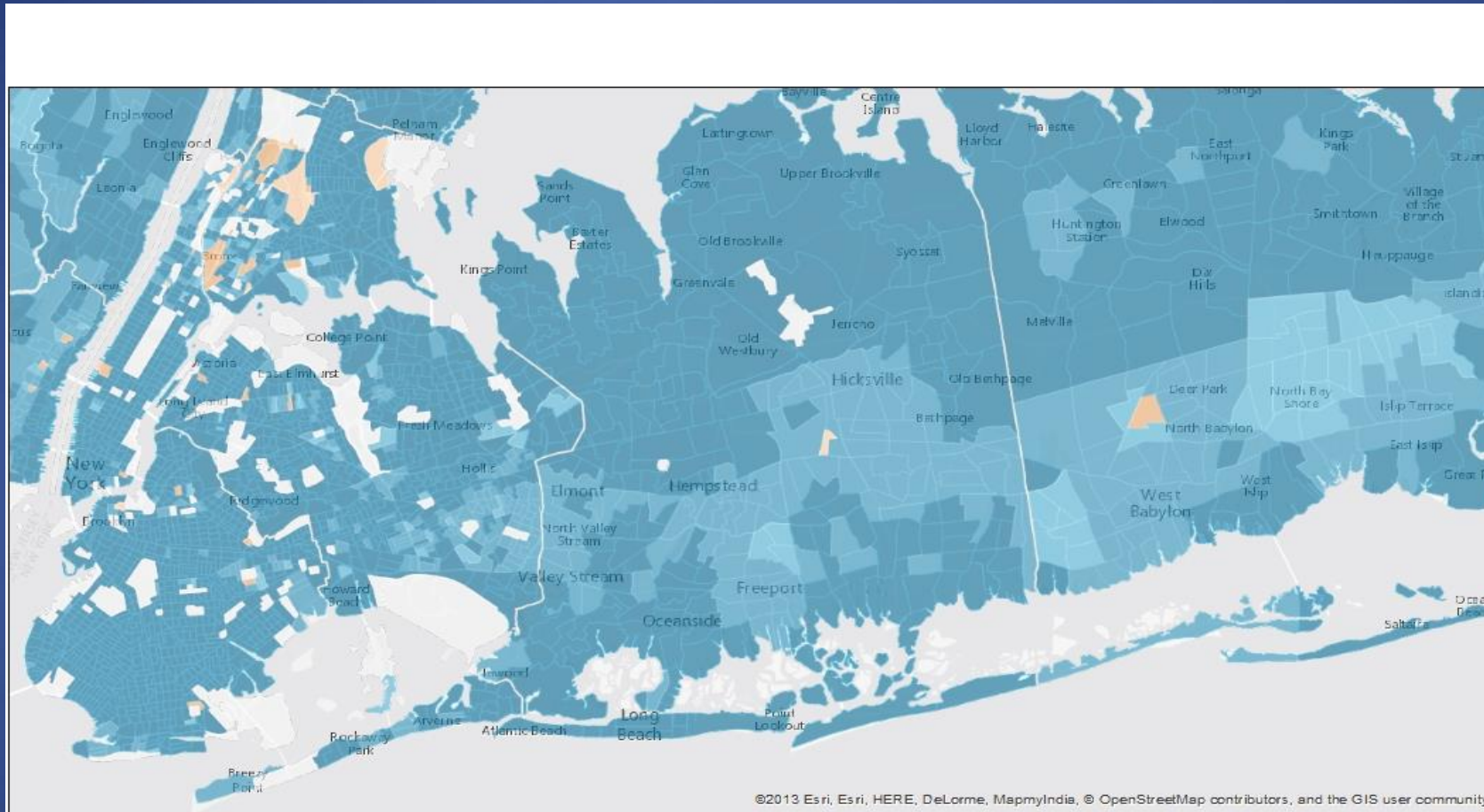
Compilation of Data and Data Layers

- Potentially affected populations
 - Population data
 - American Community Survey data/SoVI
- Potentially affected residential assets
 - HazUS
- Potentially affected business assets
 - Marinas
 - Hotels and other accommodations
 - Shellfish areas
- Potentially affected environmental assets
 - National, state, county parks
 - Boat ramps
 - Beach nourishment areas
 - Costs of future erosion

Results To Date

- Residential property loss a significant component of potential losses
- Tourism-based and fishery-based industries important contributor to revenue and employment
- Compiling inventory of selected economic and environmental assets in Nassau, Suffolk, and Westchester
- For hazard scenario used Category 3 SLOSH model

Median Housing Value Nassau – Asset Identification



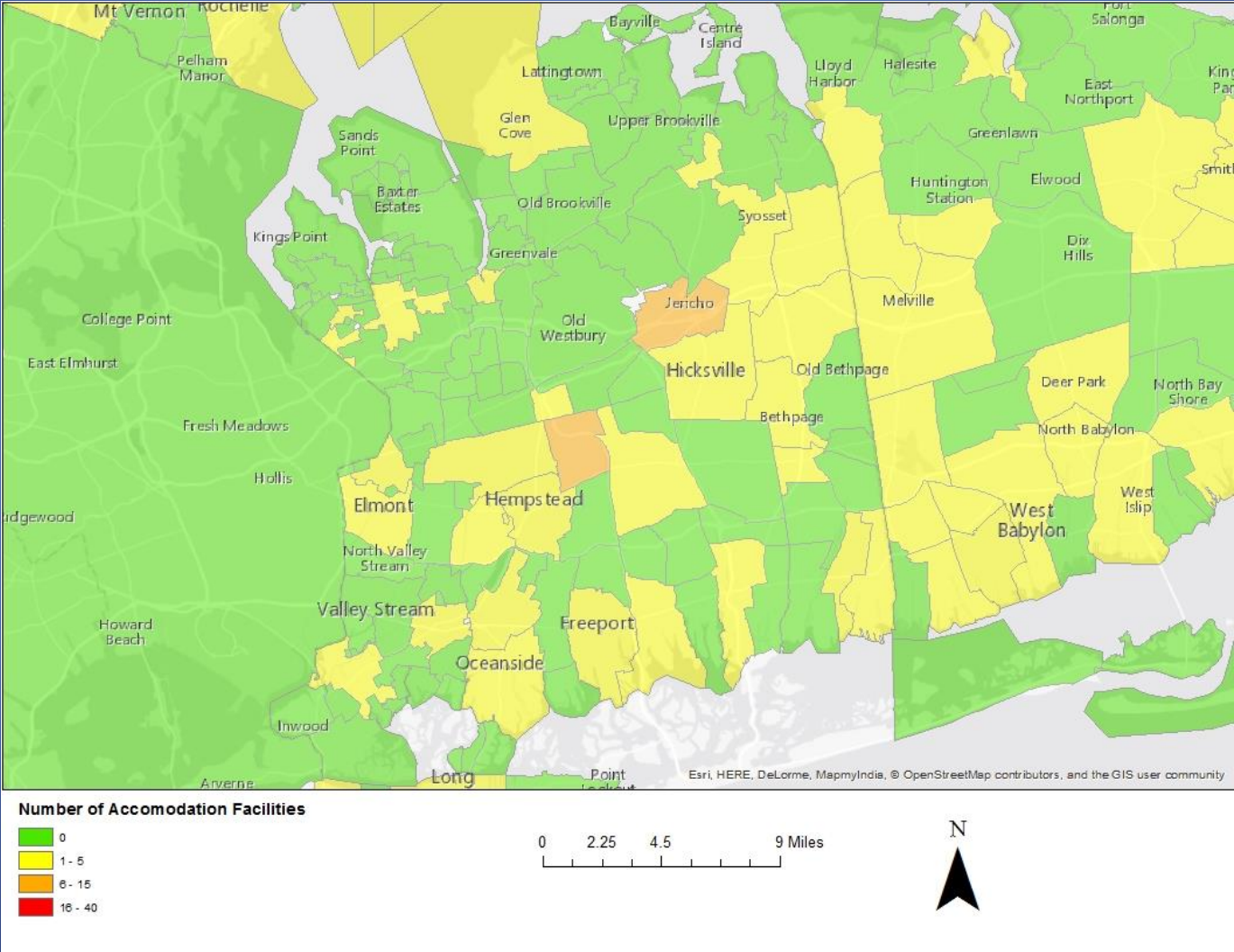
Median Home Value

- More than \$348,000
- \$274,001 to \$348,000
- \$200,001 to \$274,000
- \$127,001 to \$200,000 (US median: \$167,749)
- \$53,001 to \$127,000
- \$53,000 or less
- No homes

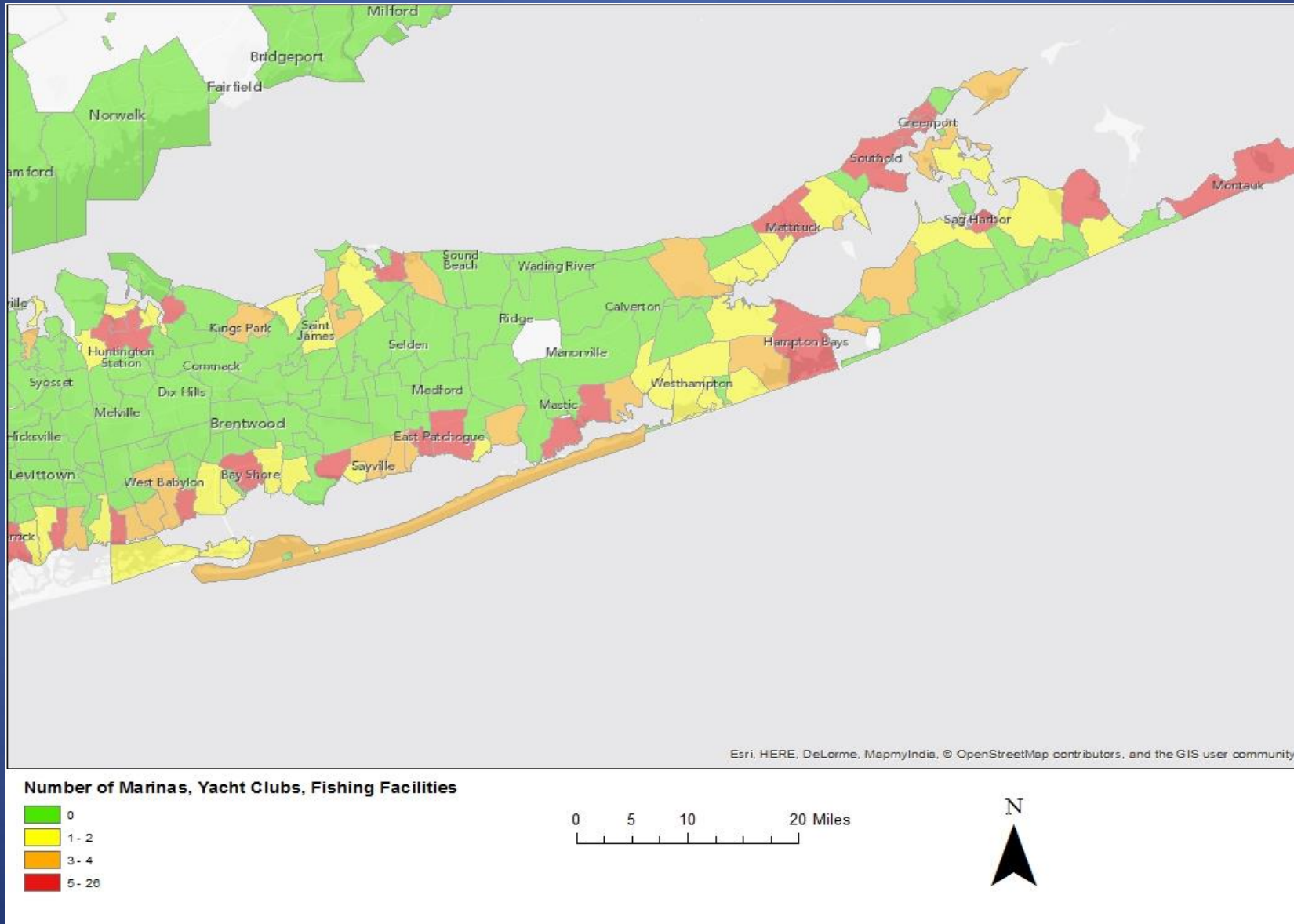
0 3 6 12 Miles



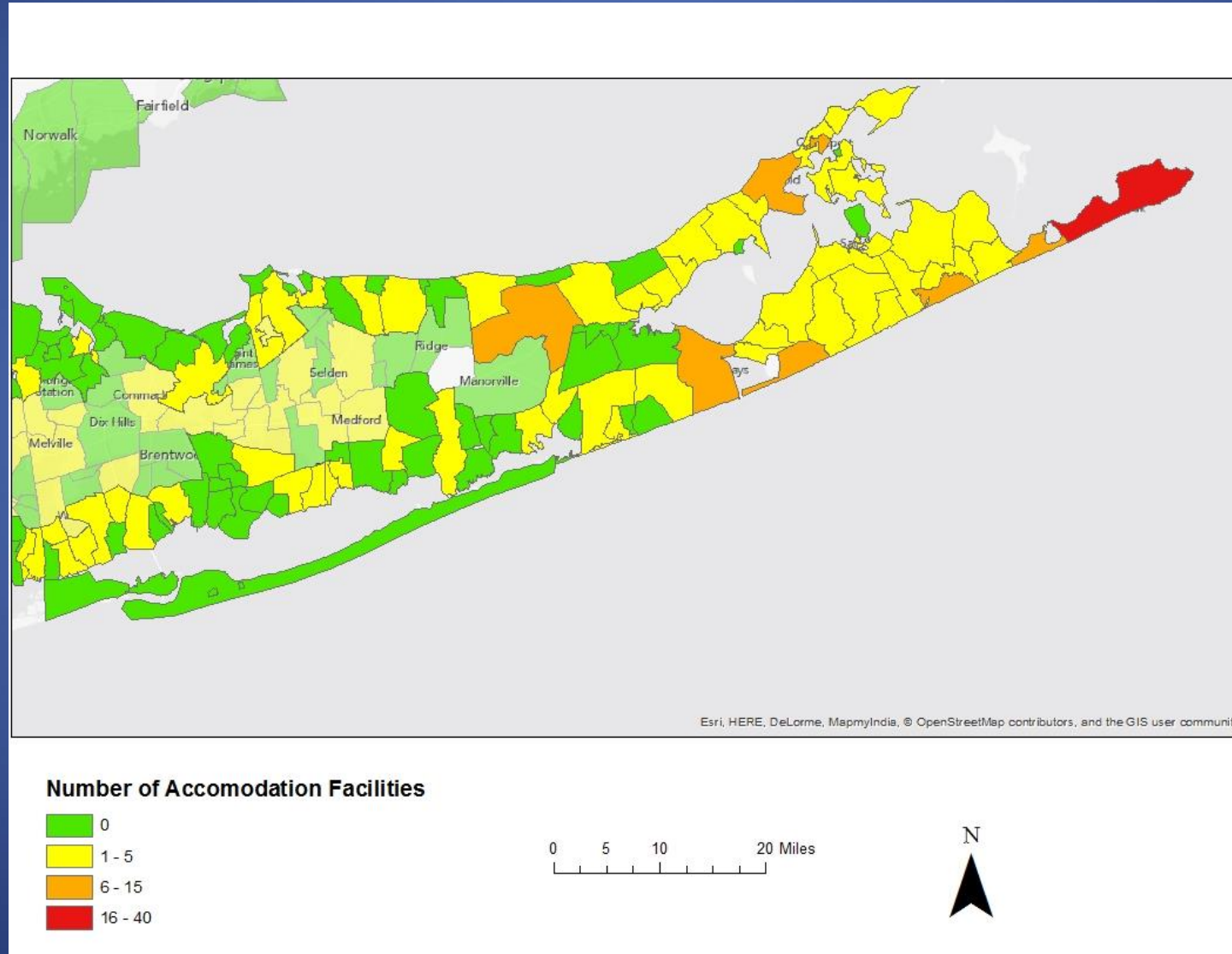
Nassau Hotels – Asset Identification



Suffolk Marinas – Asset Identification



Suffolk Hotels – Risk Analysis



Remaining Tasks

- Asset inventory work
- Integration of various assets in combination with demographic factors into an assessment of overall vulnerability of communities
- Development of business interruption scenarios and evaluation in IMPLAN
- Role of seasonality
- How does storm timing affect vulnerability?

Questions?

- Contact information:

Anthony Dvarskas

Phone: 631-632-9674

Anthony.Dvarskas@stonybrook.edu