

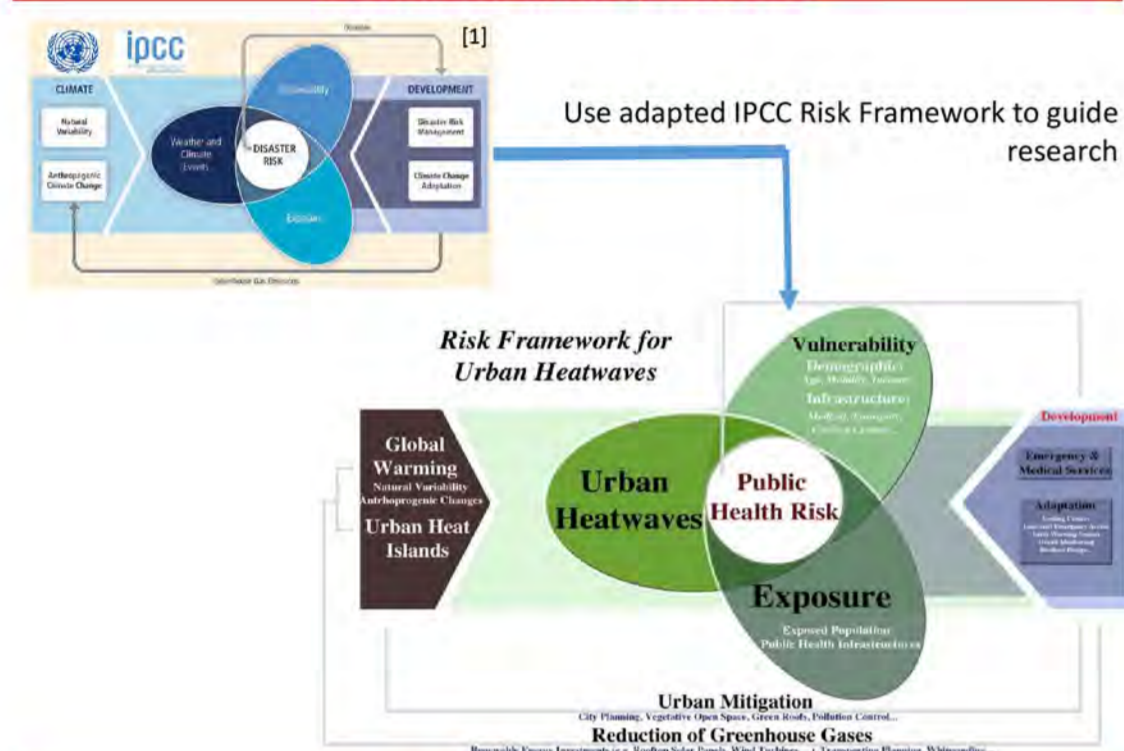
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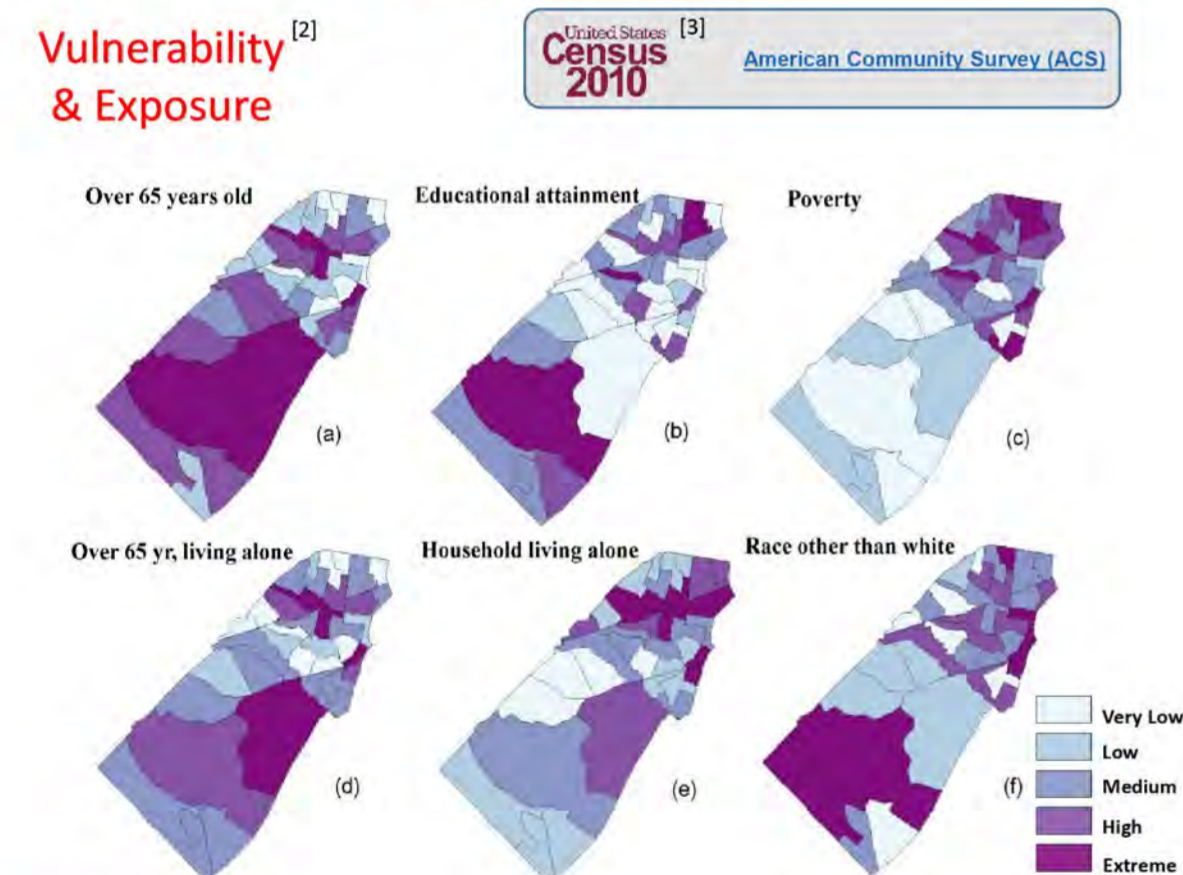
Problem Definition

Heatwaves have been responsible for a large number of lives lost, and are expected to grow in their intensity and frequency. Therefore, urgent adaptation and mitigation strategies are required for a sustainable urban planning. The Sustainability and Data Sciences Laboratory at Northeastern University, under the aegis of Thriving Earth Exchange of AGU, worked with the town of Brookline to understand the potential public health impacts of anticipated heatwaves.

Urban Risk Framework



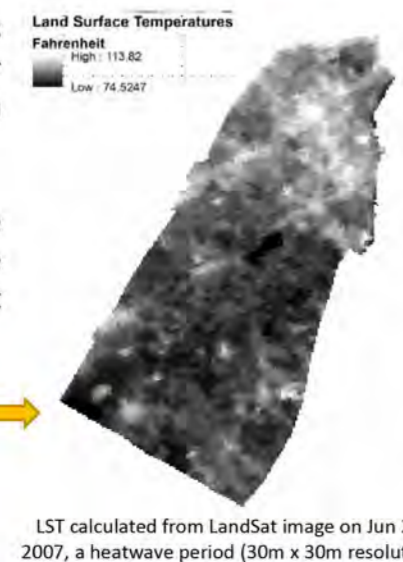
Risk Assessment



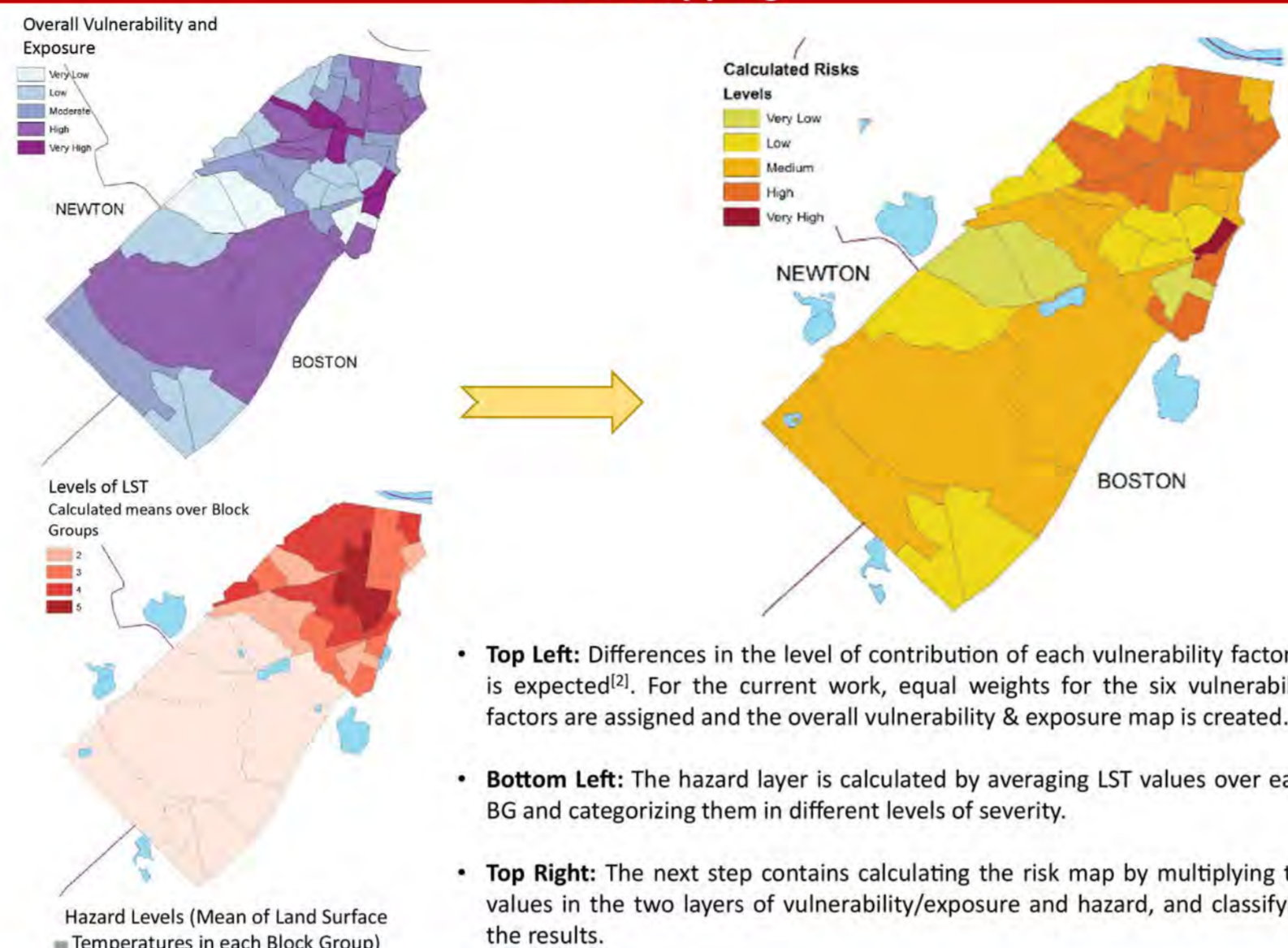
Hazard

The heatwave periods (three or more consecutive days with maximum temperature of 90 degrees Fahrenheit, or higher) calculated from CDO database are compared with the available remote sensing images of the study area.

June 27, 2007 was selected as the most recent available period during which a heatwave occurred and remote sensing data was available through Web-Enabled Landsat Data (WELD) system.



Risk Mapping



Future Projections

