

Workshops

MEASURING SOCIOECONOMIC VULNERABILITY: CUSTOMIZED INDICATORS FOR BETTER PUBLIC POLICIES

During MIT's Independent Activities Period (IAP), the Department of Urban Studies and Planning offered Measuring Socioeconomic Vulnerability: Customized Indicators for Better Public Policies. This course teaches participants different ways to measure social vulnerability, including outlining the limitations of different approaches. It aims to bring up-to-date concepts into the decision-making process of different public policies.

Different methods for summarizing socioeconomic data were presented during the course and analyzed by means of geospatial analysis (using a geographic information system). Pros and cons of upscaling and downscaling different geographical levels were discussed, as were the visual interpretation of the results of relative and absolute indices.

The course took advantage of the outstanding experience that the City of Cambridge, the City of Boston, and the MIT Office of Sustainability (MITOS) have acquired in the last years in setting the worldwide standard for future climate risk assessment at the city level.

Speakers from the City of Cambridge (John Boduc, environmental planner), the City of Boston (Mia Goldwasser, climate preparedness program manager), and MIT (Brian Goldberg, MITOS project manager) were invited to share their experiences concerning socioeconomic vulnerability to climate risk assessment at a city and university campus level.

The course was the first step in the creation of an international network of researchers and practitioners that will explore metrics for a better evaluation of socioeconomic vulnerability to climate risk, including not only the relation of socioeconomic variables to critical infrastructure, but also issues such as social capital, commuting times, and social media connectivity. The aim of the network is to foster the construction of micro indicators that will better describe social vulnerability within a city or region in order to implement specific adaptation measures and design emergency preparedness strategies.

Cases presented by students and practitioners focused on mobile phone connectivity during hurricanes (New York City), social media dependence in the distribution of supplies after catastrophes (Tibet), contradictions between rural and urban assessments (Mexico), locations of hospital services after an earthquake (Haiti), vulnerability assessment in shantytown displacements (Buenos Aires), and vulnerability assessment to climate change at the city level (United States) and in rural areas (Argentina).

Mariano Eriz, MIT SPURS Research Fellow (2015–2016) from Buenos Aires and Esteban Otto Thomasz, MIT SPURS Research Fellow (2016–2017) and researcher at Buenos Aires University, were the instructors for this workshop. Bish Sanyal, Ford International Professor of Urban Development and Planning and director of the SPURS/Humphrey Program was the faculty advisor.



Measuring Socioeconomic Vulnerability workshop