

GIS in the Social Sciences: An Application in Economics

Presentation by Brian Lee

February 21, 2018

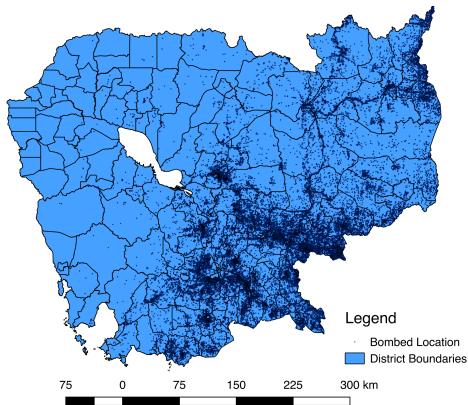
The Value of GIS in Economics

- ▶ Data and practices from disciplines like environmental science and geography are invaluable for economists
- ▶ Sources like NOAA and NASA can provide crucial information about locales, especially if censuses and surveys weren't conducted during the time period of interest
- ▶ More specifically, concepts like remote sensing can provide economists with panel and high spatial resolution data

An Application: The Long-Run Effects of U.S. Bombings in Cambodia

- ▶ From 1965 to 1975, the U.S. launched a systematic bombing campaign in Cambodia, killing up to 150,000 civilians
- ▶ Because bombing locations weren't random, we need a new variable (known as an **instrument**) to isolate a causal effect
- ▶ Using QGIS, Dr. Tobias and I calculated the straight-line distance of each bombing site to Ho Chi Minh, Vietnam and Phnom Penh, Cambodia
- ▶ I also control for socioeconomic and geographic characteristics, such as latitude, longitude, soil type, district size, and will later include rainfall

Locations of U.S. Bombings in Cambodia



- Next step is to use night time data as an outcome!