# Mapping the Unseen: Small Area Estimation for Urban Analysis

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### Introduction to Small Area Estimation

#### Introduction to SAE

- ► We live in a world with increasingly complex problems (e.g. poverty, inequalities, climate change, etc.)
- ▶ Data is essential for solving these problems.
- We also need increasingly high resolution data.

#### The role of surveys

➤ Sample surveys are cost-effective methods for obtaining information about wide-ranging topics at frequent intervals over time (Ghosh and Rao 1994).

## **Key Concepts**

- ► Small area (domain): sub-population of interest for which data is scarce.
  - Not necessarily small geographically.

Ghosh, Malay, and John NK Rao. 1994. "Small Area Estimation: An Appraisal." *Statistical Science* 9 (1): 55–76.