Integrating Equity Standards in Infrastructure Management and Restoration

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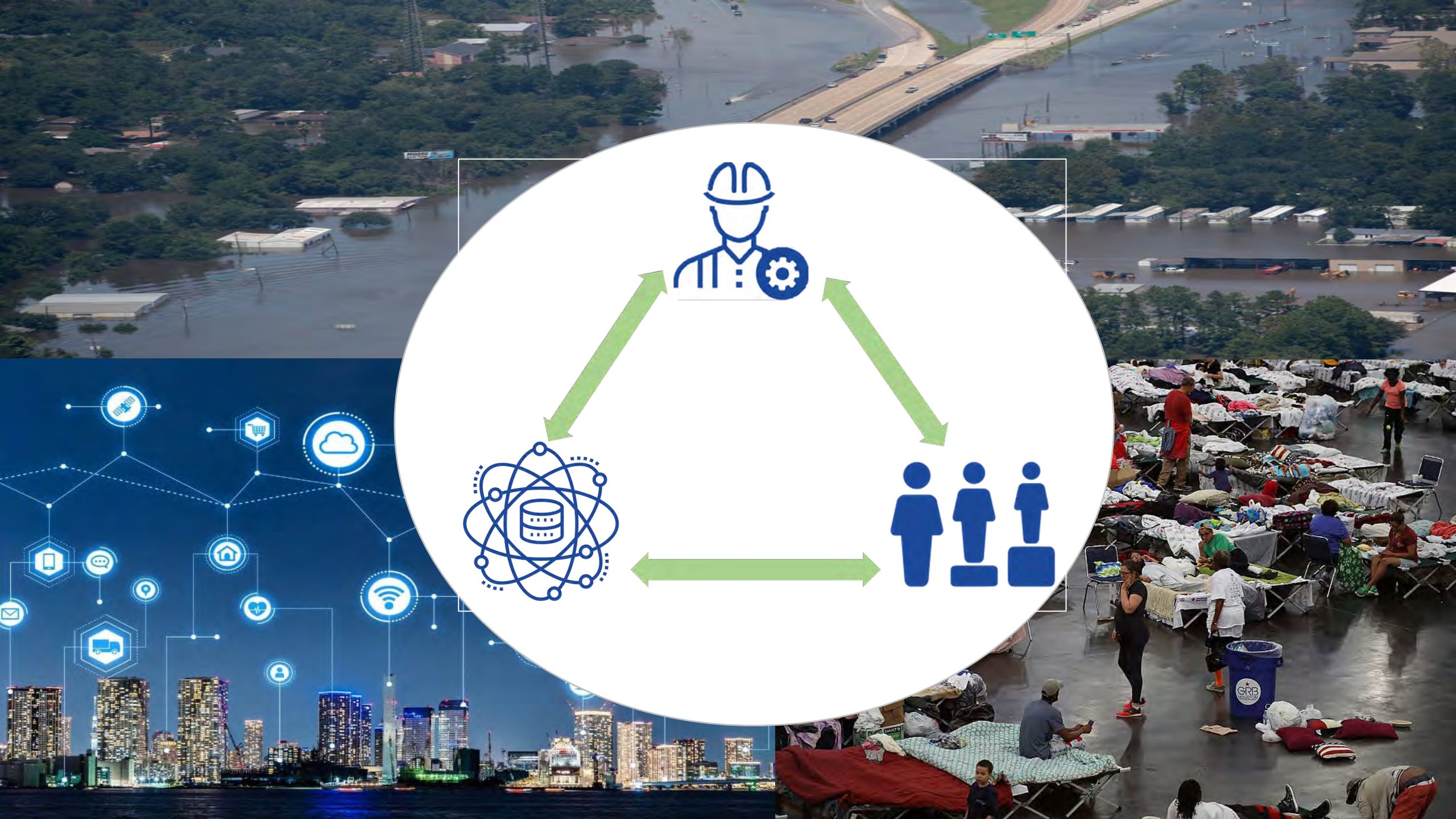
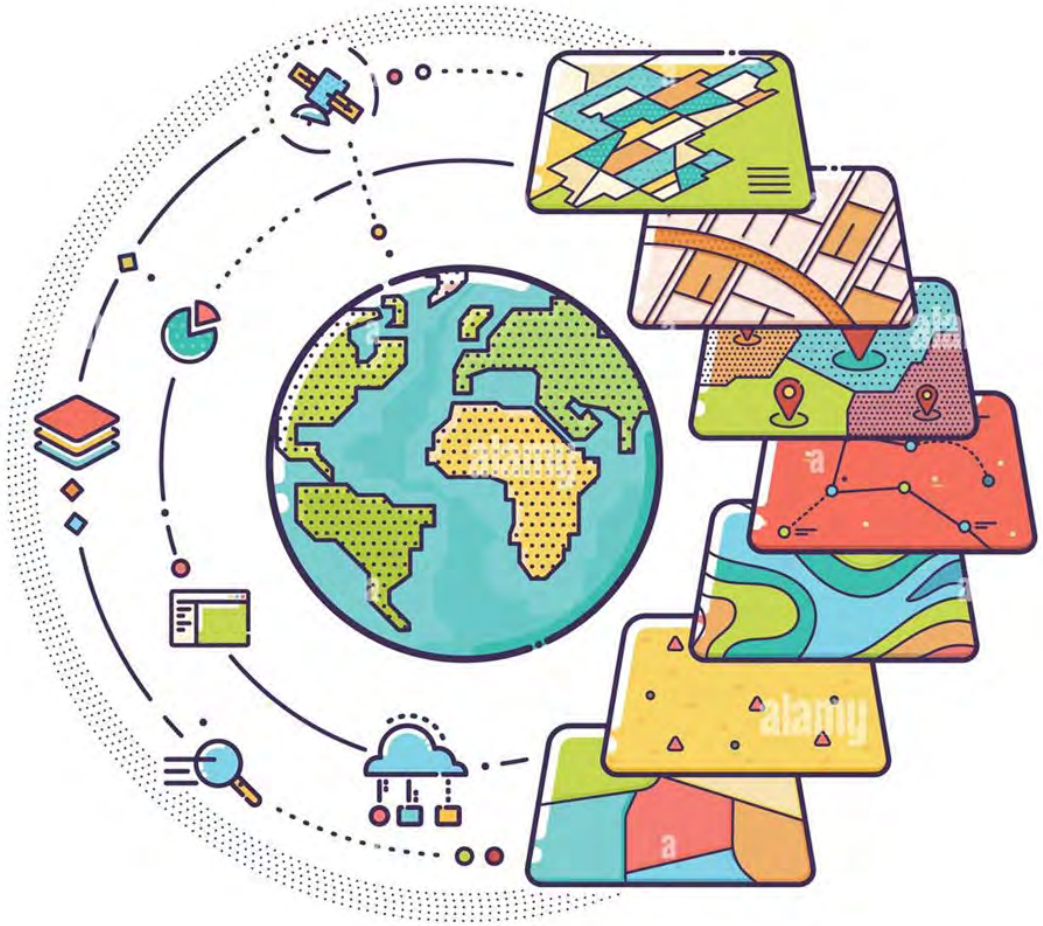
National Academies has acknowledged the “discrimination and biases inherent in infrastructure planning.”





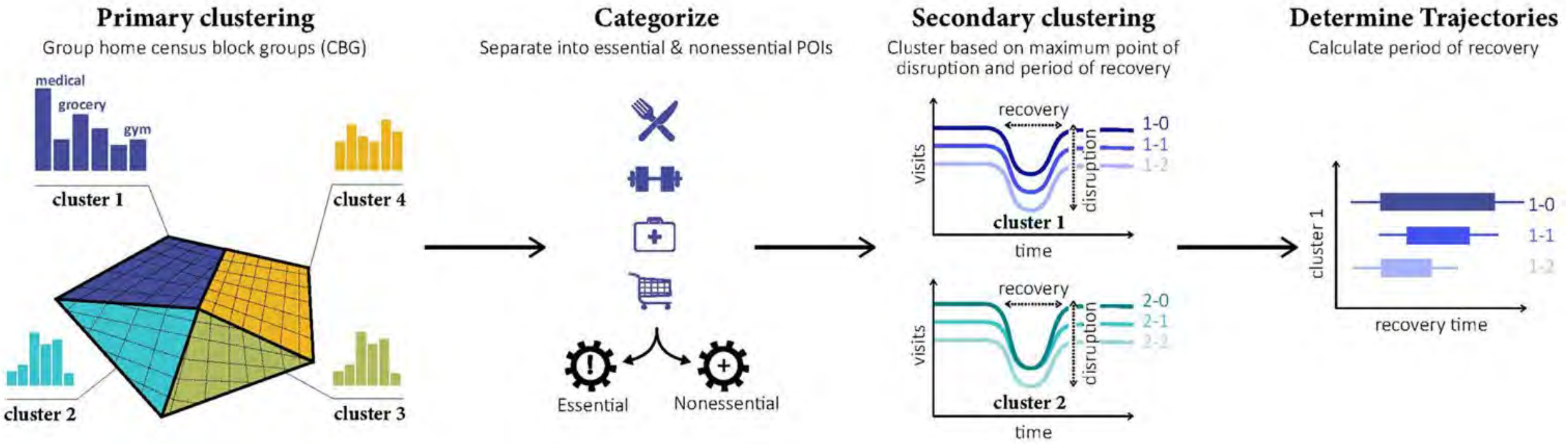
Human Mobility Data

Data for Good Movement

Third-party apps of consented and anonymized location information

Platform-as-a-service (PaaS) that provides a secure and privacy-preserving environment

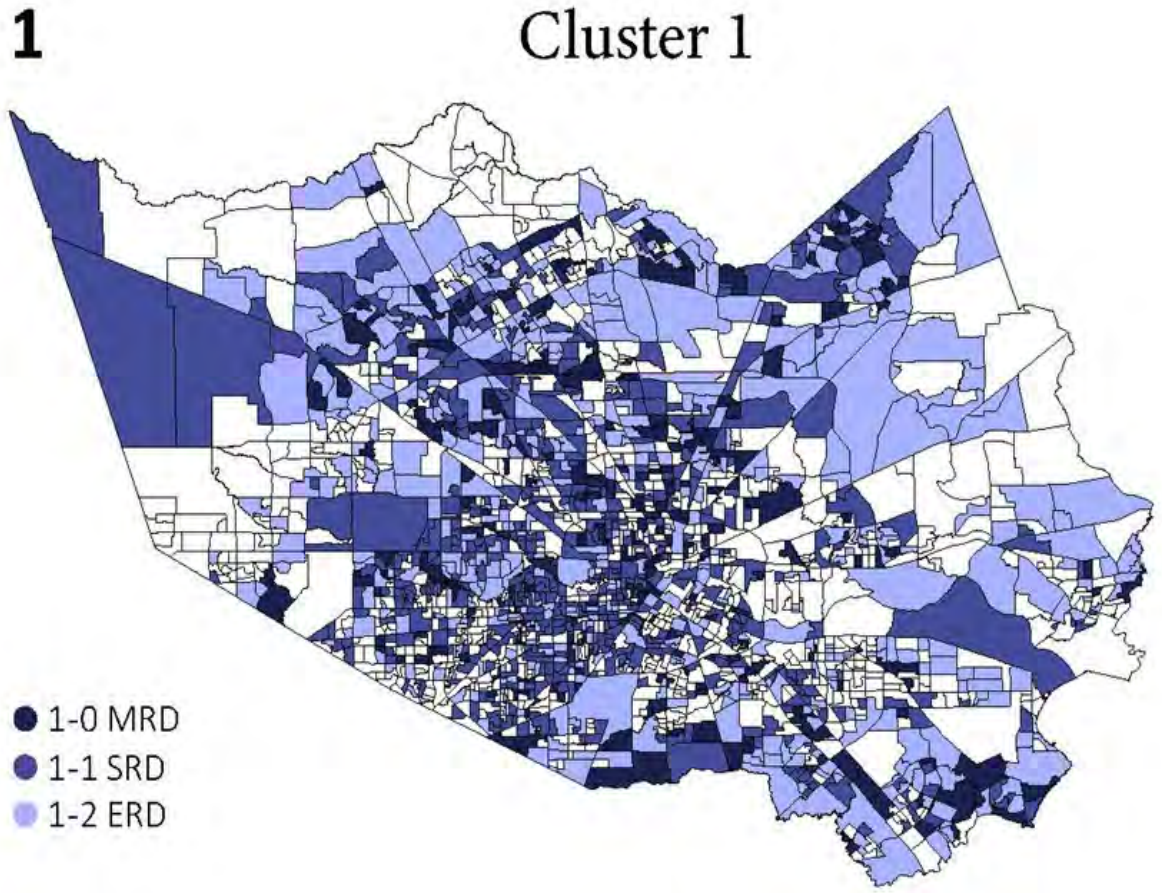
spectus

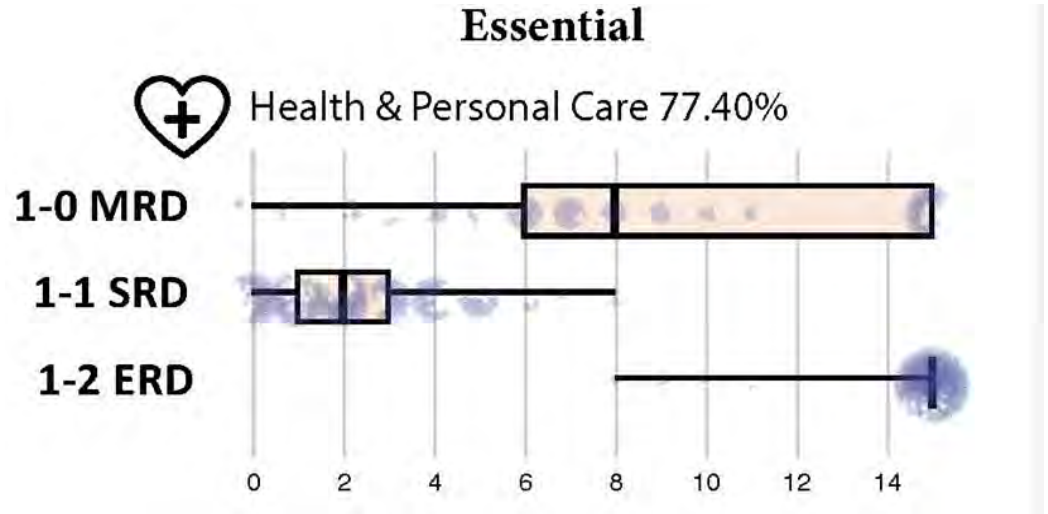


Methodology Framework

The test bed was Hurricane Harvey in Harris County, TX in 2017.

- SRD: short recovery duration
- MRD: moderate recovery duration
- ERD: extreme recovery duration





Contributions

- Established the potential of using human mobility data

- Understand the relationship to essential and non-essential services

- Recognize differential recovery rates of similar lifestyles based on equity

- Impact of lifestyle extends beyond hazards

Challenge:
What is the balance between representation and privacy?

Thank-you BAF!