Planning for Extreme Climate Risk Reduction: Experience from the 95 Midwestern Cities

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Local dimension for climate risk reduction

Extreme Climate

Local Jurisdictions

- Information power
- Regulatory power
- Spending power
- Taxing power
- Acquisition power
- Coordination power

Resilient Community / Safe Growth
Local plans responding to extreme climate

**Comprehensive Plan**
- Long-term blueprint
- “Umbrella” for zoning, subdivision, design standards
- Guidance for safe growth
- Planning process to engage stakeholders

**Hazard Mitigation Plan**
- FEMA required for federal funds: Hazard Mitigation Grant Program; Pre-Disaster Mitigation Program; Flood Mitigation Assistance Program
- Planning process, community analysis, risk assessment, mitigation strategies

**Emergency Operations Plan**
- Emergency operations/response/preparedness
- Assign responsibility
- Set forth lines of authority/relationships
- Identify personnel, equipment, facilities, supplies, and other resources
Planning components

**Factual Base**
- Climate datasets, projections, scenarios, report
- Historical extreme hazards
- Potential impacts

**Goals and Objectives**
- Vision to prevent or reduce the risk
- Multi-objective, “win-win” objectives

**Coordination and Communication**
- Vertical collaboration
- Horizontal collaboration
- Public awareness/outreach
- Integrative planning mechanism

**Policies, Tools, Strategies**
- Land use
- Building code
- Floodplain
- Ecosystem
- Water resources
- Infrastructure

**Implementation**
- Adaptations
- Steering committee
- Action plan
Local jurisdictions in this study
Performance of local plans for extreme climate risk reduction
Performance of local plans for extreme climate risk reduction
Conclusions

Local hazard mitigation plans lead in mitigating for impacts from potential extreme events, but both local comprehensive plans and emergency operations plans are proactively adapted for climatic risks.

• Relatively low awareness/recognition on climate variability

• No clear goals and “win-win” objectives

• Coordination/communication mechanisms available

• Some mitigation/adaptation policies, but no systematic integration

• Lack of implementation commitment
An examination of midwestern US cities’ preparedness for climate change and extreme hazards

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