Develop A Community Resilience Plan

Ch 1: Introduction
Ch 2: Form a Collaborative Planning Team
Ch 3: Understand the Situation

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The Community Resilience Planning Guide for Buildings and Infrastructure Systems helps communities:

- Determine customized long-term resilience goals
- Develop short and long term plans for their buildings and infrastructure systems to achieve resilience goals
- Prioritize improvements to the built environment based on their role in supporting social institutions and economic functions during recovery
- Address infrastructure dependencies and cascading effects of system failures
Community Capitals

- Knowledge about each type of capital contributes to:
  - understanding the community’s well-being
  - sustainable development and community resilience
  - disaster preparedness planning and investments

Adapted and redrawn, Flora et al 2008
Resilience Concept

- Resilience can be expressed in terms of:
  - system functionality
  - time to recover functionality following a disruptive hazard event
Other Federal Activities Supporting Resilience

**National Preparedness Goal (NPG)** identifies core capabilities to strengthen the security and resiliency of the United States.

**National Planning Frameworks** – roles and responsibilities for 5 mission areas

**National Preparedness System** - guidance, programs, processes, and systems that support the NPG
Other Federal Activities Supporting Resilience (cont.)

**Critical Infrastructure Sectors**
- Chemical
- Commercial Facilities
- Communications
- Critical Manufacturing
- Dams
- Defense Industrial Base
- Emergency Services
- Energy
- Financial Services
- Food and Agriculture
- Government Facilities
- Healthcare and Public Health
- Information Technology
- Nuclear Reactors, Materials, and Waste
- Transportation Systems
- Water and Wastewater Systems

**National Infrastructure Protection Plan (NIPP)** - critical infrastructure sector owners and operators collaborate to advance security and resilience

**FEMA Disaster Mitigation Assessment** - guidance for mitigation plans

**Threat and Hazard Identification and Risk Assessment (THIRA)** - helps communities map risks to core capabilities in the NPG
Other Resilience Activities

- SPUR (2009) Framework
- Oregon Resilience Plan
- NOAA’s Coastal Resilience Index
- Baseline Resilience Indicators for Communities (BRIC)
- Community and Regional Resilience Institute’s (CARRI) Community Resilience System
- Communities Advancing Resilience Toolkit (CART)
- United Nations International Strategy for Disaster Reduction (UNISDR) Resilience Scorecard
- Rockefeller Foundation’s 100 Resilient Cities Initiative
Guide Scope and Limitations

Aspects of community resilience not addressed:

- Roles and responsibilities of public-private agencies
- Social, political and economic strategies or processes
- Methods of engaging and informing stakeholders and the community
- Methods of obtaining financial resources and evaluating investment options
- Specifics on community services (e.g., banking) essential for community response and recovery
- Specifics on vulnerable populations and ways they might be affected by a disaster event
- Natural resources and the environment
Planning Steps for Community Resilience

1. Form a collaborative planning team
2. Understand the situation
   - Social Dimensions
   - Built Environment
3. Determine goals and objectives
4. Plan development
5. Plan preparation, review, and approval
6. Plan implementation and maintenance
1. Form a Collaborative Planning Team

Public
- Elected Officials
  - Mayor, City Council
- Local Government
  - Planning & Building Dept, Public Works, Education, Human Services
- Community Members

Private
- Business and Services
  - Banking, Utility providers, Health care, Media
- Organizations
  - Non-Governmental, Voluntary Org. Active in Disasters, Community Service

Adapted and redrawn from Plodinec 2013
2. Understand the Situation
Social Dimensions

- Identify and Characterize the Social Dimensions
  - Community Members
    - Present and future needs
    - Demographics
    - Economic Indicators
    - Social Vulnerabilities
  - Social Institutions, their functions, any gaps in capacity
  - Social Institution’s dependencies
  - Community metrics
Community Member Needs

Adapted from Maslow 1943

- **Survival**
  - Life, food, water, shelter, clothing

- **Safety and Security**
  - Law and order, stability, employment, health

- **Belonging**
  - Family, friends, neighborhood

- **Growth & Achievement**
  - Achievement, recognition, fulfillment

- **Individuals and Families**

- **Neighborhoods**

- **Communities**
Social Institutions that Meet Needs

Family and Kinship  Economic
Government         Health
Education          Community Service
Religious and others Media

Identify:
• Services provided
• Gaps in capacity during recovery
• Dependence on one another
• Community metrics
2. Understand the Situation
The Built Environment

Buildings
Individual structures including the equipment and contents that house people and support social institutions

Building Clusters
A set of Buildings that serve a common function such as housing, healthcare, retail, etc.

Infrastructure Systems
Physical networks and structures that support social institutions including transportation, energy, communications, water and waste water systems.

Dependencies
Internal, External, Time, Space

Characterize
Location, number, construction, demands and use, etc.
2. Understand the Situation
Link Social Dimensions and Built Environment

Some rely more on the built environment

- Identify how services are supported
  - Services provided to meet needs
  - Dependency on other services and systems
  - Dependency on built environment
  - Consequences of loss

Some functions change

- Emergency Rooms
- Industrial Plants
- Schools → Shelters