# Overview:
# Step 2 – Social Dimensions of the NIST Community Resilience Planning Guide

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# What's distinctive about the NIST Guide?

*While there are other guides available that address resilience issues, NIST's Planning Guide has three unique aspects:*

- **It recognizes that social needs should play a significant role in settings goals for how our buildings and physical infrastructure systems should perform**

- **It acknowledges the unique role of local government as the logical convener for relevant stakeholders needed to develop a comprehensive resilience plan**

- **It addresses dependencies among social and physical systems**

# SIX-STEP GUIDE TO PLANNING FOR COMMUNITY RESILIENCE

## 1. FORM A COLLABORATIVE PLANNING TEAM

- Identify leader
- Identify team members
- Identify key stakeholders

## UNDERSTAND THE SITUATION

### Social Dimensions
- Characterize social functions & dependencies
- Identify support by built environment
- Identify key contacts

### Built Environment
- Identify and characterize built environment
- Identify key contacts
- Identify existing community plans

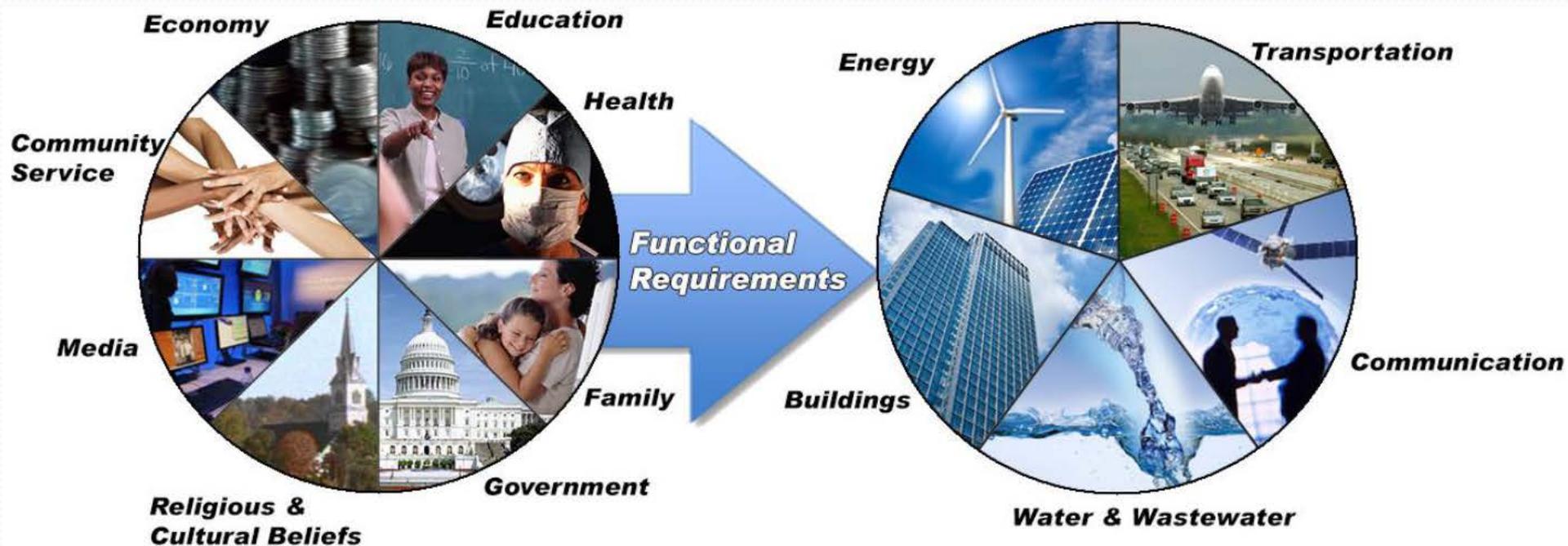### Link Social Functions & Built Environment
- Define clusters

## 3. DETERMINE GOALS & OBJECTIVES

- Establish long-term community goals
- Establish performance goals
- Define community hazards
- Determine anticipated performance
- Summarize results

# Relationship Between Social Dimensions of a Community and the Built Environment

# Identify and Characterize the Social Dimensions

1. **Characterize the community's population—community members and their present and future needs**

2. **Identify social institutions and systems within the community**

3. **Identify dependencies among and within social institutions**

4. **Identify key social and economic community metrics associated with resilience**

# Community Strengths/Capacity and Vulnerability

- **In characterizing the social environment, it is important that communities identify their strengths and capacities, as well as their vulnerabilities**

- **Identifying social vulnerabilities and drawing upon local capacities as outlined in the Guide are critical to building resilience**

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# Sub-Step #1

*Characterize the community's population—community members and their present and future needs.*

- **Develop a description of the social dimensions of a community and those who live there**
  - Population demographics and location
  - Economic indicators
  - Social vulnerabilities
  - Social capital

- **Consider short- and long-term needs, including potential growth**

# Guide Brief for Sub-Step #1

- **Provides guidance regarding the first part of Step 2 – "Characterize the population" for the social dimensions task group of the collaborative planning team**

- **Provides information for use in discussions with local experts who interpret social and economic data, including those who use Geographic Information Systems (GIS) to map and present different types of spatial information**

# Guide Brief for Sub-Step #1

- **Lists basic activities needed to characterize the population and offers suggestions for how a community might go about this process**

- **Provides examples of questions that might be addressed using data**

- **Includes examples of the types of indicators that might be used to characterize the population, selected sources of these data, and additional resources for more advanced analysis**

# Example: Population Demographics

- *Are there geographic concentrations of vulnerable populations in the community, such as low-income households, older adults, individuals living with disabilities, and others? How might their locations further increase their vulnerabilities in the event of a disaster?*

- *Is there a substantial non-English-speaking population in the community? If so, is it geographically concentrated in specific areas of the community?*

- *To what extent do residents have access to transportation in an emergency? Are there geographic concentrations of populations without the ability to evacuate in the event of a disaster?*

- *To what extent are identified vulnerable populations represented in community resilience planning?*

# Sub-Step #1 Considerations…

- **Does the planning team have enough data and the right types of information needed to characterize the community?**

- **Are additional analyses needed to identify community vulnerabilities and capacities that threaten or support resilience?**

# Sub-Step #2

*Identify social institutions and systems within the community.*

- **Their functions**

- **The needs they meet**

- **Gaps in institutional and organizational capacity that could be improved by changes to the built environment or other approaches**

# Guide Brief for Sub-Step #2

- **Summarizes the types of social institutions and their key functions in a community**

- **Describes the basic activities associated with this task**

- **Offers ideas about how a community might carry out this part of the process (e.g., an inventory)**

- **Provides suggestions regarding types of expertise and where to find such expertise in local or regional departments, agencies, or organizations**

- **Highlights ways in which dependencies among a community's population and the organizations within social institutions might be considered in the context of the built environment**

# Examples of Questions Related to Sub-Step #2

- *What citizen groups, neighborhood organizations, and government offices can help the planning team understand the various family and kinship dynamics in the community? Where are they located?*

- *What key business and financial institutions serve the community? Where are they located (within the community and in the broader region)?*

- *What/Who are the local government entities, essential personnel, and facilities (including communications) in the community? Where are these facilities and personnel located?*

- *What is the community's capacity with respect to providing health-related services? Where are these facilities and personnel located?*

# Example: Community Service Organizations

**It is important to:**

- **Understand the roles that CSOs play in supporting the local population on a day-to-day basis**

- **Identify how the services they provide might be disrupted during and after a hazard event**

- **Consider the potential for such disruptions to negatively affect the local population**

# Example: Community Service Organizations

**It is also beneficial to recognize:**

- **How communities can access the capabilities their local CSOs provide during response and recovery**

- **How CSOs can become key players in resilience planning and ways the capacity of CSOs can be developed to promote resilience**

- **How damage to the built environment might affect <u>other</u> institutions and organizations**

# Guide Brief for Sub-Step #2

*Types of information that might be included in an inventory of organizations:*

- **Name of organization**
- **Primary point(s) of contact**
- **Telephone**
- **E-mail**
- **Mailing address**
- **Physical location (latitude and longitude)**

- **Types of services provided**
- **Types of populations served**
- **Types of facilities occupied**
- **Where employees live**

# Sub-Step #2 Considerations...

- **Completion of this inventory should provide the information needed to assess capacities and gaps in service provision**

**The inventory can be used to:**

- **Identify dependencies and interdependencies within and among the social institutions**

- **Highlight gaps that might be improved by changes to the built environment or other approaches**
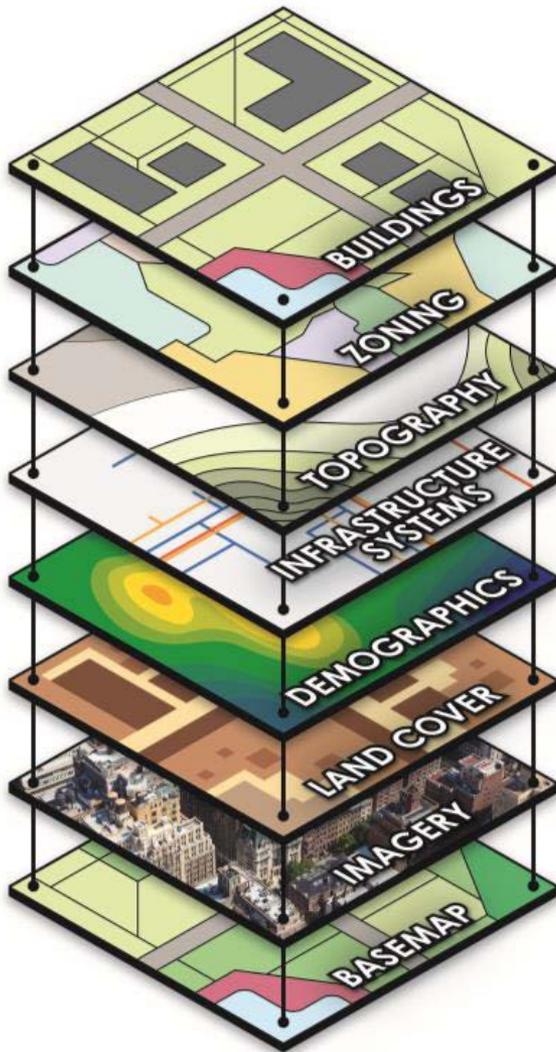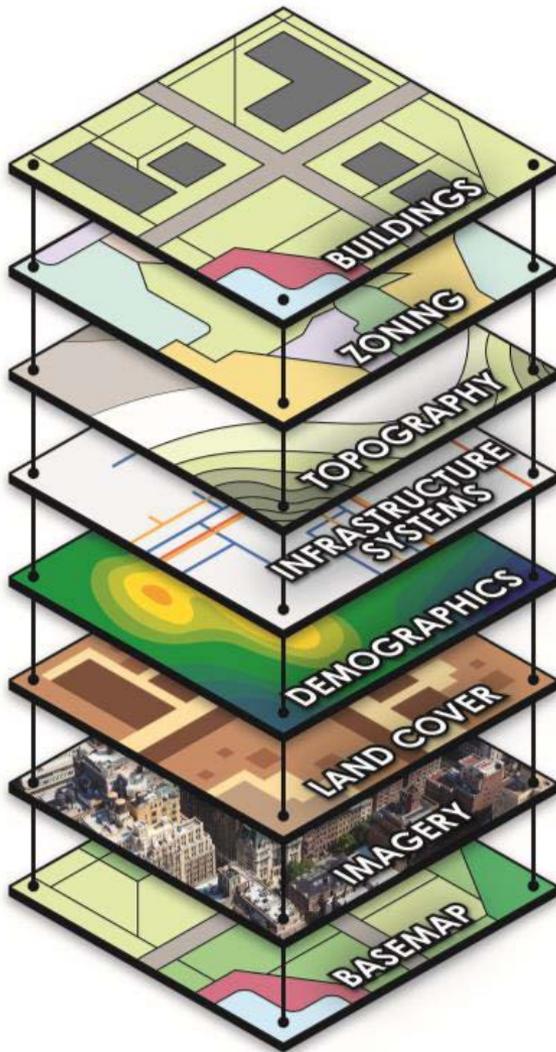
- **Ultimately, information about the social and built environments needs to be combined and reviewed**

- **This will help to present a comprehensive "picture" of the community's strengths and vulnerabilities that can be used in resilience planning**

# *For further discussion ...*

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# Sub-Step #3

## *Identify dependencies among and within social institutions.*

- **A disruption in the built environment that affects one social institution may also affect others**

- **The planning team should identify dependencies among and within social institutions to determine which functions are most critical during recovery**

# Links Between Social Institutions and the Built Environment

*Identify links between social institutions and the built environment.*

- **Social institutions rely on the built environment, and some rely on it more heavily than others**

- **The Guide provides examples of how the social institutions rely on the built environment**

- **The tables in Chapter 10 of the Guide offer ways for communities to consider these linkages to support resilience planning**

# Links Between Social Institutions and Buildings

| Social Institution | Purpose of Buildings within each Social Institution | How Actualized within Built Environment | Possible Impacts if Buildings are Damaged | |
|---|---|---|---|---|
| | | | Direct | Indirect |
| **Family** | | | | |
| **Economic** | Point of sale<br><br>Location of employment, gathering points<br><br>Prepare materials for transport<br><br>Store materials<br><br>House equipment and machinery<br><br>Design and develop aircraft parts | City's downtown:<br><br>  Stores<br><br>  Restaurants<br><br>  Bank<br><br>  Salon and barbershop<br><br>  Internet cafe<br><br>  Houses and apartments<br><br>National Aircraft Parts plant | Loss of revenue<br><br>Loss of goods and services for sale<br><br>Loss of ability to manufacture goods<br><br>Loss of employment<br><br>Loss of income<br><br>Loss of housing<br><br>Loss of materials<br><br>Decrease in social capital | Loss of taxes, market share<br><br>Price increases |
| **Government** | Provide work and meeting space for leaders and staff<br><br>House public safety and emergency response capabilities | Offices<br><br>Police stations<br><br>Fire and EMS stations<br><br>Emergency operations center (EOC)<br><br>Jail<br><br>Courthouse<br><br>Libraries | Diminished emergency response<br><br>Disruption to government continuity<br><br>Loss of archived materials | Increased casualties and economic damage |
| **Health Care** | | | | |
| **Education** | | | | |
| **Community Service** | | | | |
| **Religious** | | | | |
| **Media** | | | | |

# Sub-Step #4

***<u>Identify key social and economic community metrics</u>.***

- **Key social and economic metrics**

- **Methods to track the <u>processes</u> of community planning**

- **Methods to track the <u>impacts</u> and <u>outcomes</u> of community planning and improvements**

# *Questions?*

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