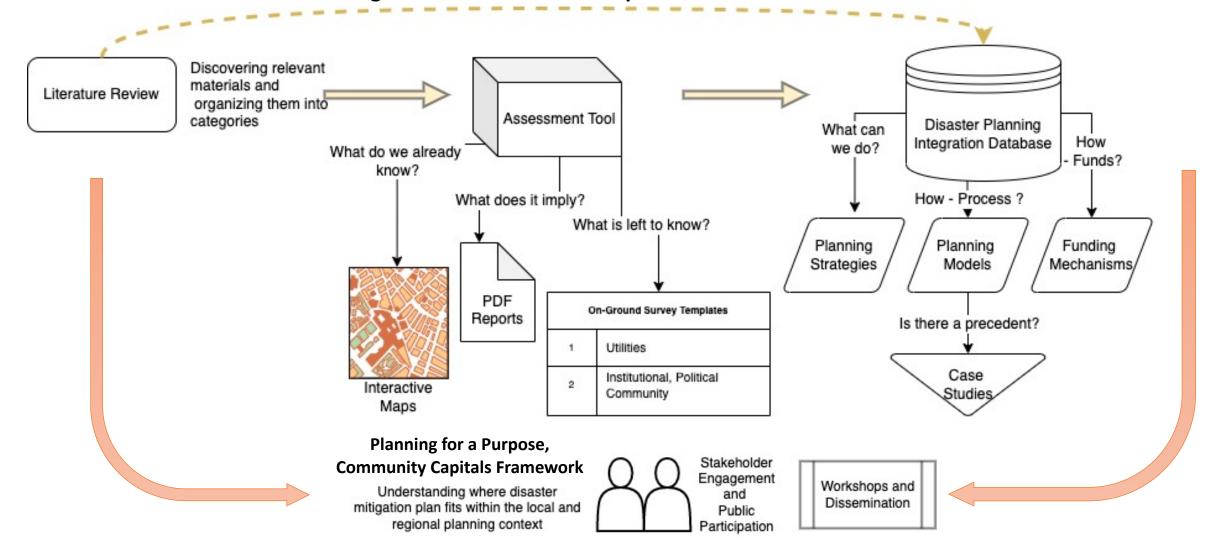
# A Disaster Planning Integration Toolkit for Rural Illinois

Arpita Banerjee

**Illinois Extension** 

### Toolkit

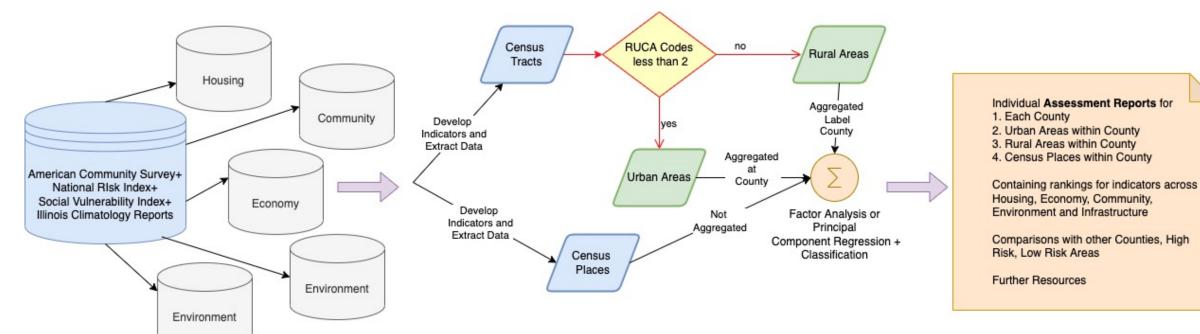
#### **Disaster Mitigation + Economic Development + Green Infrastructure**



# Assessment Tool

Methods, Data, Demonstration

## Community-Level Assessments



#### Housing/Residential

- Residential Age
- Homeownership
- Housing Affordability
- Housing Stability
- Insurance

#### Economic

- Types of Businesses
- Diversity and Location Quotient
- Employment and Wages
- Poverty

#### **Environment and Hazards**

- Physiographic factors and Environmental Quality
- Land use in floodplains
- History of disasters and past damage

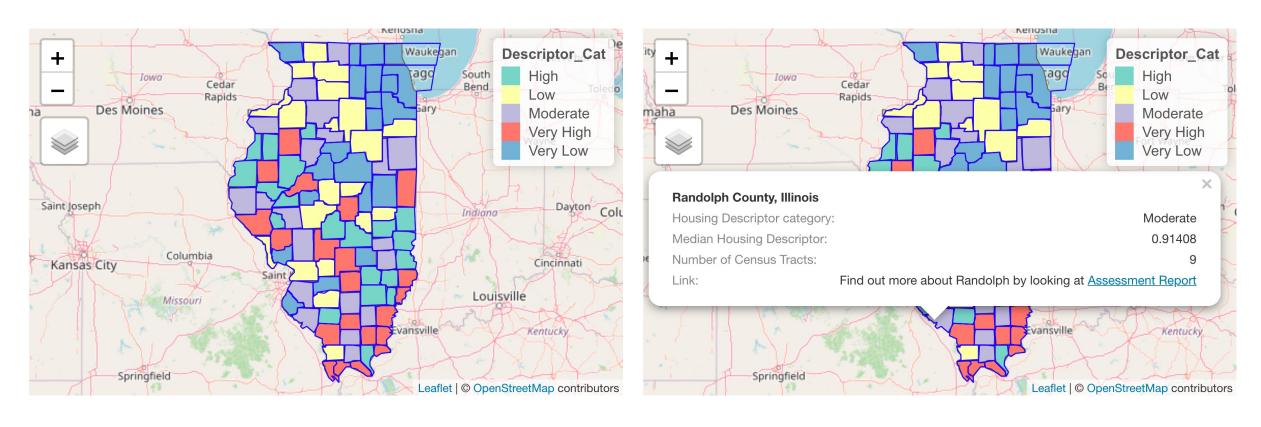
#### Community/Demographic

- Age
- Sex
- Race
- Community Composition
- Health

#### Infrastructure

- Utilities
- Transportation
- Critical and Emergency Facilities

## Assessment Tool



- I. County Level Map showing 5 categories of Disaster Resilience, currently developed based on only indicators for Housing Indicators
- II. Hovering over counties show their names
- III. Clicking on a County shows few details along with link to a detailed report
- IV. Report Layout on Next Slide

# Sample County Report

Data from Champaign County, IL

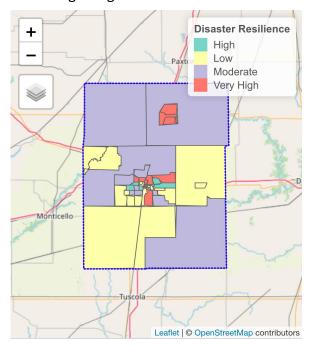
#### Champaign County , Illinois – Sample Report

#### County Level (Aggregate)

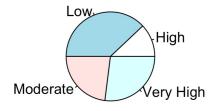
Table 1 Basic Statistics for Champaign, IL

Information	Value	
Population	205943	
Area	996.27 sq mil	
Gross Density (persons/sq mil)	207	
Avg HH Size	2.34	
Median HH Income	\$ 53936 (annual)	

**Map 1** County Map for Champaign, IL, showing categories of Disaster Resilience

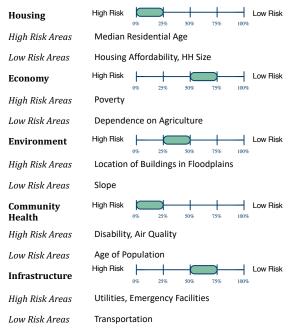


**Table 2** Percentage of Census Tracts under each Resilience Category in Champaign, IL

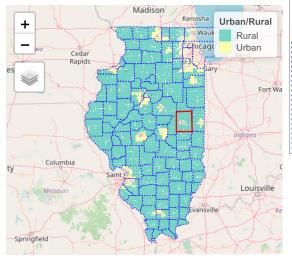


High	Very High	Moderate	Low	Very Low
12%	27%	23%	38%	0

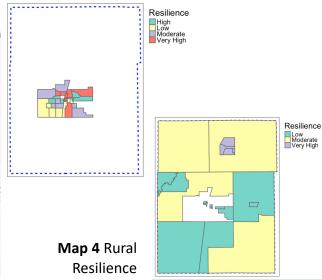
#### **Indicator Group Rankings**



### Map 2 State Map showing urban and rural areas



#### Map 3 Urban Resilience



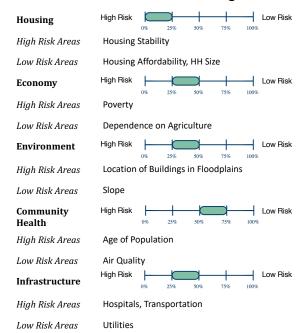
#### **Urban** – Indicator Rankings

#### Housing Median Residential Age High Risk Areas Low Risk Areas HH Size. Insurance **Economy Employment and Wages** High Risk Areas Low Risk Areas Types of Businesses **Environment** High Risk Areas Land use in floodplains Low Risk Areas No disasters/past damage Community Health High Risk Areas Disability, Air Quality Low Risk Areas Age of Population Infrastructure Utilities High Risk Areas

Hospitals

Low Risk Areas

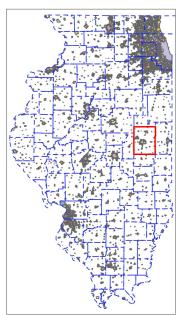
#### Rural – Indicator Rankings

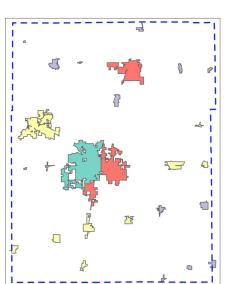


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#### **Census Places**

Map 5 Census Places in IL and Champaign

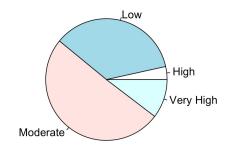




Resilience

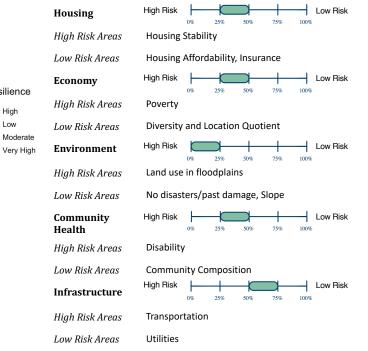
Moderate

**Table 3** Percentage of Census Places under each Resilience Category in County, IL



High	Very High	Moderate	Low	Very Low
3%	9%	44%	31%	0

#### Places – Indicator Rankings



#### **Appendix**

Will contain comprehensive list of how every indicator fares at the county level, best performing counties and values of state average for each county. It has not been included here for legibility and conciseness.

#### **Further Resources**

Need to Assess in further detail?

#### The following *questionnaires* should help

- On-ground Housing Survey template
- On-ground Community Resilience template

#### See *Strategies* for

- Housing
- **Environment and Hazards Mitigation**
- Community Resilience

#### See *Funding Mechanisms* for

- **Housing Projects**
- **Green Infrastructure**
- **Emergency management**

#### See *Case Studies* for planning precedents

Greening Greensburg,

- **Manual for Easy Search Library**
- **Planning Processes**

#### Easy-search Keywords:

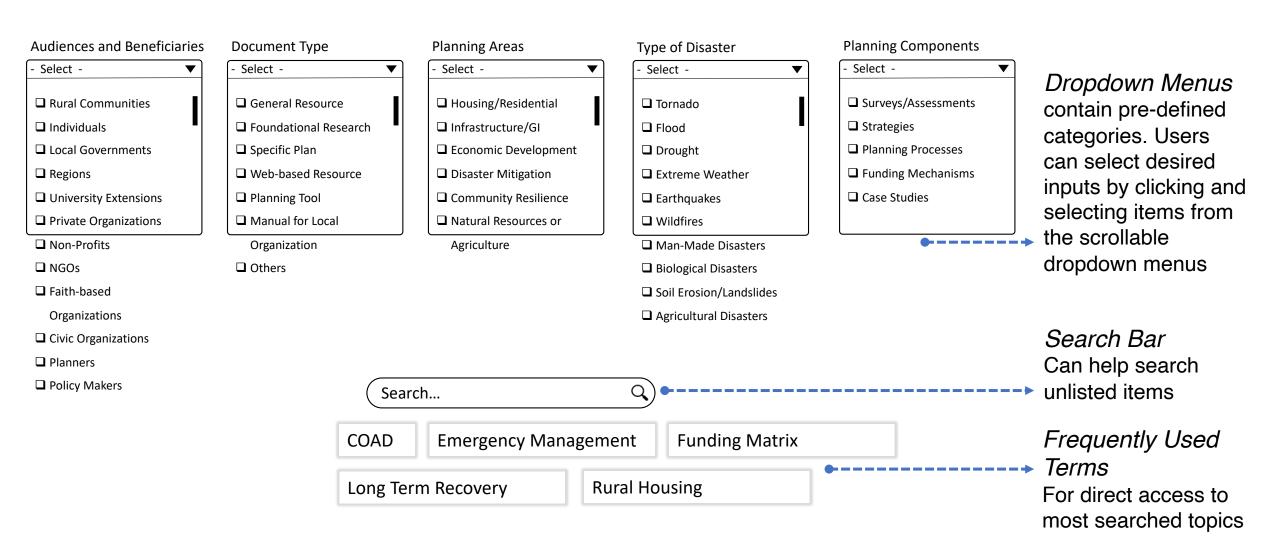


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# Disaster Planning Integration Database

Library containing all relevant and available materials

# Disaster Planning Integration Library Interface



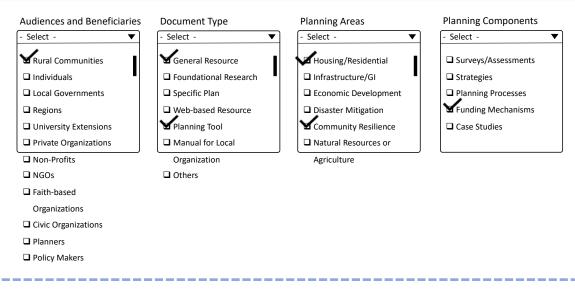
#### Step 1

Select items from drop-down menus

#### Step 2

Select
Document
and topic
from
search
results

#### Hypothetical Demonstration



#### Showing search results 2 out of 5

#### Click A Toolkit for Rural Housing

J. D. McClanahan, Illinois Extension - 2021

**Abstract**: The toolkit provides stakeholders in rural cities, towns, unincorporated areas and counties of Illinois with guidance on ...Read full abstract

Click Contains: Funding Mechanisms Strategies Strategies Strategies

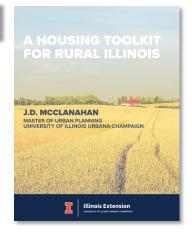
#### **Federal Disaster Funding Streams and Post-Disaster Community Best Practices**

Zach Kennedy, Carrie McKillip, Ashley Mueller, et al., Illinois Extension - 2021

**Abstract**: The document includes funding mechanisms through federal funding matrices, address local data gathering ambiguities ...<u>Read full abstract</u>

local data gathering ambiguities ... Read full abstract

Contains: Funding Mechanisms Strategies Case Studies Planning Processes



#### A Toolkit for Rural Housing

J. D. McClanahan, Illinois Extension - 2021

**Abstract**: The toolkit provides stakeholders in rural cities, towns, unincorporated areas and counties of Illinois...Read full abstract

#### **Funding Mechanisms**

#### **Organizations Providing Funding**

Illinois Housing Development Authority (IHDA), United States Department of Housing and Urban Development(HUD), United States Department of Agriculture (USDA)

#### **Broad Areas of Funding**

**HUD** - LIHTC (Low Income Housing tax Credit) Program, Housing Choice Vouchers

IHDA - LIHTC, affordable rental housing, community programs, information to local lenders and realtors USDA - Rural Development, Single Family Housing Program, Multi-Family Housing Program

#### Step 3

View Document along with required information

## Progress Update

#### **Assessment Tool**

Tasks Completed

Data has been extracted from 3/5 indicator groups and analyzed

First batch of reports generated with housing data

Applicability of methods and final report template has been finalized

Tasks Remaining
Raster Analysis for Environmental
and Infrastructural Data to create
final reports for hosting

#### **Disaster Planning Integration Library**

Tasks Completed

Interface has been finalized and 60+ documents have been incorporated into the library (will be an ongoing process as more information becomes available)

Testing on interface to understand its usability has been performed

Tasks Remaining
Adding more resources as they
become available and web-hosting

#### **Planning Process and Dissemination**

Tasks Completed

Two possible modules –

- Stand alone plans for communities with no prior experience
- 2. Integration into existing plans

**Planning for a Purpose** as a model for Action Planning

Tasks Remaining
Finalizing processes, developing
manuals and stakeholder engagement