



Building Preparedness Capacity

Addressing Populations with Access and Functional Needs

Christine Bevc, PhD, MA

North Carolina Institute for Public Health

with Special Guest

Betsy Kagey, PhD, MSPH

Georgia Department of Public Health

June 3, 2015



UNC
GILLINGS SCHOOL OF
GLOBAL PUBLIC HEALTH

THE NORTH CAROLINA
Institute *for* Public Health

North Carolina Institute for Public Health (NCIPH)

- Service arm of the Gillings School of Global Public Health at UNC-Chapel Hill
- Since 1999 has served as a bridge between academia and partners in community organizations and government agencies

Deliver training, conduct research and provide technical assistance to transform the practice of public health for all



Objectives

- Describe how the Vulnerable and At-Risk Populations Guide can identify vulnerable and at-risk populations
- Discuss strategies for engaging vulnerable and at-risk populations in local preparedness planning
- Identify lessons learned from communities working with vulnerable and at-risk populations to enhance preparedness efforts



Planning & Resilience

- **All-Hazards Planning**

- *Based on the concept that jurisdictions should develop, exercise and revise core plans that address all hazards, whether natural, accidental, negligent or intentional*

- **Community Resilience**

- *Ongoing and developing capacity of the community to account for its vulnerabilities and develop capabilities that aid that community in mitigating, recovering, and strengthening*



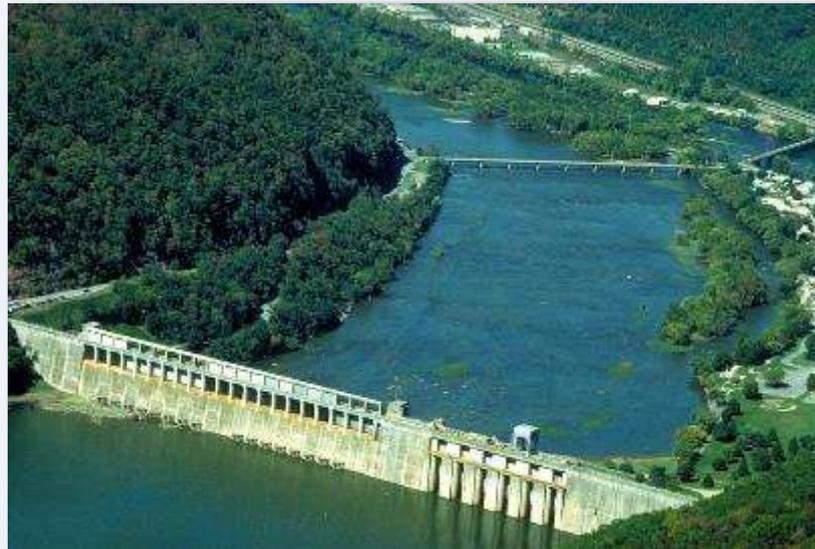
Individuals with Access and Functional Needs

- Individuals who may have difficulty accessing public health and medical services they require following a disaster or emergency
- Referred to as “at-risk”, “special needs” or “vulnerable” populations
- At-risk groups may include:
 - Children
 - Senior citizens
 - Pregnant women
 - Persons living with disabilities
 - Persons living in institutions
 - Persons from diverse cultures
 - Persons with limited English proficiency
 - Transportation disadvantaged
 - Persons with chronic medical disorders
 - Persons with pharmacological dependency



Defining Vulnerability

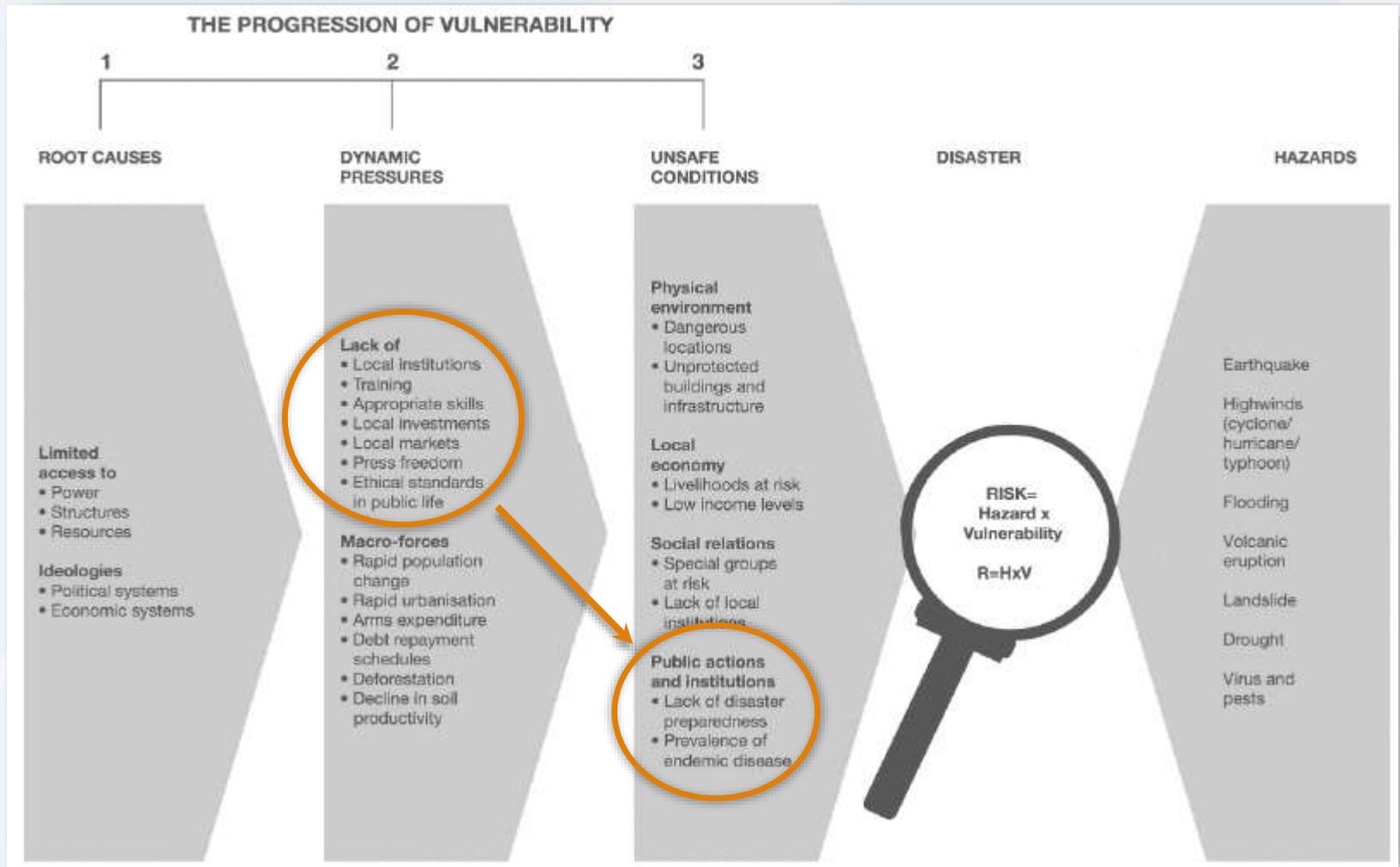
“Vulnerability is the pre-event, inherent characteristics or qualities of a social system that create potential harm. Vulnerability is a function of exposure (who or what is at risk) and sensitivity to the system (the degree to which people and places can be harmed)”.



Bluestone Dam, West Virginia



Vulnerability and Risk



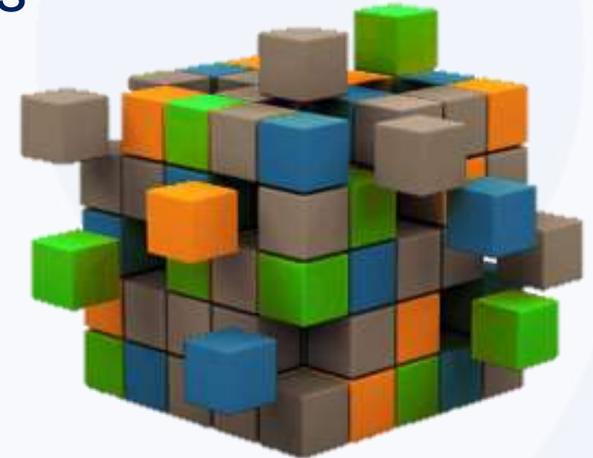
Pressure and Release Model – Progression of Vulnerability (Blaikie et al. 2003)



Vulnerability is Multidimensional

Resource limitations:

- **Economic** - poverty and link to hazardous environments and in adequate nutrition
- **Educational** - ability to understand health information and make informed choices
- **Social** - support system
- **Health status** - physical, biological, psychological
- **Health risk** - lifestyle, environmental



Developing Your Plan

Assess Current State

- Response roles and responsibilities
- Resources (health dept. and partners)
- Progress and needs in developing PHEP capabilities

Determine Goals

- Review jurisdictional planning and assessment documents
- Prioritize PHEP capabilities
- Develop short and long-term goals

Develop Plans

- Implement goals
- Plan for how to build and sustain capabilities
- Evaluate progress



Developing Your Plan



- Assess at-risk populations
- Set priorities based on findings
- Define public health's primary responsibility
- Define partners
- Collaborate and engage
- Reassess and refine

Assess At-Risk Populations

Ability to set priorities based on evidence

- How many?
- Where do they live?



Social Vulnerability Index (SVI)*

- **Metric that combines 14 census variables**
 - *Indicators of social vulnerability*
 - *Focuses on a set of population groups*
 - *Different domains of potential vulnerability*
- **Mapped at the local jurisdiction level**
 - *Spatially identifies socially vulnerable populations*
 - *Constructed at a smaller unit for local planning*

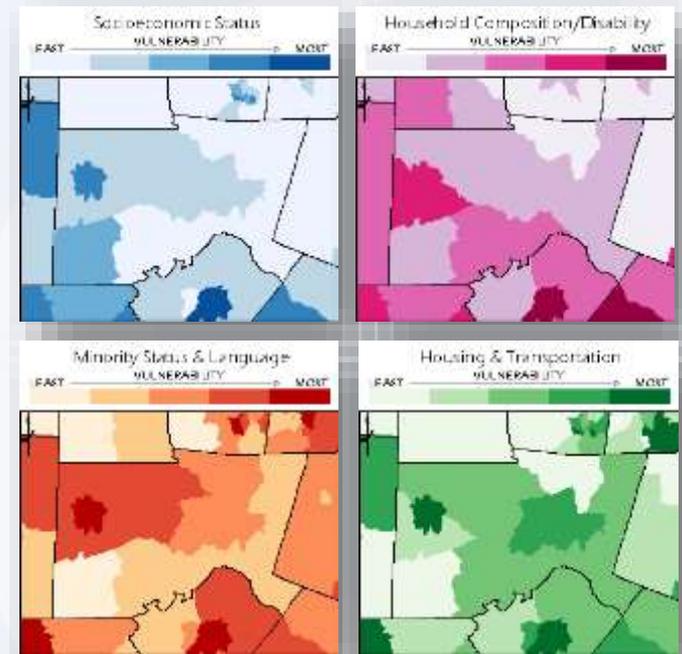
**Developed by CDCs Geospatial Research, Analysis, and Services Program (GRASP), 2011*



Social Vulnerability Index (SVI)*

Intended to capture a diverse range of populations

- **Socioeconomic Status**
 - Includes income, poverty, employment, and education variables
- **Household Composition and Disability**
 - Includes age, single parenting, and disability variables
- **Minority Status and Language**
 - Includes race, ethnicity, and English language proficiency variables
- **Housing and Transportation**
 - Includes housing structure, crowding, and vehicle access variables



**Developed by CDCs Geospatial Research, Analysis, and Services Program (GRASP), 2011*

Levels of Planning

Planning for the “whole community” varies by scale and “community”



County



Preparedness Region



Hospital EMS Regions



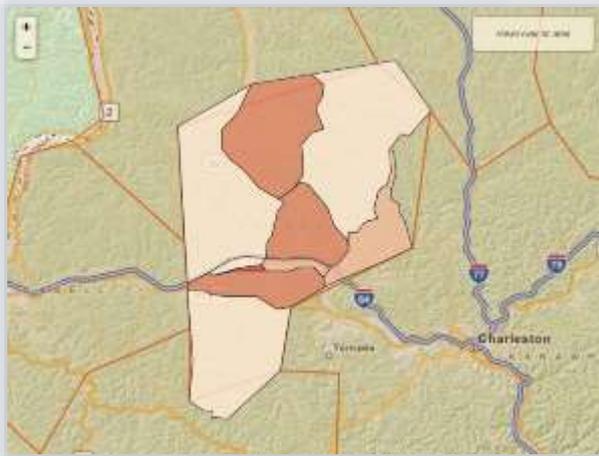
Emergency Management Regions

Illustrates each jurisdiction's vulnerable populations at the census tract level

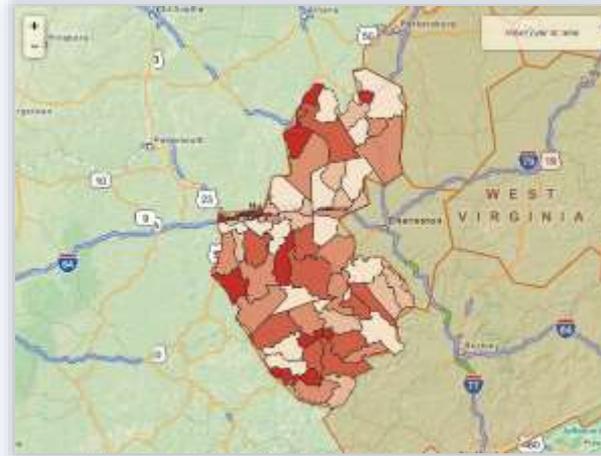


Making Planning Local

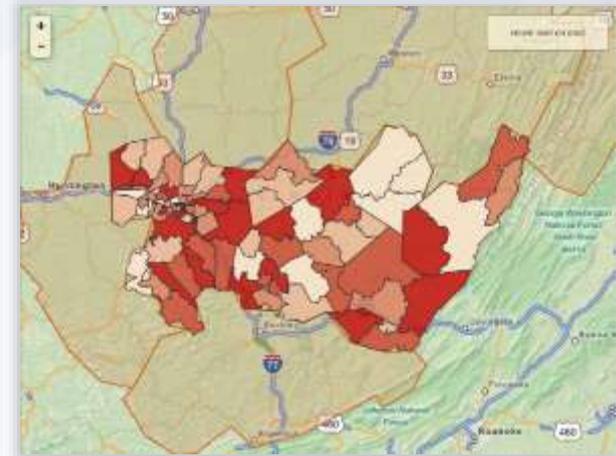
Planning for the “whole community” varies by scale and “community”



Putnam County



Bundle Team
Public Health District



Region 3/4
Hospital EMS Region

Example of Putnam County across multiple planning regions



Translation to Practice

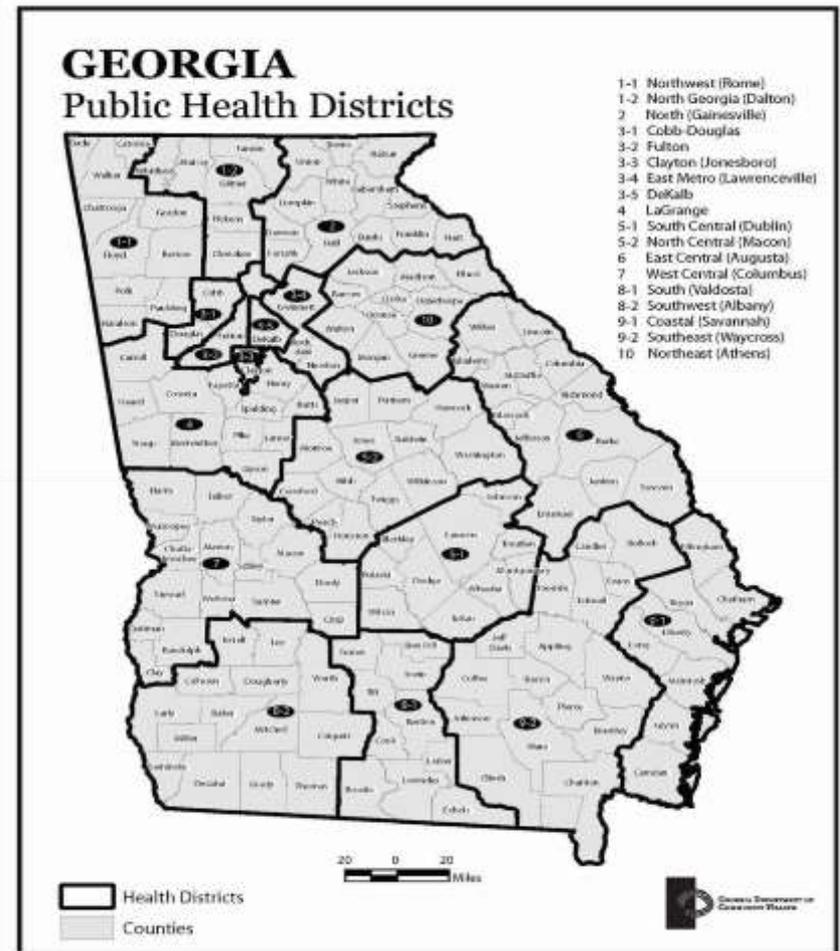


Special Guest

Betsy Kagey, PhD, MSPH

Academic Liaison

Georgia Department of Public Health



Georgia's Four Seasons of Climate Change



Drought



Floods



Wildfires



Ice storms



Welcome

Better outreach. Better preparedness.

Vulnerable & At-Risk Populations Resource Guide assists state and local public health agencies, emergency management, hospitals, and other agencies with improved, local mapping options (custom mapping available). Direct links to population and partner-specific resources and tools are selected to help improve partnerships and planning for the "whole community."

[Register and login](#) to access special features, including the ability to bookmark, export, and share your own resources!

NEWS >> MARK YOUR CALENDARS

You're invited to join our official launch and "virtual" tour on **Tuesday, June 17th at 2pm**. Learn more about the site and its features.



Be sure to [register here](#) to reserve your space!

Featured

Latest Project Findings

Read more about the project findings shared at this year's **NACCHO Preparedness Summit**. Project team shares progress in building competency and capability for at-risk populations planning, highlighting top internal and external challenges to preparedness.

[Check out our latest presentation >>](#)

[View more project communications >>](#)

Recent Resources

KIDS COUNT

A project of the Annie E. Casey Foundation, **KIDS COUNT** is a national and state-by-state effort to track the well-being of children in the United States by providing high-quality data and trend analysis.



Planning for your Community

Choose a state >> Choose an Area >> Choose a Place



Public Health

Preparedness Engines at Local Health Departments



Emergency Management

EM Area or Districts



County Level



View vulnerability data, more accurately.

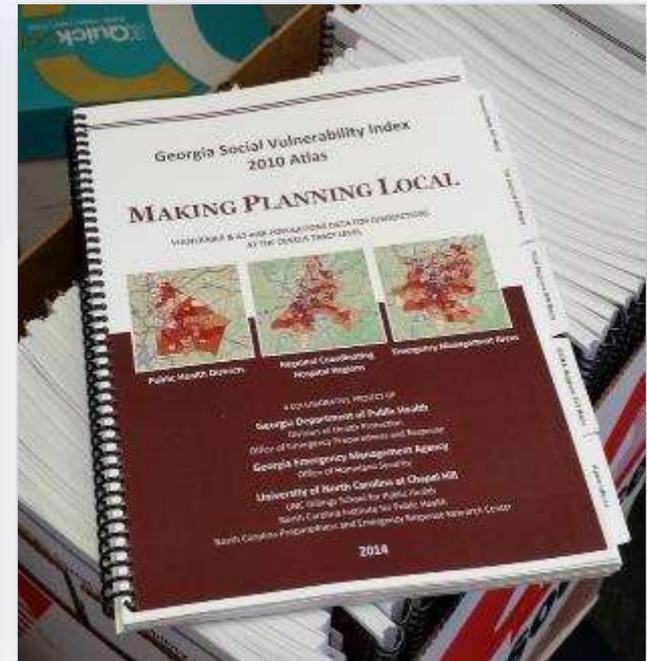
Maps & Data options allow you to select from view multiple levels. Each level offers associated SVI measures, adapted to your selected area, to help you better plan for your "whole community." The different levels allow you to view SVI measures relative to your planning area to see how vulnerability varies across the area. Services available to state and local agencies.



Success Stories

Integrating Vulnerable Populations into Georgia's GODAWGS

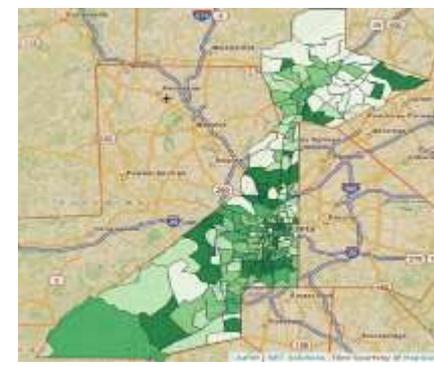
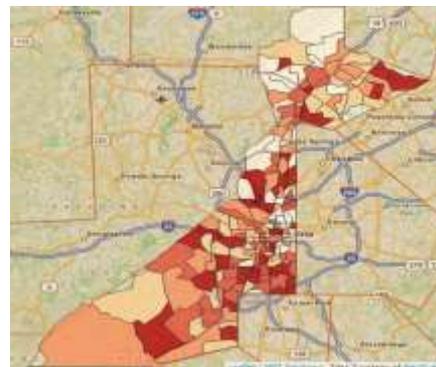
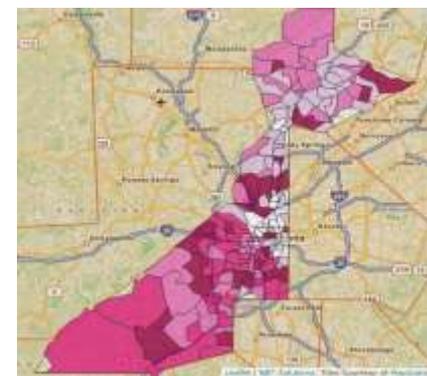
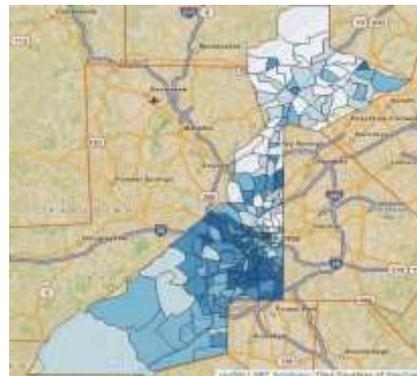
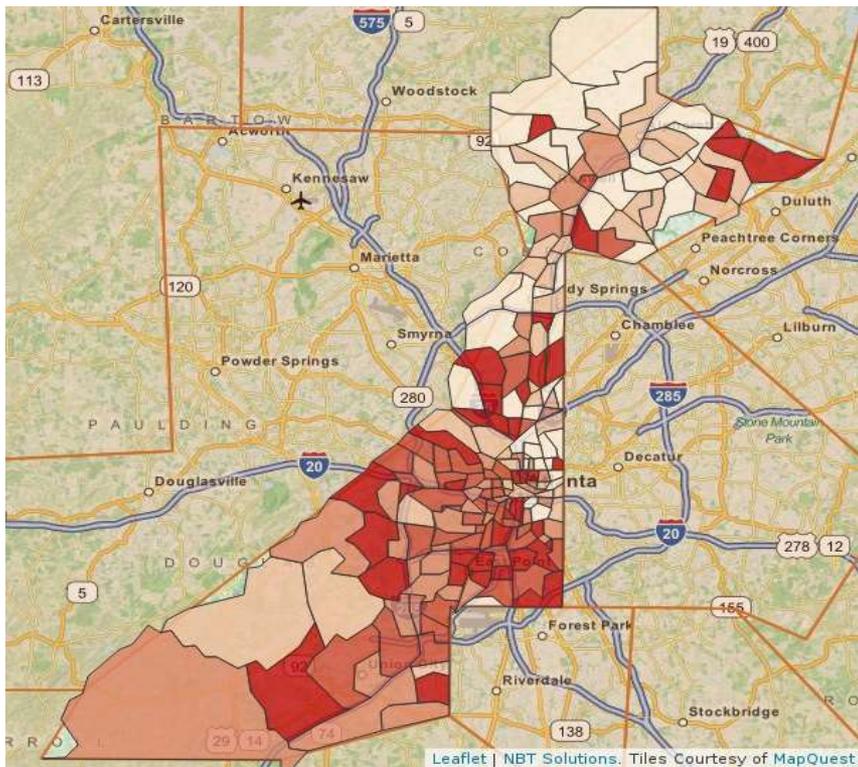
Learn more about the interagency partnership between Georgia Department of Public Health (GDPH) and Georgia Emergency Management Agency (GEMA) to integrate custom Social Vulnerability Index (SVI) layers into Georgia Online Disaster Awareness Geospatial System (GODAWGS).



Releasing a printed Atlas to EP planners in Georgia

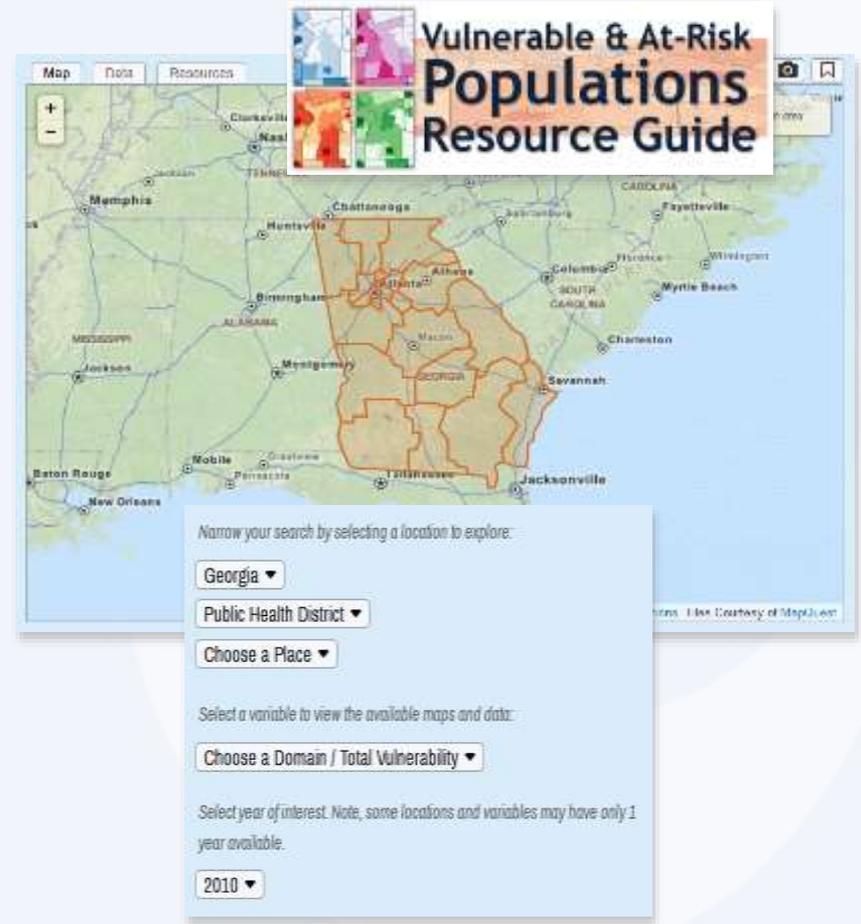
Georgia Public Health District – Fulton (3-2)

Overall Social Vulnerability



Beyond the Atlas

- Complement to the printed atlas
 - *VARPguide.com*
- Accessing Georgia data
 - *Public Health Districts*
 - *Regional Coordinating Hospitals*
 - *Emergency Management Areas*
- Offers online resources



Maps & Data

This page enables you to explore the many different kinds of demographic data available, exploring via map and data table to see the vulnerability of populations in a selected area. Start by choosing where your search will take place (five states currently included in this pilot project), and then move through the variables to view maps and data about the populations living in your selected area.

To create your map, use the drop down menu to narrow your search by selecting a location to explore.

[Choose a state >>](#) [Choose an Area >>](#) [Choose a Place](#)

Use the drop down menu beneath to select the level or variable of vulnerability to view. To scroll down the list, simply click on the list and hold your mouse button to slide it up or down. You can view the level of vulnerability for each census tract in the map by hovering over the tract. Alternatively, you can view a table of the data by clicking on the **Data** tab located at the top of the map area.

BONUS >> After you've created your map and selected your vulnerability domain or variable, you can view a list of matching **Resources** by clicking on the tab.

For Registered Users >> You have the option to bookmark your map and data for later use. Bookmarked maps are listed on your **MyPage**.

If you are not already registered, you can [create your account here >>](#)

Don't see your state?

Contact the Project Team to find out how your area can be included >>

Email us at VAPGuide@unc.edu

Narrow your search by selecting a location to explore:

Georgia ▾

Public Health District ▾

Choose a Place ▾

Select a variable to view the available maps and data:

Choose a Domain / Total Vulnerability ▾

Choose a Domain / Total Vulnerability

Socioeconomic Status

Household Composition/Disability

Minority Status/Language

Housing/Transportation



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For Regist

Georgia ▼

If you are

Public Health District ▼

Fulton ▼

Narrow your se

Georgia ▼

Public Health

Socioeconomic Status ▼

Choose a Pla

Total (%) - or specific variable... ▼

Select a variab

Choose a Da

2010 ▼

Choose a Da

Socioeconom

Household C

Minority Statu

Housing/Tran

Select a variable to view the available maps and data:

Select year of interest. Note, some locations and variables may have only 1 year available.

Map **Data** Resources

Socioeconomic Status Total Rankings

Tract FIPS	G1TOPRGA	G1TOPRPHD	G1V1PRPHD	G1V2PRPHD	G1V3PRPHD	G1V4PRPHD
13121005700	0.84	0.8218	0.8621	0.5517	0.9855	0.8404
13121001800	0.423	0.8382	0.9557	0.9212	0.0938	0.9212
13121003200	0.209	0.3827	0.4877	0.133	0.5222	0.3941
13121010119	0.394	0.4412	0.5419	0.2908	0.8749	0.4039
13121010120	0.148	0.3088	0.0985	0.4288	0.4877	0.3251
13121010121	0.119	0.4383	0.9409	0.4831	0.2759	0.197
13121002800	0.701	0.8765	0.8424	0.3399	0.7734	0.5882
13121002900	0.181	0.3039	0.5222	0.0246	0.5123	0.2709
13121010508	0.273	0.3824	0.2288	0.5025	0.8108	0.2908
13121002100	0.83	0.7402	0.8887	0.8278	0.1872	0.8278
13121003900	0.892	0.9755	0.867	0.87	0.9704	0.7783
13121002800	0.898	0.5588	0.7044	0.8552	0.7488	0.2089
13121980000	-898	0.4314	0.0049	0.8177	0.197	0.8177
13121000100	0.039	0.0931	0.0887	0.2512	0.2315	0.2483
13121001500	0.21	0.7353	0.8818	0.8227	0.1921	0.8227
13121003100	0.811	0.8887	0.8404	0.5981	0.7537	0.5517



Adairsville

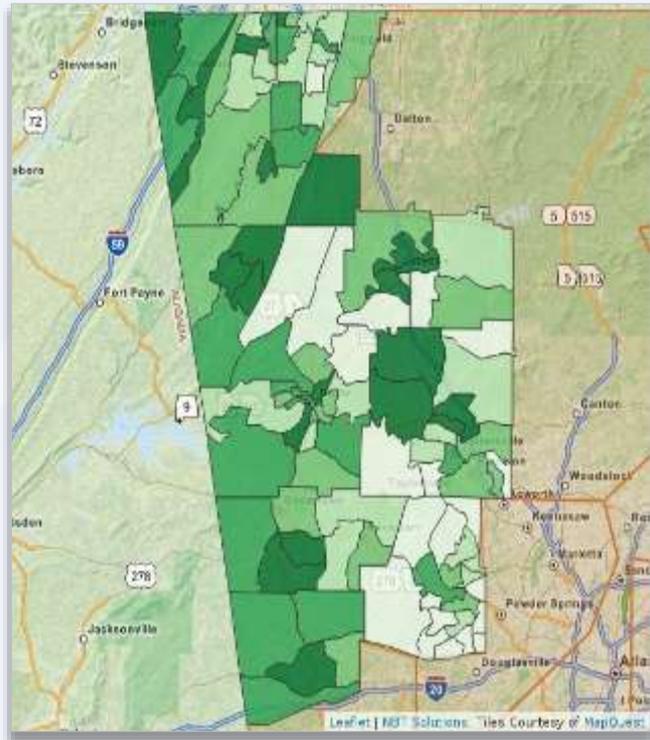
January 2013



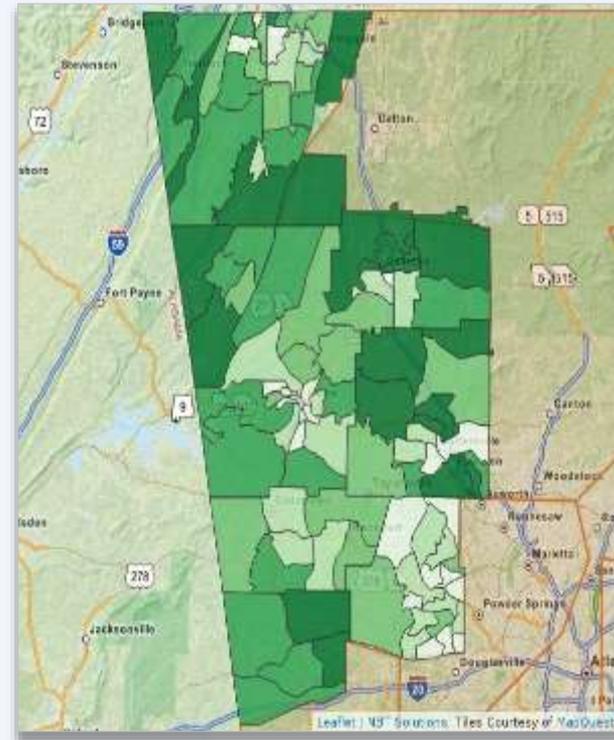
HD 1-1 Northwest Georgia

2010 SVI Data

Planning for Tornadoes



**Housing and
Transportation**



% Mobile Homes



Limitations of SVI Mapping

- Scale
 - *Census Tract*
- Timeliness of Data (2010)
- Completeness
 - *Know the variables*
 - *There are other things that make people vulnerable*



How Can Public Health Make a Difference?

- Identification (outreach and case finding)
- Linking to health services (case manager)
- Developing or revising programs to meet needs
- Educating how to promote health
- Ensuring a competent work force
- Providing direct care
- Advocating for programs and services to meet specific needs



Involve Target Groups In Planning

- Primary data collection
- Identification and involvement of key stakeholders
- Identification and training of community organizations serving the target populations
- Creating a special planning group



Institutional Preparedness and Planning

- Train, advocate for, and assure institutions that work with these groups are prepared:
 - *Intellectually disabled*
 - *Drug and/or alcohol dependent*
 - *People in nursing homes or assisted-living facilities*
 - *Adults and children in criminal justice system*
 - *Children in school or foster care*



Alignment w/ PHEP Capabilities

- **Engage public and private organizations in preparedness activities** that represent the functional needs of at-risk individuals as well as the cultural and socio-economic, demographic components of the community. (Capability 1, Function 1.)
- **Identify those populations that may be at higher risk** for adverse health outcomes. (Capability 1, Function 1.)
- **Identify the potential hazards, vulnerabilities, and risks in the community** that relate to the jurisdiction's public health, medical, and mental/behavioral health systems. (Capability 1, Function 1.)
- **Work with emergency management and community and faith-based partners** to identify the public health, medical, and mental/behavioral health services. (Capability 1, Function 3.)
- **Build community partnerships** to support public health preparedness (Capability 1, Function 2.)
- **Facilitate the collection of geographically-specific data** (Capability 1, Function 1.)



Applications to Practice

- **Leverage resources into opportunities**
 - Plan more efficient evacuations
 - Identify neighborhoods that may need services
 - Effectively target and support community-based efforts
 - Apply evidence-based decisions to support practice
- **One piece of the complex puzzle**
 - Help the whole community get prepared, stay prepared and be ready
 - Effective risk reduction and mitigation



Thank You

**For additional questions,
contact us at:**

VARPguide@unc.edu

Visit the *Vulnerable & At-Risk Populations Resource Guide* at:

www.VARPguide.com