

Towards a Resilient Georgia:

How the Carl Vinson Institute of Government is helping communities address a changing landscape

Presenters



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Agenda

- Georgia's Demographics
- Forestry and Natural Resources
- GAPS and Emergency Management
- Resilience and Compatible Use





Economic Development



Downtown Redevelopment



Infrastructure and Community
Resilience



Workforce Development



UGA Institute of Government

- Governmental Services and Research
- Governmental Training, Education, and Development
- Information Technology Outreach Services
- Infrastructure and Community Resilience
- Survey Research and Evaluation Services
- Workforce and Economic Development



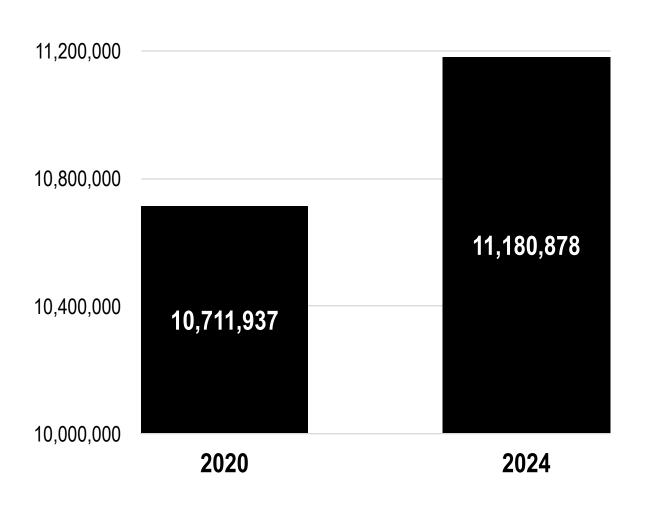
Applied Demography Program

- Nearly two decades of partnership with the Governor's Office of Planning and Budget
- Partner with OPB, USG, GDEcD, GDC, GFC, regional, and local governments
- Georgia Representative for Federal State Cooperative for Population Estimates and Projections (FSCPE/P)
 - Vital Statistics, Group Quarters, Housing Unit Review, Population Estimates, Population Projections



11,600,000

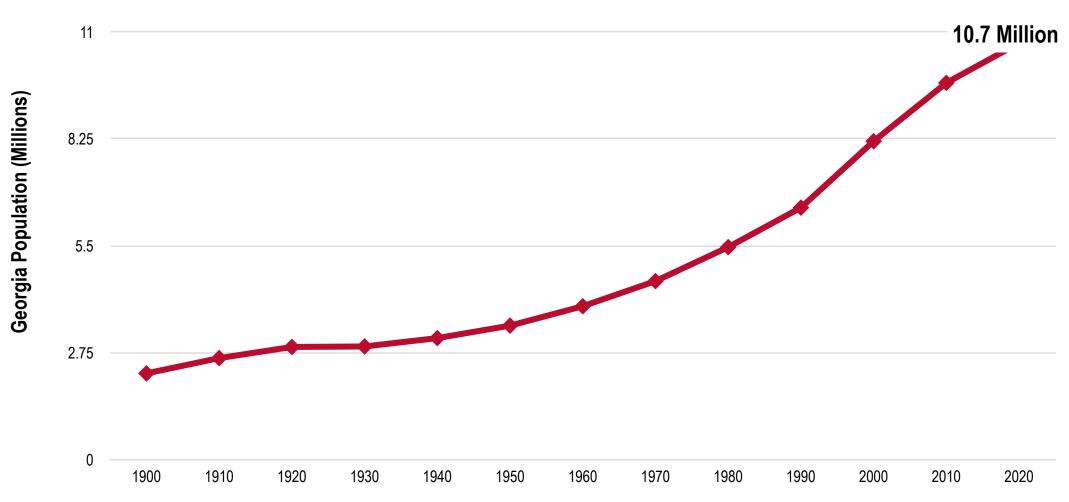
Georgia's Population increased by ~470,000 between 2020 Census and 2024 Estimates





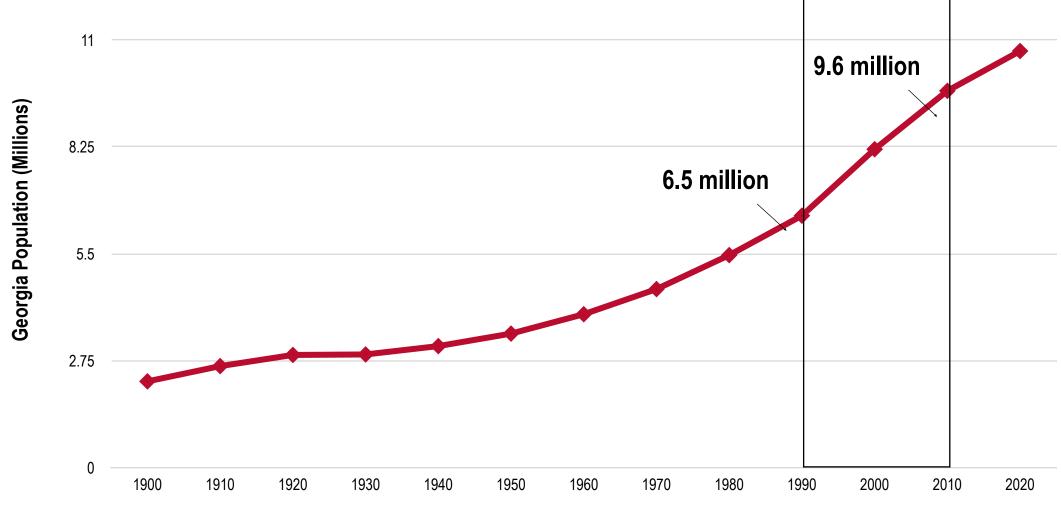
Note: Year ends July 1, 2024 Source: US Census Bureau Population Estimates

Georgia's Population, 1900-2020



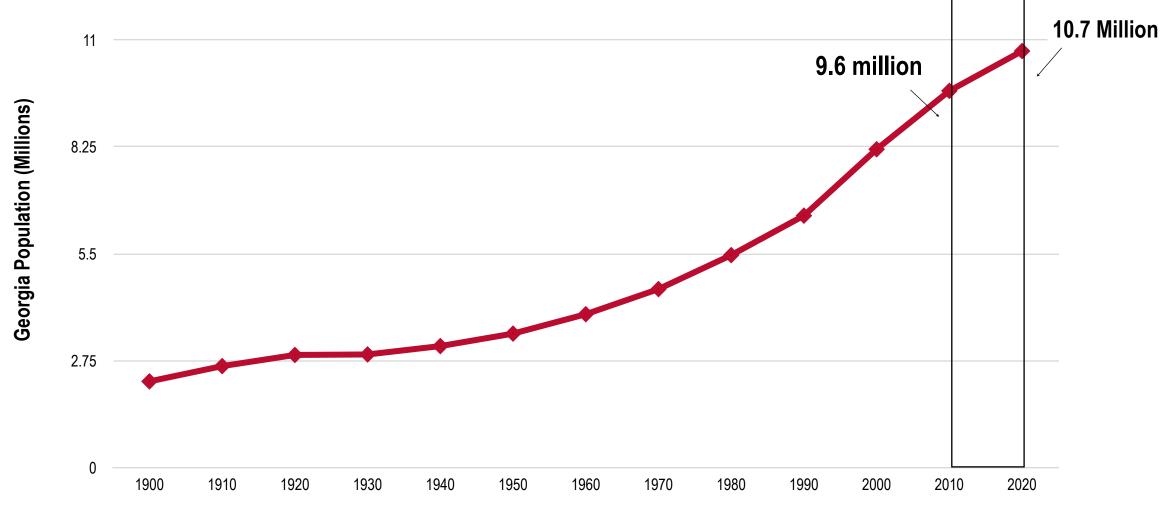


Three Million New Georgians in Two Decades





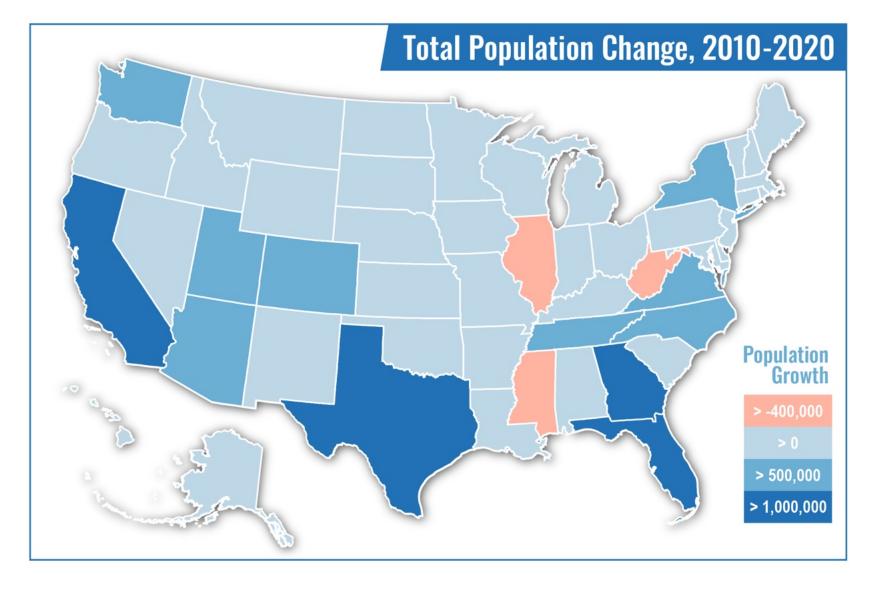
Georgia's Population Increases ~1 million in 2010s





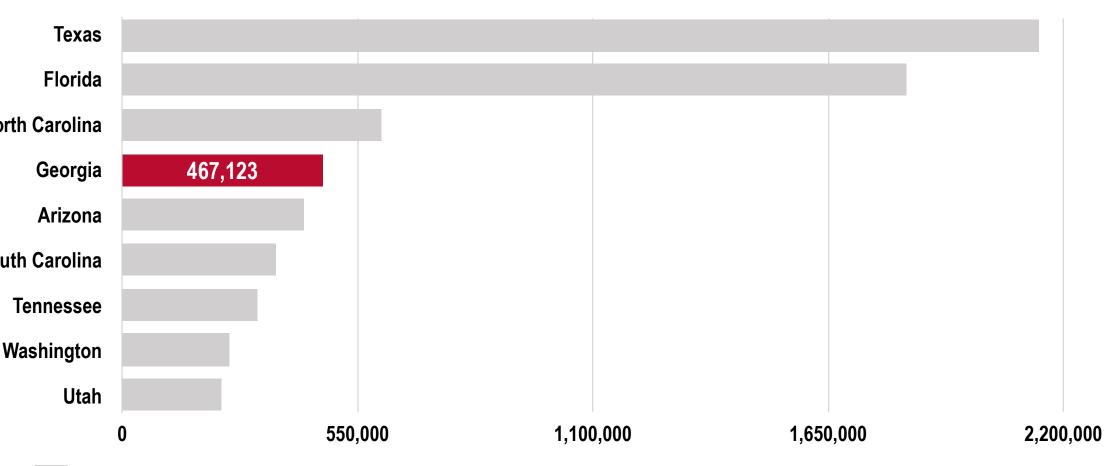
Source: US Census Bureau, NHGIS

Georgia was one of four states to grow by more than 1 million people in 2010s





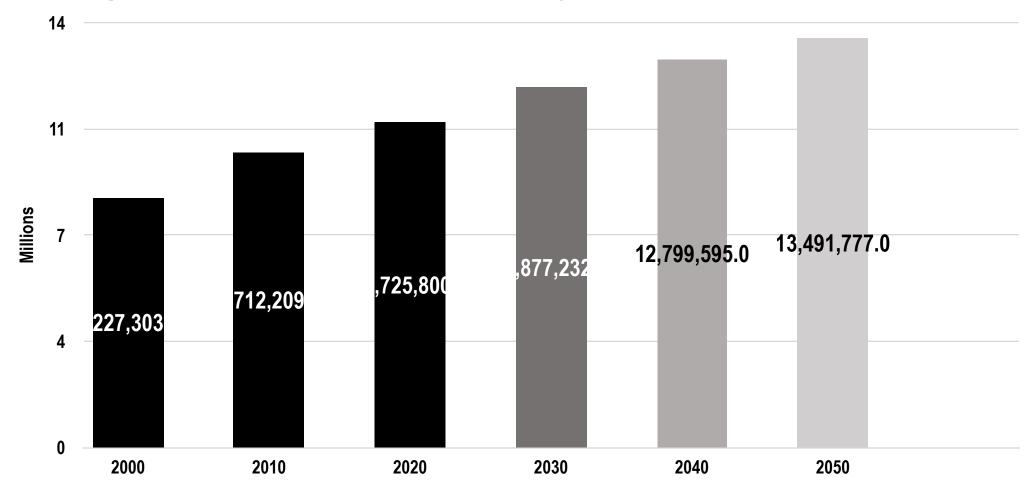
Georgia ranks 4th in <u>numeric</u> growth since 2020





Note: Year ends July 1, 2024 Source: Vintage 2024 US Census Bureau Population Estimates

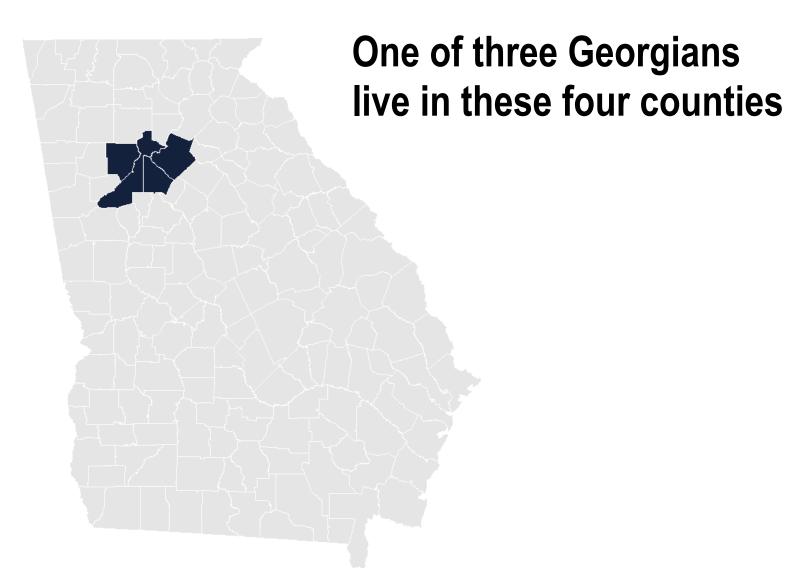
Georgia's Population Projections, 2025 Series



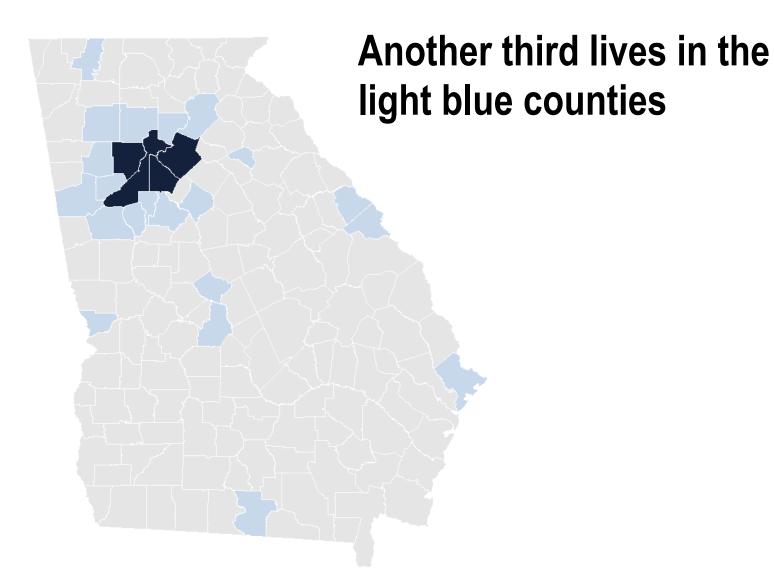


The Geography of Georgia's Population

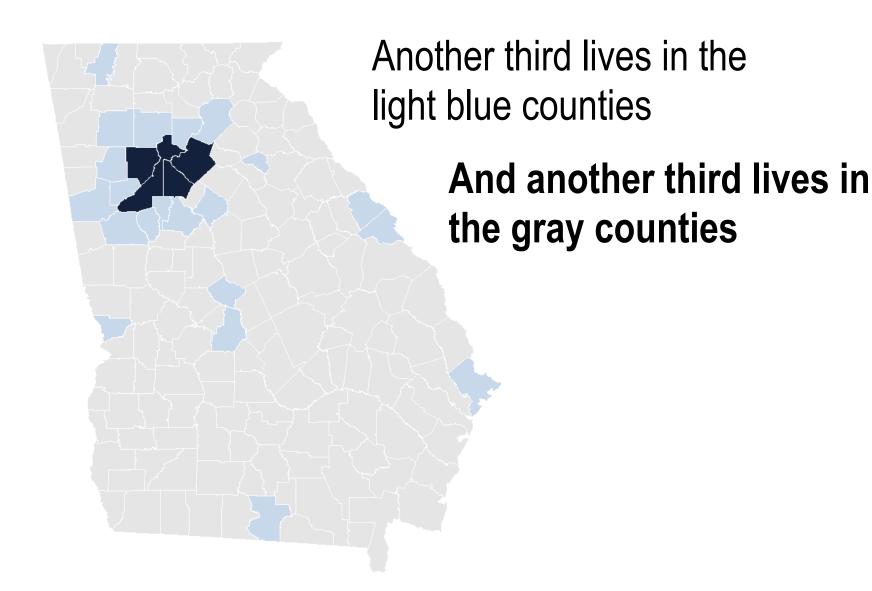






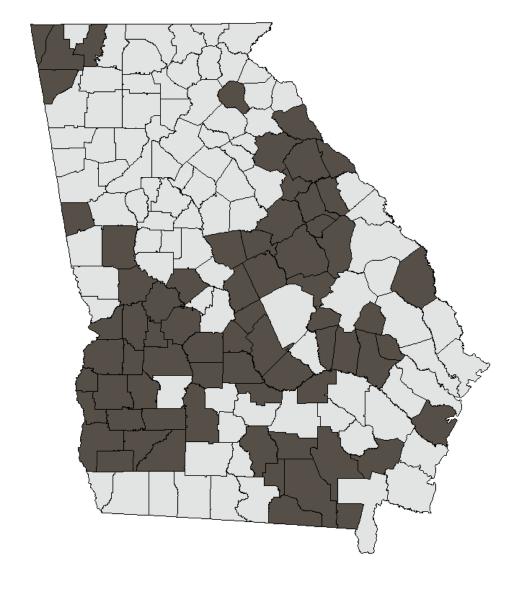








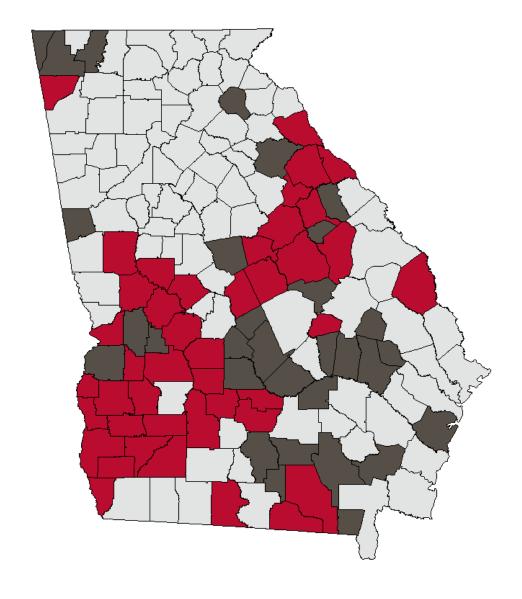
68 counties lost population between 2010 and 2020





68 counties lost population between 2010 and 2020

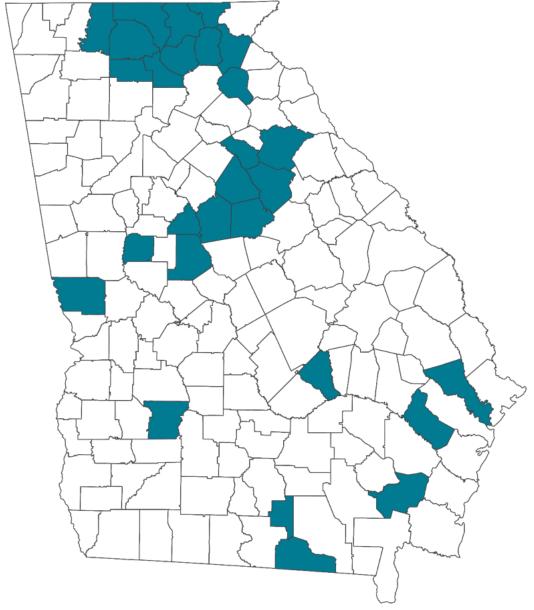
43 counties have fewer people in 2020 than in 2000





Georgia's Rural Growth

28 rural counties have experience population increase of more than 50% since 1990





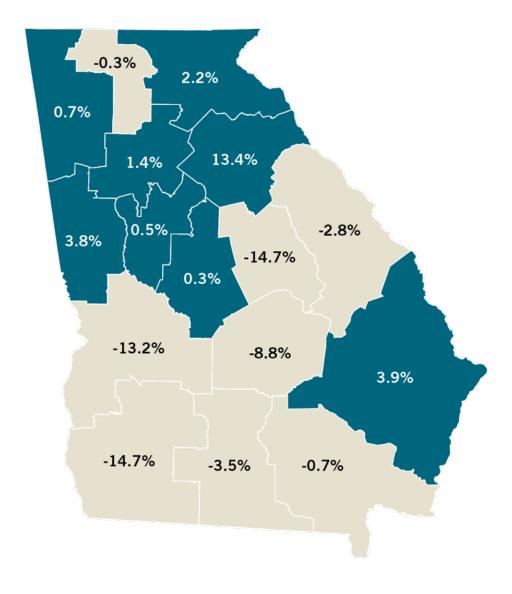
Source: US Census Bureau, NHGIS, Minnesota Population Center

Georgia's Aging Population



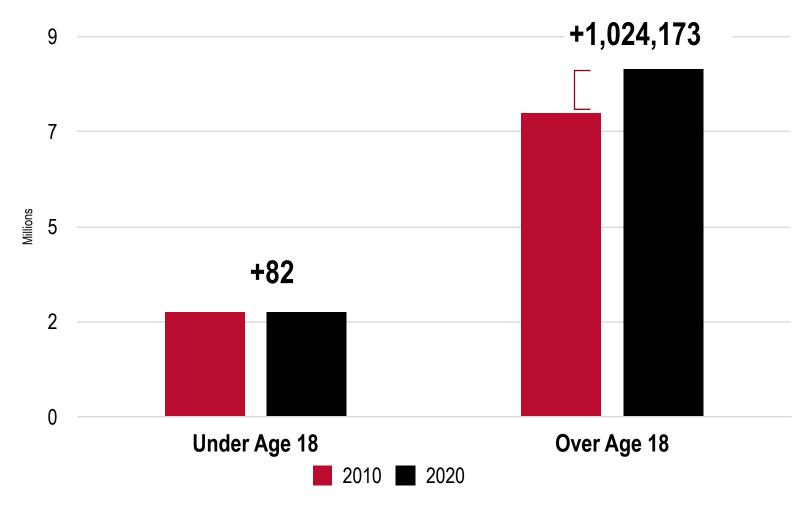
Declining number of births already impacting local school systems

 K-12 Enrollments have declined in half of the Regional Education Service Areas (RESAs) over the past ten years (Fall 2013-2023)



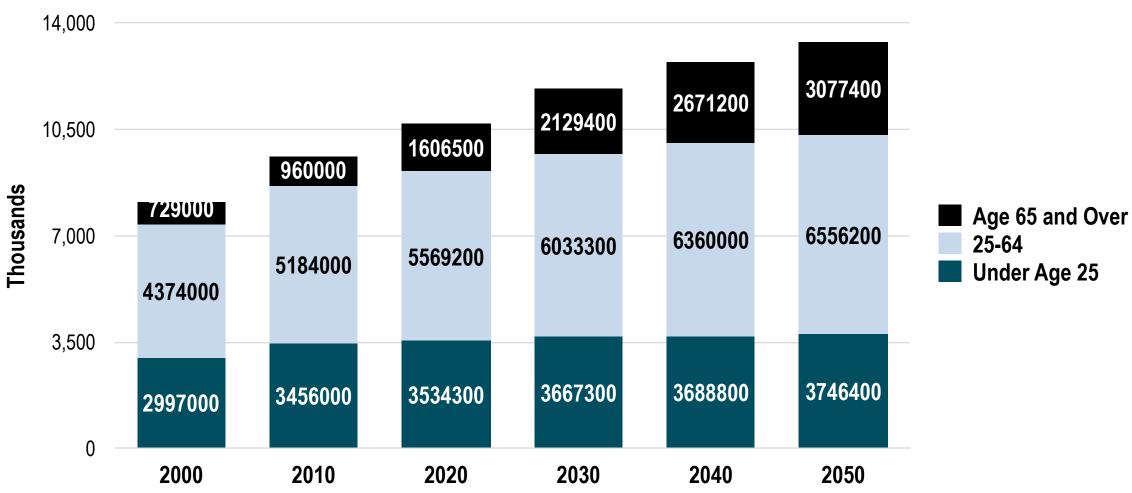


Georgia's Population Growth in 2010s was Adult Population Growth



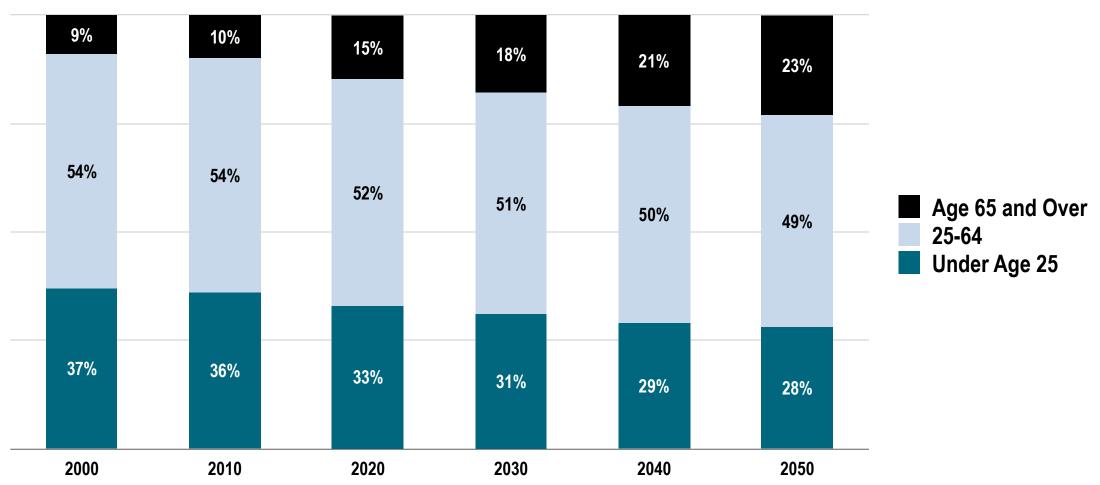


Georgia's Population is Aging





Georgia's Changing Age Distribution





Georgia Demographics in Summary

- Georgia's Population Growth Slowed in the 2010s
 - Remains among the fastest-growing states in the country
 - Migration drives Georgia's population growth
- Aging Population
 - The age 65 and older population is growing faster than the rest of the state
- Suburban and Exurban areas are projected to experience the fastest growth in the next 20 years



Defense Communities: Forest and Land Management

Dessa Benson, Ph.D.



RESILIENCE

Resilience includes the ability to respond to:

- Natural Hazards
- Environmental Changes
- Development Impacts
- Bad Actors

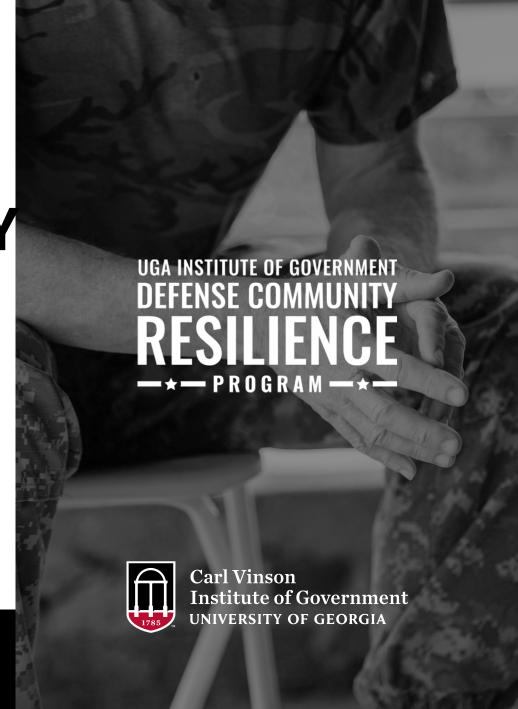
Resilience refers to the capacity to continue to progress towards long-term success and prosperity despite impacts from external shocks.





DCRP: A MULTI-DISCIPLINARY PARTNERSHIP

The Defense Community Resilience
Program (DCRP) is a multi-disciplinary
partnership housed at the Carl Vinson Institute
of Government that supports shared resilience
planning between military installations and





THE GOAL OF DCRP

is to bolster capacity for resilience planning by connecting university resources to military installations and defense communities.





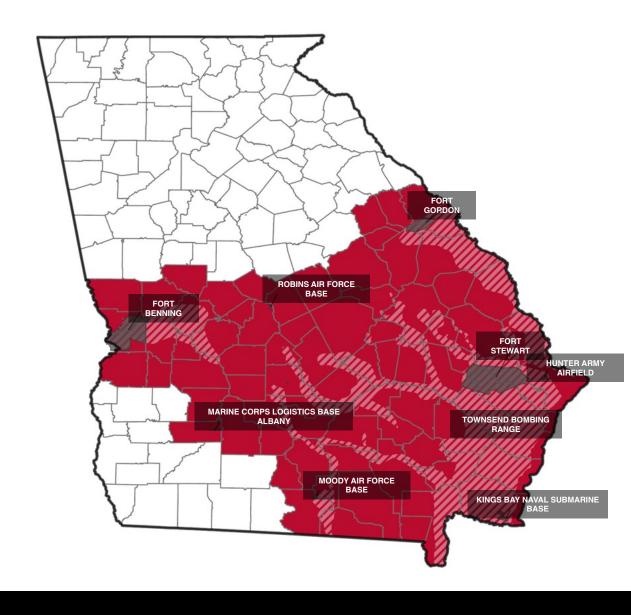
DEFENSE

ae the town diverse regions and tates that serve as home to our nation's military installations, missions, private sector partners, and that otherwise support military readiness.

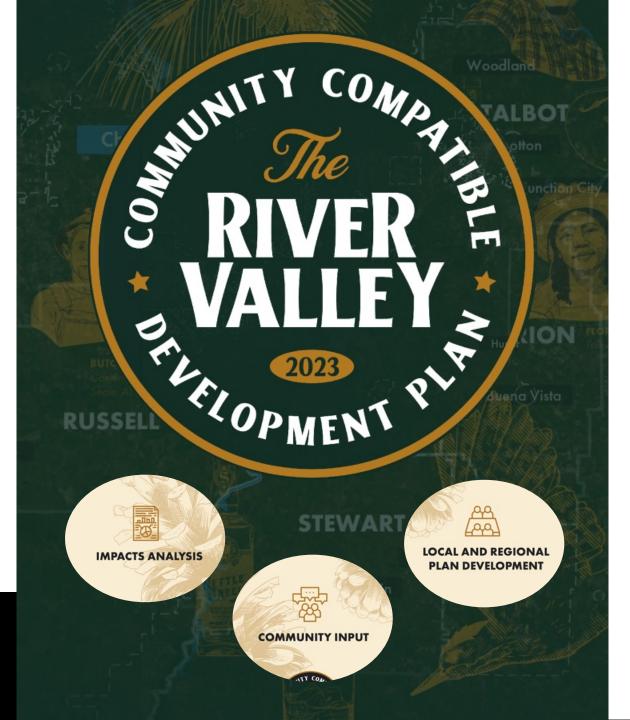
These areas are home to more than **70%** of the military population.

76 of 159 counties in Georgia

Georgia's resilience is linked to the resilience of both military installations and defense communities



DCRP ORIGIN: WORK IN PARTNER WITH DEFENSE COMMUNITIES













PROJECT SPONSORS





















LONGLEAF PINE RIVER VALLEY COMMUNITY COMPATIBLE DEVELOPMENT PROJECT **CONSERVATION EFFORTS AND PRIORITIES** Sprewell Bluff WMA WHAT EXACTLY The following map was created by the Nature IS THE "FALL LINE?" Big Lazer WMA Conservancy for the Chattahoochee Fall FD Roosevelt SP Line Conservation Partnership (CFLCP) and It's all about geology and soils. The represents the Local Implementation Team Project Fall Line is literally a fall...a drop in TALBOT Area (LIT). This map has been adapted by the elevation from the rocky, more Carl Vinson Institute of Government () clay-based soils found to the north Chattahoochee River (CVIOG) to highlight overlapping conservation of the Fall Line, to a drier, sandier priority areas and existing conservation lands soil system to the south side of the over The River Valley Community Compatible Sandhills WMA Fall Line. Development Project area. The lands to the north of the Fall Line typically support more hardwood-dominated forests and TAYLOR Chattahoochee rocky steams, while south of the Fall Line WMA Fall Line, dry sandhills reminiscent of ancient dunes support a Fort Moore pine-dominated landscape with an **Flint River** incredibly diverse assemblage of CHATTAHOOCHEE plant and animal life. The Fall Line **Uchee Creek** is where these natural worlds Confluence MARION collide and merge together. RUSSELL MICHAEL HENSLEY. THE NATURE CONSERVANCY, STEWART -Hannahatchee WMA **RED-COCKADED WOODPECKER** Providence Canyon SP Eufaula NWR The Nature Conservancy CONSERVATION LANDS 20 Miles County Boundaries ACUB Priority Area 1 Federal Sentinel Landscape City Boundaries Private Fall Line Region ACUB Priority Area 2 **SP - State Park, NWR - National Wildlife Refuge, State Rivers LIT Boundary and WMA - Wildlife Management Area



WHERE WE ARE WORKING WHAT WE ARE DOING

MOODY AFB

NORTH CAROLINA

SEYMOUR JOHNSON AFB

SOUTH CAROLINA

ALABAMA

FORT MOORE

ROBINS AFB

MCRD PARRIS ISLAND

MCSA BEAUFORT

FORT STEWART AND HUNTER ARMY AIRFIELD

KINGS BAY NSB

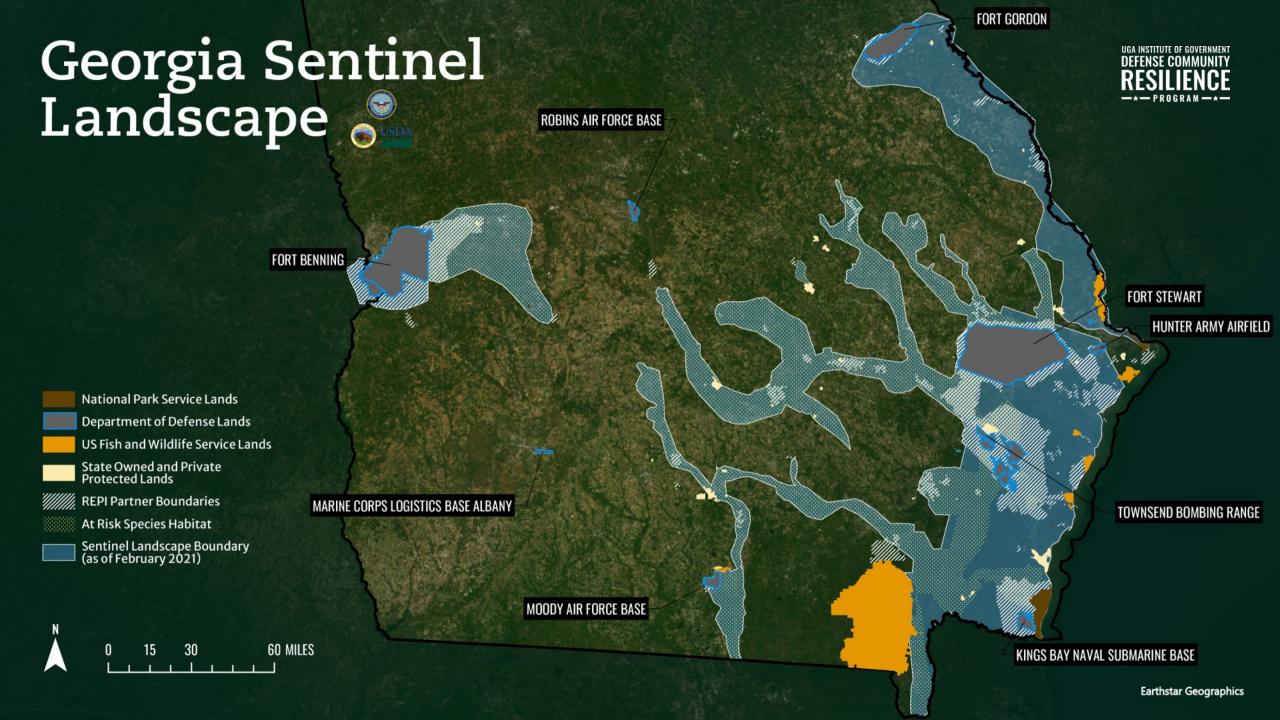
NS MAYPORT

UNIVERSITY OF GEORGIA

Carl Vinson Institute of Government

FLORIDA

GEORGIA





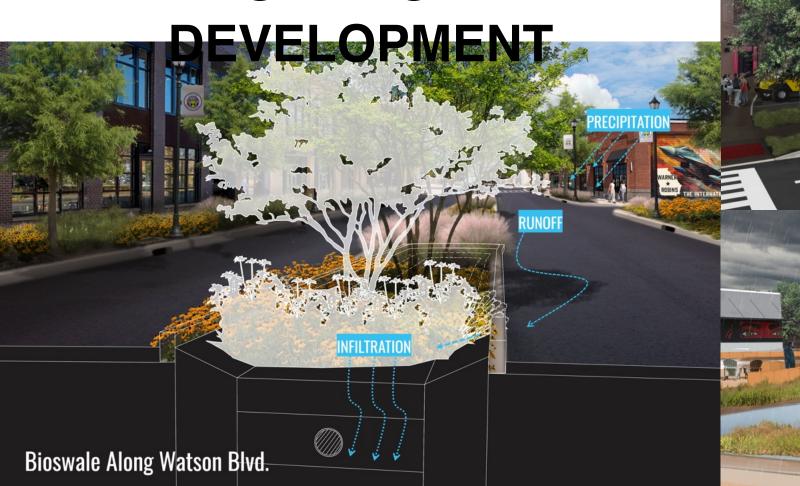
BENEFITS OF STREAM ENHANCEMENT AND RESTORATION TECHNIQUES

















COMMUNITY DISASTER PREPAREDNESS AND RESPONSE









PLANNING FOR THE FUTURE:

What DERESILE, increasing increas

- Wildfires are a national security concern.
- 2021 analysis of 145 DoD installations found that: Fort Benning, Fort Gordon, and Fort Stewart were assessed at high, moderate, and low. This does not include fueling potential of recent downed debris from storms.







0'-5' Immediate Zone

- Remove all dead leaves, needles, flammable debris and vegetation from roofs, gutters and the area within 5' of your home.
- Move any flammable material like mulch, flammable plants, leaves, needles, and firewood piles away from exterior walls.
- Remove anything stored underneath decks or porches.

5'-30' Intermediate Zone

- Thin out dense groups of trees.
- Remove vegetation under trees and prune trees 6-10' feet from the ground.

30'-100' Extended Zone

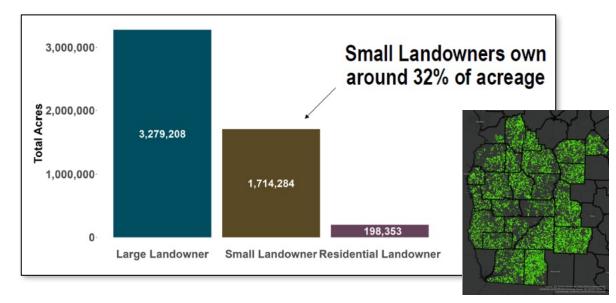
- Remove heavy accumulations of ground debris. Break up continuous fuels.
- Remove dead plants and trees. Remove small trees growing between or under mature trees.

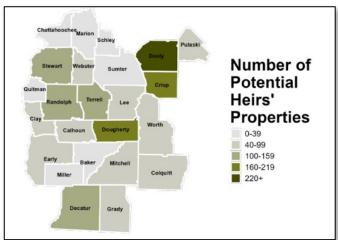
PLANNING FOR THE FUTURE:

- DW Istablic Rep RES with CE mitigation practices, but vulnerabilities remain.
- Need for more forward-thinking, collaborative strategies:
 - Fuel reduction through prescribed burning and mechanical treatment
 - Focus on wildland-urban interface (WUI), defensible space, and installationcommunity buffers
 - Workforce training









Most Potential Heirs' Properties are owned by small landowners are wooded areas smaller than 25 acres and valued one-third price lower than nonheirs' properties.

PLANNING FOR THE FUTURE: LANDOWNERS AND

- Hatel RS'orgha ROP Emilia Sorgha Roperty Law Center
- Purpose: Conduct geographic analysis of small and underserved timber landowners
 - Population and land ownership demographics for 20 counties in Southwest Georgia
 - Identified potential heirs' property

Disaster Resilience across the Chattahoochee Valley Region: Community Preparedness

Ileeia A. Smith, Ph.D.



Emergency Management Overview

- Organized effort to prepare for, respond to, recover from, and mitigate the impacts of disaster or emergencies—whether natural, technological, or human caused.
- The overall goal is to protect lives, property, and the environment ensuring communities can remain resilient.
- Core phases of emergency management include mitigation, preparedness, response, and recovery.



Core Phases

- Core phases of emergency management include:
 - Mitigation: Actions to reduce or eliminate long-term risk
 - Preparedness: Planning, training, and resource allocation to ensure readiness
 - Response: Immediate action efforts during and after an emergency
 - Recovery.



Disaster Resilience Overview

- The ability of individuals, communities, organizations, and systems to withstand, adapt to, and recover from disasters while minimizing damage and maintaining essential functions.
- Disaster resilience goes beyond immediate response, focusing on long-term strength amd sustainability.
- Key components of disaster resilience include risk awareness, adaptability, community engagement, collaboration, and sustainability.



Community Engagement

- Collaboration
- Participation
- Communication
- Trust & Relationships
- Capacity Building



Georgia Alabama Partnership for Sustainability Taskforce

- Fort Benning has a goal to have a 14-day supply of "needs" to continue operations and business in case of a catastrophic event.
- By 2026, the potential for unforecasted catastrophic events has increased, enhancing the necessity for a plan to ensure the installation and surrounding areas can be operational due to a loss of power, communications, and infrastructure.

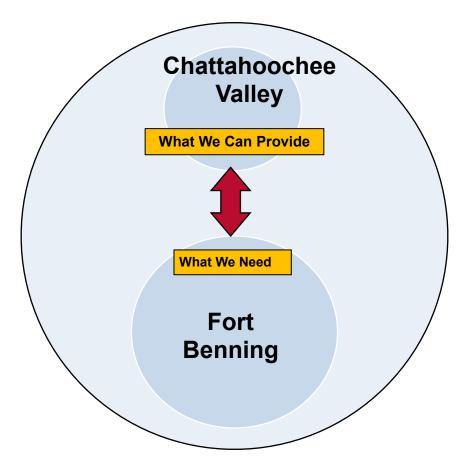


Taskforce Purpose

- Ensure planning initiatives in support of installation critical missions.
- Achieve goal to maintain a 14-day supply of resources to continue operations in case of a catastrophic event.
- Develop an emergency response plan for sustainability across Fort Benning and the surrounding areas.



Fort Benning & the Chattahoochee Valley



 Proactively plan & prepare for a variety of natural/manmade disasters by identifying potential threats, reduce vulnerabilities, minimize consequences and hasten response and recovery. efforts related to critical infrastructure failures.

 Mutually beneficial for <u>readiness and</u> <u>resiliency</u> for Fort Benning and the surrounding area.



Fort Benning & the Chattahoochee Valley

- Columbus-Muscogee
- Harris County
- Chattahoochee County
- Marion County
- Talbot County
- Stewart County
- Taylor County

- Smiths Station
- Phenix City
- Russell County
- Lee County





Taskforce Members

- Fort Benning (Emergency Management/DPW/PAIO/Garrison Commander)
- Local Emergency Management Agencies (Directors/Staff)
- Local Government Officials (Commissioners)
- Law Enforcement (Sheriff's Office/Fire)
- Public Safety
- Public Schools
- Health and Human Service Agencies
- Community Stakeholders (Nonprofits/Civic/Social/Faith-Based)



GAPS Conference 2025

- The GAPS Taskforce has previously hosted held workshops and trainings to advance emergency preparedness strategies since 2018.
- Composed primary in smaller, more informational environments for military personnel and first responders.
- Conducted as tabletop exercises, presentations, and small panel discussions.
- As a next step in advancing sustainability initiatives, this annual/semi-annual emergency management conference is being held.



Target Audience

- Local, state, and federal government officials and staff
- Emergency management personnel
- Utilities
- First responders
- Public safety personnel
- Law enforcement
- Community partners



Topics

- Mutual Aid Agreements
- Incident Command
- Energy Partnerships
- Water Resource Management
- Response Coordination
- Emergency Communication
- Manmade Threats
- Mass Casualty Incidents



Panel Discussions

- Recent Disaster Response in Georgia and Alabama
- Building Resilience: Foundations of Emergency Preparedness, Response, & Recovery
- Advancing Energy Resilience through Regional Partnerships & Planning
- From Triage to Transport: Managing the Complexities of Mass Casualty Incidents
- The Right Message at the Right Time: Coordinating Emergency Communication and Response



Outcomes

- Strengthen Regional Collaboration: Connect with emergency managers, public officials, and community leaders from across the Chattahoochee Valley regions to build partnerships that are unified in disaster preparedness, response, and recovery.
- Acquire Knowledge of Best Practices in Disaster Resilience: Gain insights from expert-lead sessions on disaster resilience, emergency management protocols, community preparedness, and long-term recovery efforts.
- Amplifying Shared Experiences: Hear directly from those affected by past disasters and engage in inclusive discussions about responsive preparedness approaches.



Outcomes Continued...

- Gain Awareness of Preparation Needs: Staying informed is essential. This conference prepares attendees to proactively secure resources and lead resilient planning efforts in their communities.
- Enhanced Access to Research and Tools: Discover the latest innovations in disaster modeling, resilience frameworks, and practical tools that help communities adapt emergency preparedness strategies.



Future Action

- Conduct GAPS quarterly meetings to identify and establish regional policies and Mutual Aid Agreements.
- Ensure information can be disseminated and communication is not Interrupted
- Develop installation/community disaster conference framework that could be replicated across other installations in the Southeast
- Create lessons learned, best practices, and training initiatives in support of emergency preparedness efforts



Enhancing Community Resilience and Military Readiness

Ben McGarr, AICP

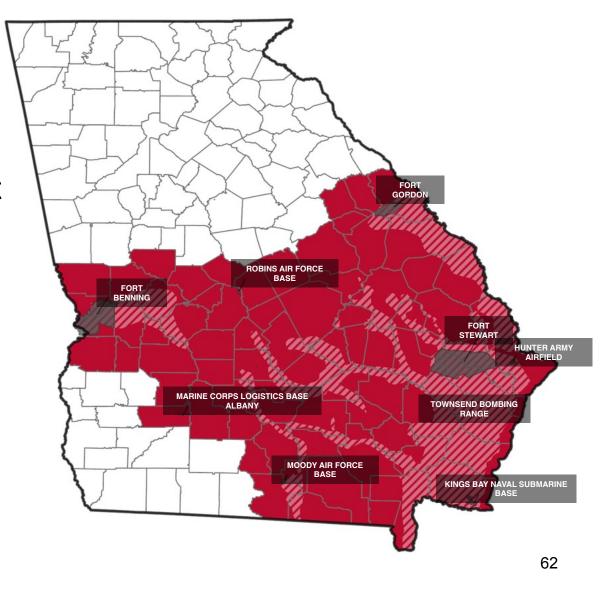


Community—Installation Connection

 70% of the military population lives offpost

 Military has \$22 billion economic impact in the state, and on average, installations account for 30% of their neighboring community's GDP. (Georgia Chamber of Commerce, 2024)

 Department of Defense (DoD) is largest employer in Coastal Georgia (Savannah Economic Development Authority, 2024)





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is to bolster capacity for resilience planning by connecting university resources to military installations and defense communities.





FORT STEWART AND HUNTER ARMY AIRFIELD

FOCUSED REGIO READINESS STU





Carl Vinson Institute of Government College of Engineering Warnell School of Forestry and Natural Resources

PROJECT TEAM

Carl Vinson Institute of Government

(PI) Scott Pippin, JD, MEPD,

CFM, Defense Community Resilience Kesley Broich, MLA, Creative Program (DCRP) Manager Design Specialist

Ben McGarr, MCP, MPA, AICP, Military Community Resilience Manager

Leigh Elkins, MLA, Senior Public Service Faculty

Shana Jones, JD, Associate Director, Infrastructure and Community Resilience Division

Sydney Williams, PhD, Resilience Specialist

Taylor Hafley, PhD, Applied Demographer

Ashlee Tziganuk, PhD, Postdoctoral Research Associate Eleonora Machado, MLA, Creative Design Specialist

Emily Schattler, MS, Program Manager

Danielle Dankner, BA. Administrative Manager

Warnell School of Forestry and Natural Resources

Nate Bibbelink, PhD, Professor, Warnell Alec Nelson, PhD, Postdoctoral School of Forestry and Natural Resources; Associate Vice President for Strategic Research Growth, UGA Office of Research

Research Associate. Warnell School of Forestry and Natural Resources

College of Engineering

Matt Bilskie, PhD, Assistant Professor

Sung-hee "Sonny" Kim, PhD, PE, Professor

Jidong Yang, PhD, PE, FITE, Associate Jintong Han, Graduate Research Professor

Lynn Abdouni, PhD, Associate Research Scientist

Aditya Gupta, PhD, Research Scientist

Dong-Hyuk "Easton" Kim, PhD, Postdoctoral Research Associate

Lina Cardenas Caro, MS, PhD Student

Assistant

Hao Zhen, Graduate Research Assistant

Fort Stewart and Hunter Army Airfield

OCUSED **REGIONAL**



FS/HAAF Focused Regional Readiness Study

- Funded by the Office of Local Defense Community Cooperation (OLDCC)
- Goal: Provide military and community leaders with additional information on the project's three components.
- Components:
 - Flood Risk and Transportation
 - FS/HAAF Workforce Housing Assessment
 - Natural Infrastructure Identification and Prioritization

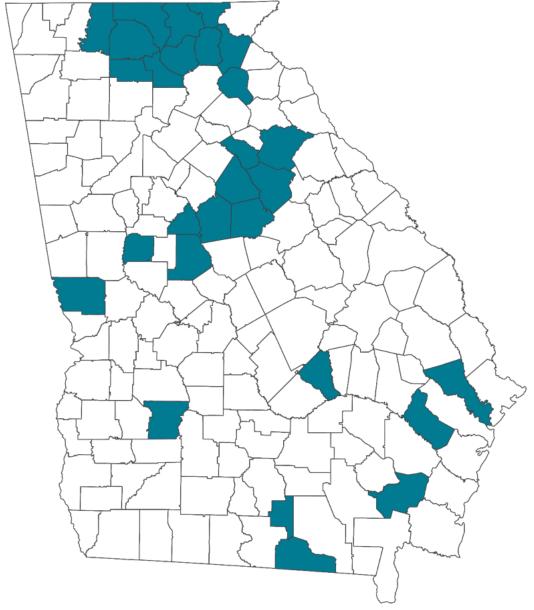


Photo Credit: Chatham Emergency Management Agency



Georgia's Rural Growth

28 rural counties have experience population increase of more than 50% since 1990

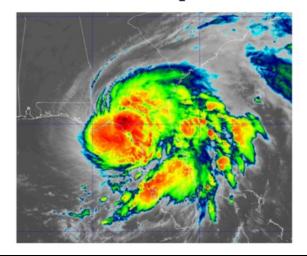


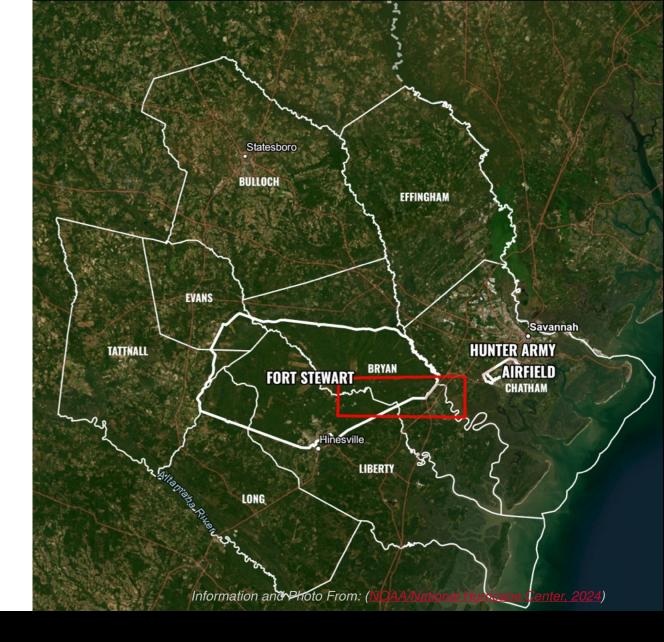


Source: US Census Bureau, NHGIS, Minnesota Population Center

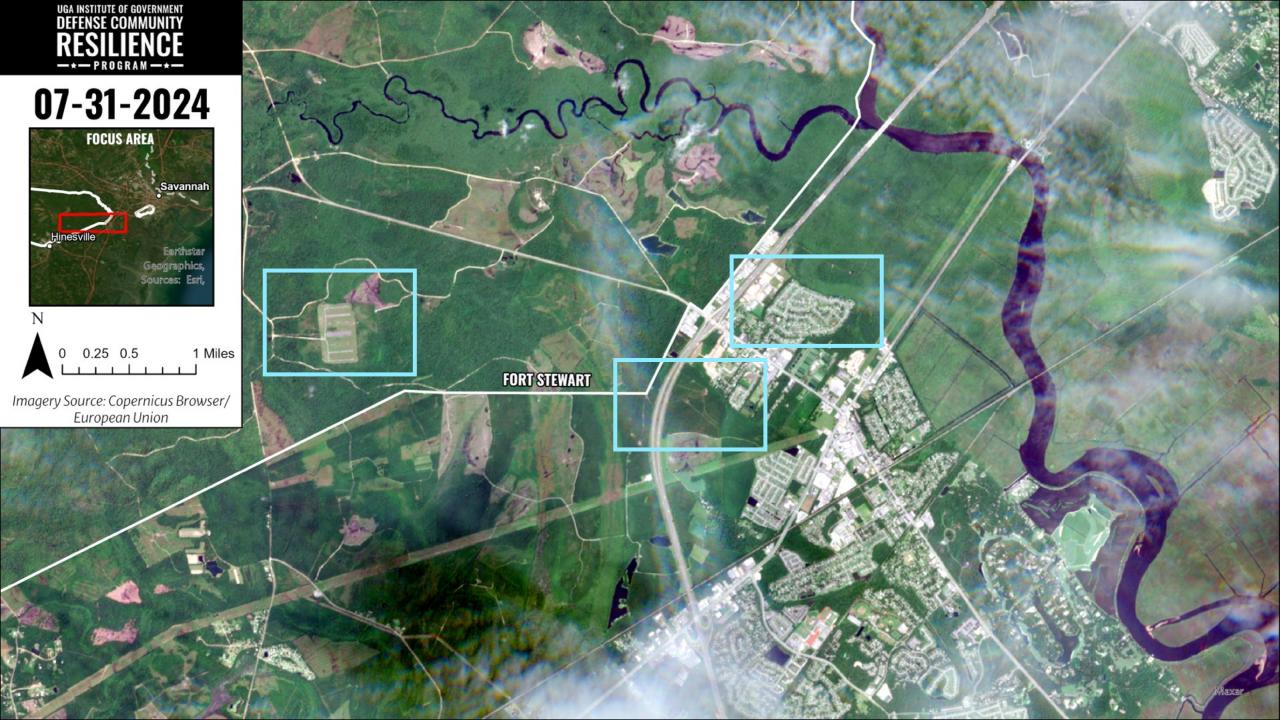
REGIONAL IMPACTS FROM DEBBY

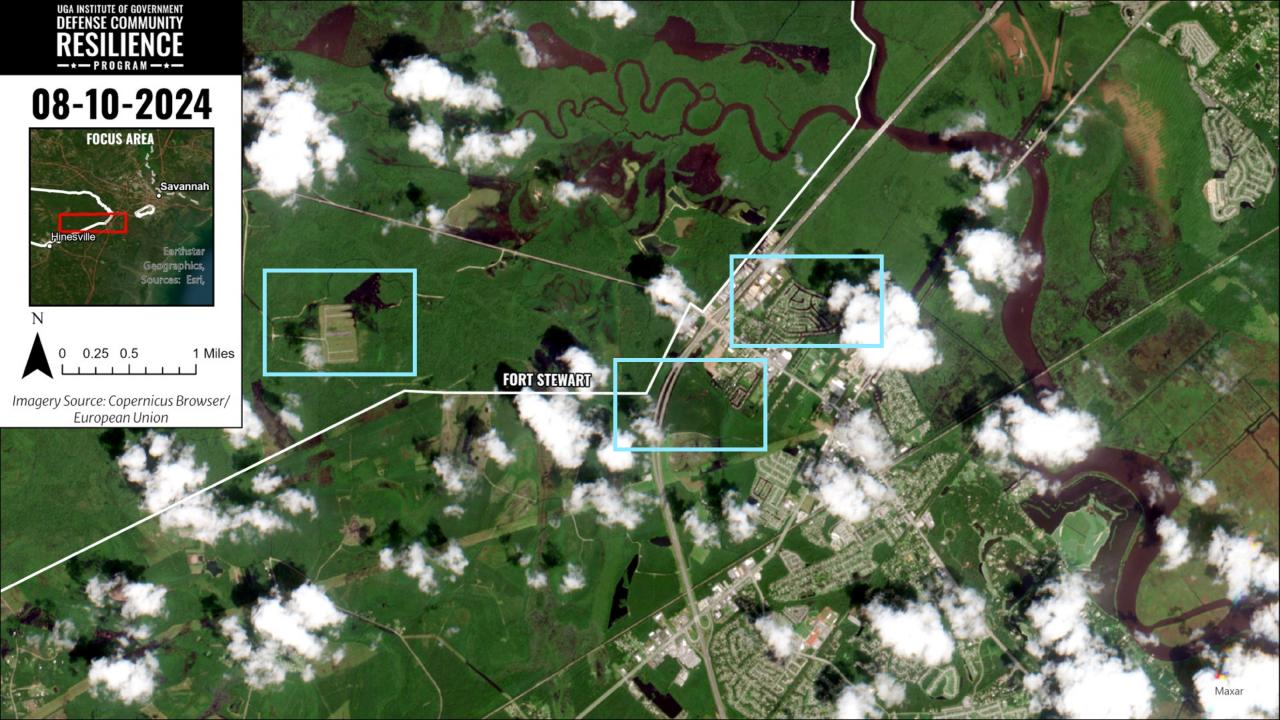
- 10-15 inches of rain across eastern Georgia
- 14.85 inches recorded in Effingham County
- Nearly 100 roads damaged in Bulloch County
- About 30 homes destroyed in Evans County
- 69,000 customers lost power

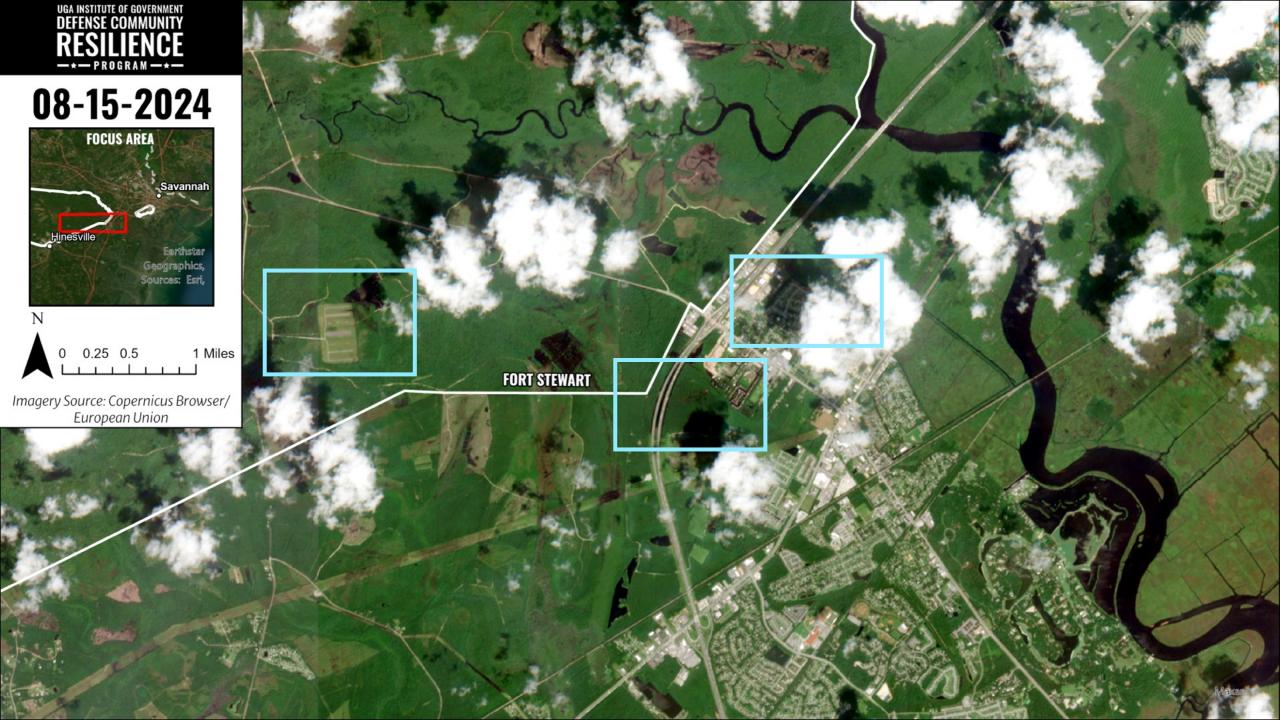












FORT STEWART AND HUNTER ARMY AIRFIELD

FOCUSED REGIONAL READINESS STUDY

THE 100-YEAR FLOOD

The two maps represent the 100-year flood, which is a flood that has a 1% chance of happening in any given year and a 26% chance of occurring in a given 30-year period. The zoomed in area highlights the impacts of flooding on buildings and roadways that are critical to surrounding communities and military operations. Mapping, assessments and planning play an important role in becoming more resilient against natural hazards and increasing regional readiness.



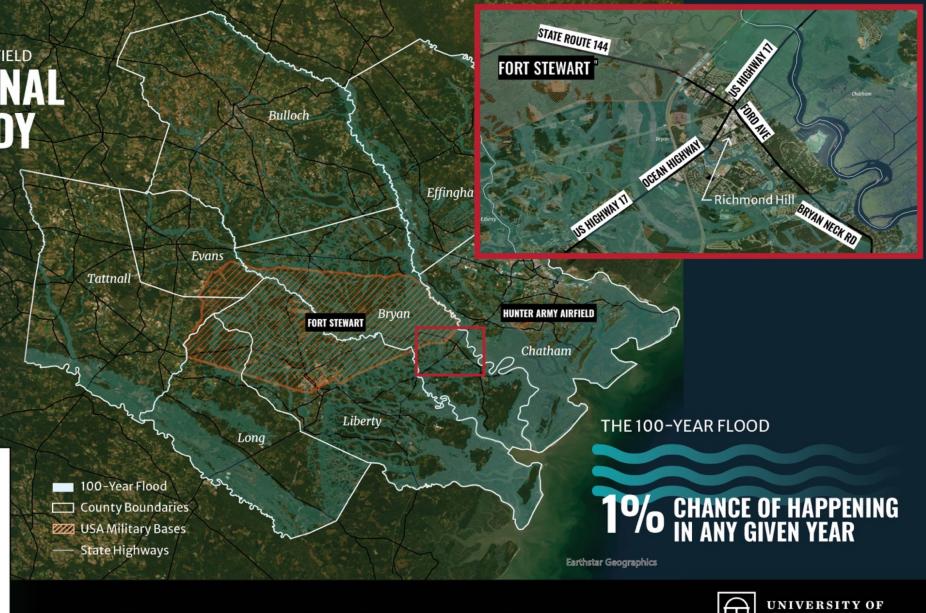
FLOOD RISK AND TRANSPORTATION



FS/HAAF WORKFORCE HOUSING ASSESSMENT



NATURAL INFRASTRUCTURE IDENTIFICATION AND PRIORITIZATION



Map provided by Matt Bilskie and Lina Cardenas, UGA College of Engineering, Coastal Ocean Analysis and Simulation Team Designed by Kelsey Broich, UGA Carl Vinson Institute of Government



Carl Vinson Institute of Government College of Engineering

Compatible Use Guidance Toolkit

- Fort Benning Installation Readiness Grant
- Funded by OLDCC
- Aims to help defense communities implement compatible use policies to prevent encroachment
- Promotes community resilience and installation readiness

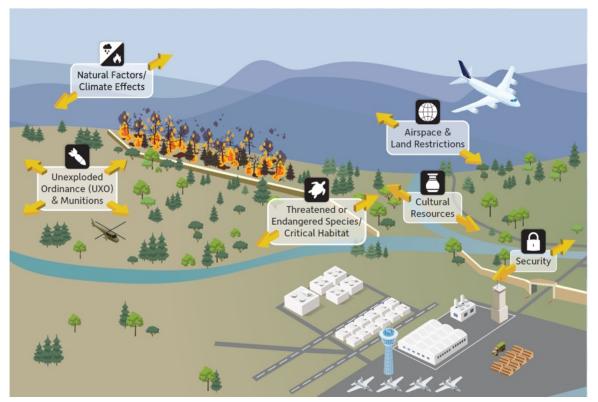
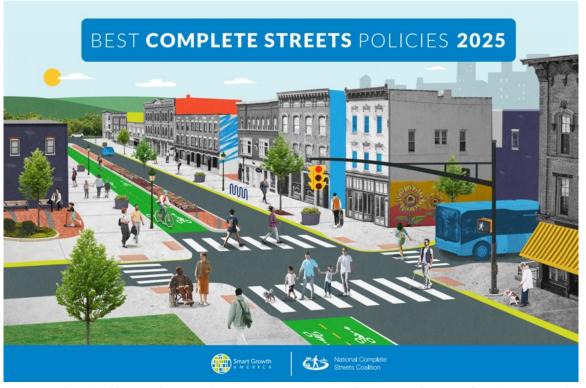


Photo Credit: (OLDCC, 2022)



Compatible Use Guidance Toolkit

- Aligns with common Planning themes
 - Walkable Cities
 - Smart Growth
 - Transit-Oriented Development
 - Resilience and Hazard Mitigation
 - Preservation of Rural Character
 - Regional Collaboration



Credit: (Smart Growth America and National Complete Streets Coalition, 2025)





Since 1927, the Carl Vinson Institute of Government has been an integral part of the University of Georgia. A public service and outreach unit of the university, the Institute of Government is the largest and most comprehensive university based organization serving governments in the United States through research services, customized assistance, training and development, and the application of technology.

Questions?



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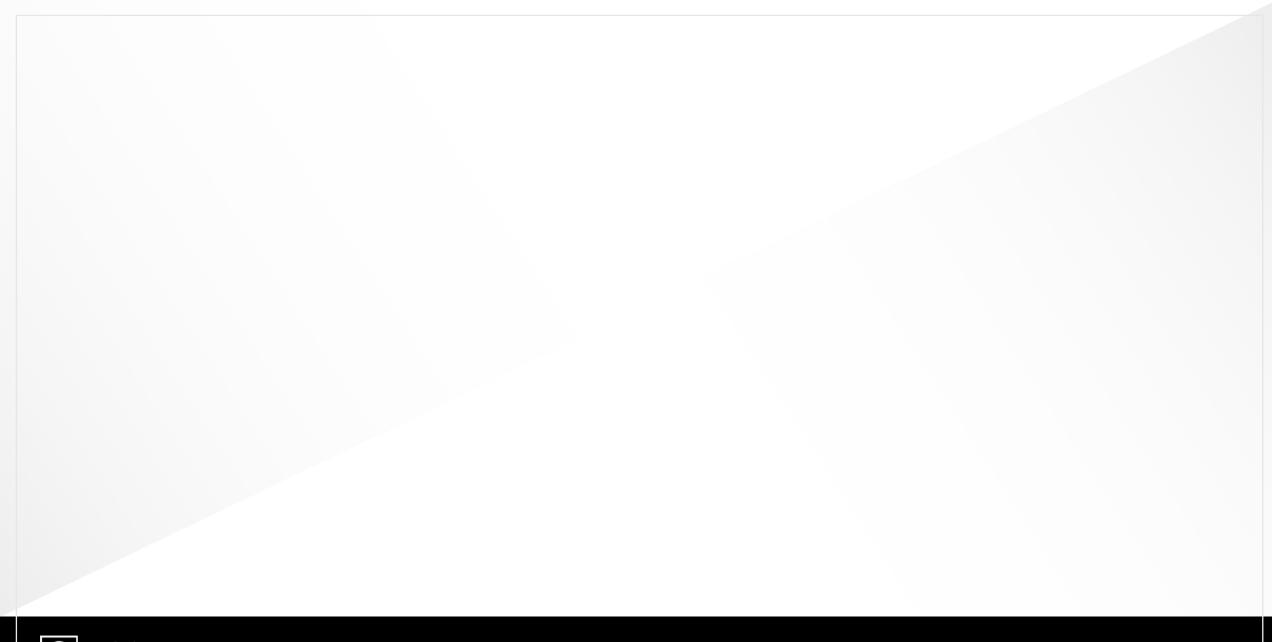
Ileeia Smith, Ph.D.Public Service Faculty

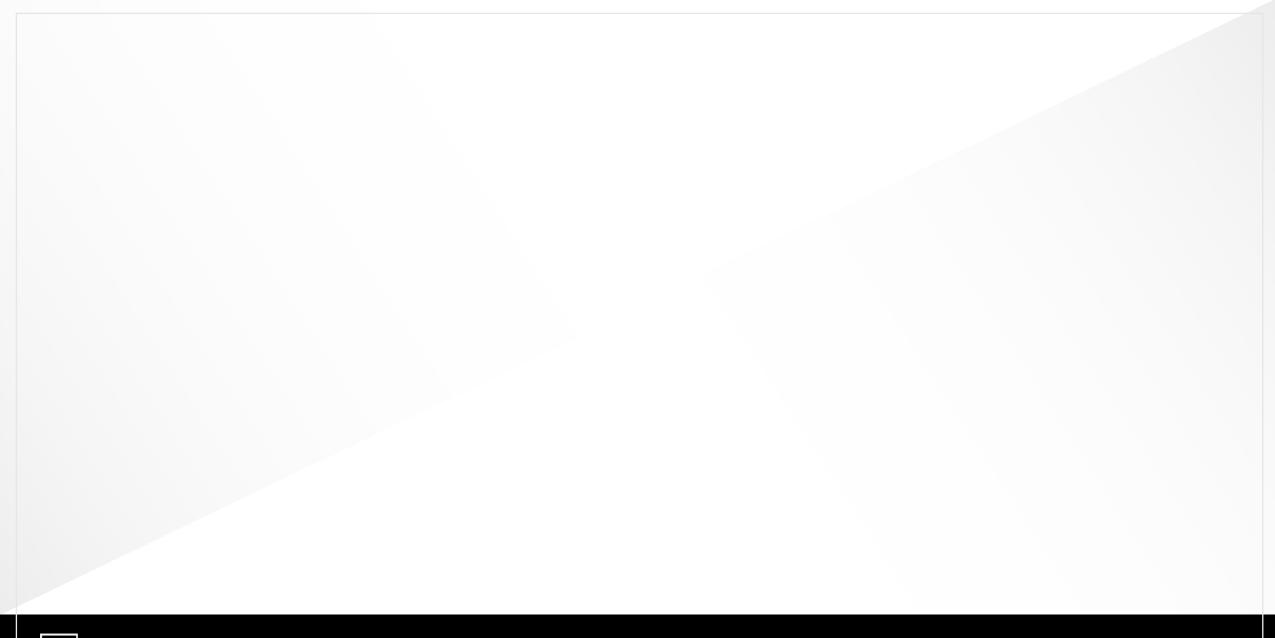
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Georgia Alabama Partnership for Sustainability Taskforce (GAPS)

lleeia A. Smith, Ph.D.



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Georgia Alabama Partnership for Sustainability Taskforce

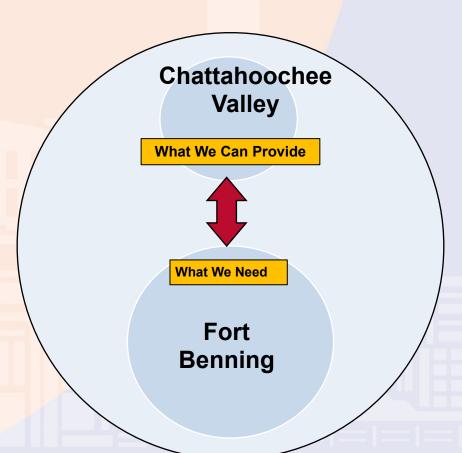
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- Achieve goal to maintain a 14-day supply of resources to continue operations in case of a catastrophic event.
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Fort Benning & the Chattahoochee Valley



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Conference Background

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- Composed primary in smaller, more informational environments for military personnel and first responders.
- Conducted as tabletop exercises, presentations, and small panel discussions
- As a next step in advancing sustainability initiatives, this annual/semi-annual emergency management conference is being held.

Target Audience

 Targeted attendees include local, state, and federal government officials and staff, emergency management personnel, utilities, first responders, public safety personnel, law enforcement, and community partners.

Topics

- Mutual Aid Agreements
- Incident Command
- Energy Partnerships
- Water Resource Management
- Response Coordination
- Emergency Communication
- Manmade Threats
- Mass Casualty Incidents

The 2025 Conference is presented by The Georgia Alabama Partnership for Sustainability

Panel Discussions

- Recent Disaster Response in Georgia and Alabama
- Building Resilience: Foundations of Emergency Preparedness, Response, &
 Recovery
- Advancing Energy Resilience through Regional Partnerships & Planning
- From Triage to Transport: Managing the Complexities of Mass Casualty Incidents
- The Right Message at the Right Time: Coordinating Emergency Communication and Response

Outcomes

- Strengthen Regional Collaboration: Connect with emergency managers, public officials, and community leaders from across the Chattahoochee Valley regions to build partnerships that are unified in disaster preparedness, response, and recovery.
- Acquire Knowledge of Best Practices in Disaster Resilience: Gain insights from expert-lead sessions on disaster resilience, emergency management protocols, community preparedness, and long-term recovery efforts.
- Amplifying Shared Experiences: Hear directly from those affected by past disasters and engage in inclusive discussions about responsive preparedness approaches.

Outcomes Continued...

- Gain Awareness of Preparation Needs: Staying informed is essential. This conference
 prepares attendees to proactively secure resources and lead resilient planning efforts in their
 communities.
- Enhanced Access to Research and Tools: Discover the latest innovations in disaster modeling, resilience frameworks, and practical tools that help communities adapt emergency preparedness strategies.

Future Action

- Conduct GAPS quarterly meetings to identify and establish regional policies and Mutual Aid Agreements.
- Ensure information can be disseminated and communication is not Interrupted
- Develop installation/community disaster conference framework that could be replicated across other installations in the Southeast
- Create lessons learned, best practices, and training initiatives in support of emergency preparedness efforts
- GAPS 2026: July 21st and 22nd, 2026









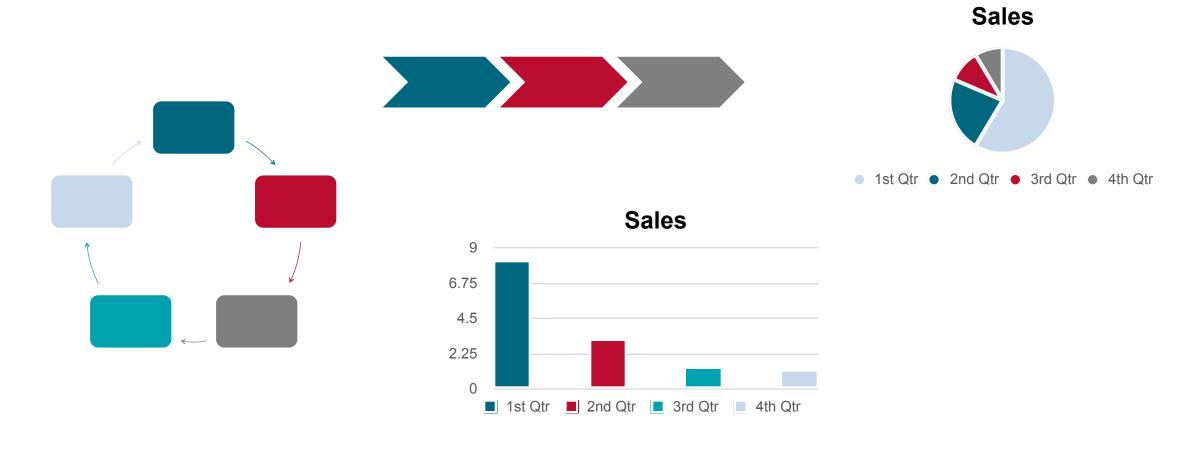








Examples of Data Content and Colors





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