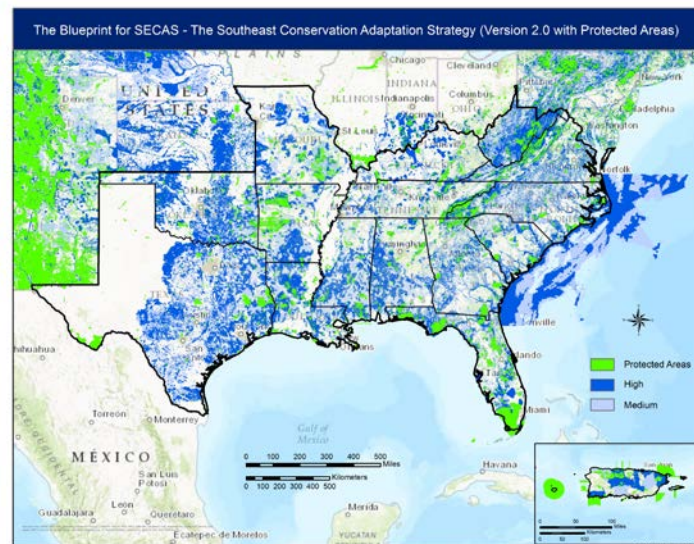


But What About the People?

The Role of Urban Planning and Green Infrastructure

The Southeast Conservation Adaptation Strategy: A Model for Collaborative Conservation

David Rouse, FAICP, ASLA
Managing Director, Research and Advisory Services
American Planning Association
drouse@planning.org



American Planning Association
Making Great Communities Happen

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Create Better Communities



The American Planning Association provides leadership in the development of vital communities by advocating excellence in planning, promoting education and citizen empowerment, and providing our members with the tools and support necessary to meet the challenges of growth and change.

[Learn More](#)

Applied Research: Green Communities Center

Advances practices that improve environmental quality, address climate change, and reduce development impacts on natural resources. Priorities are:

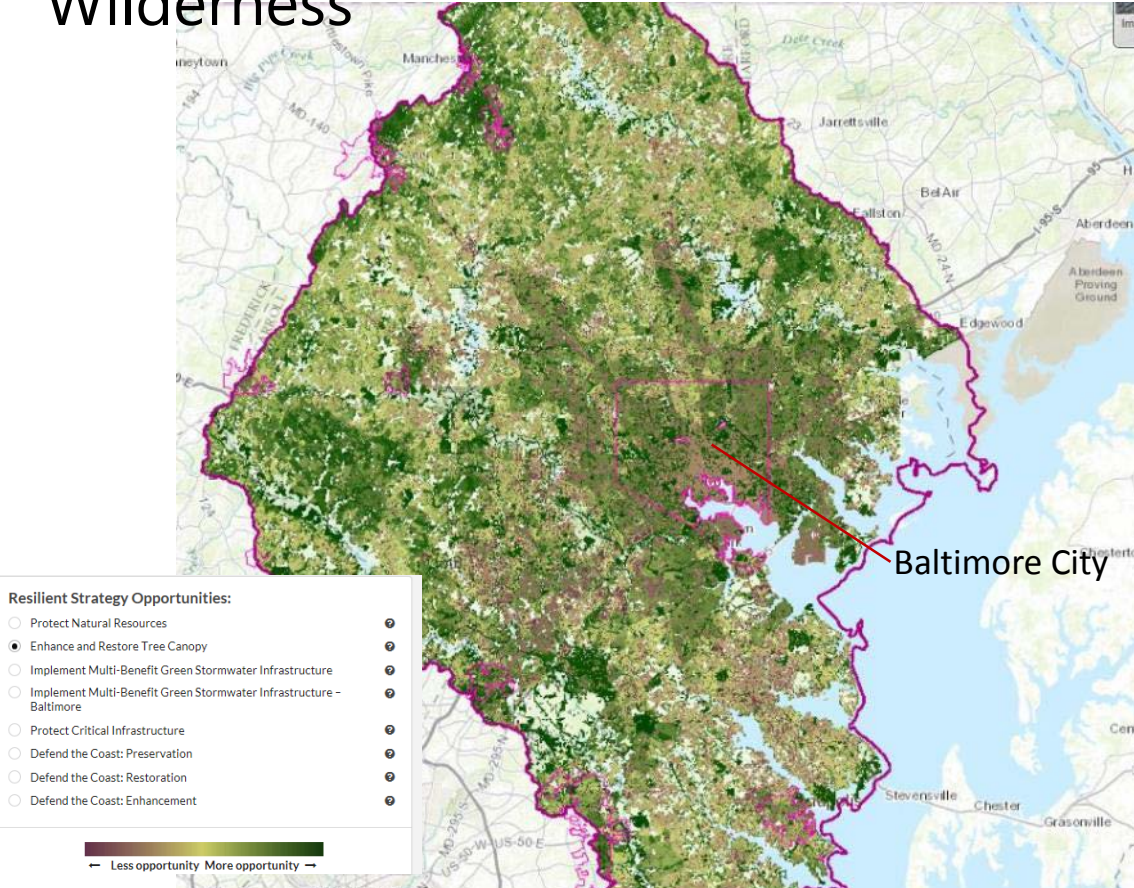
- Green/blue infrastructure
- Green energy
- Green transportation



**SUPPORTING A REGIONAL
GREEN INFRASTRUCTURE NETWORK
THROUGH LOCAL POLICY AND ACTION**

*Best Practices for Using Green Infrastructure to
Enhance Resilience to Coastal Storms and Climate Change*

Sample Project: Greater Baltimore Wilderness



Resilient Green Infrastructure Strategies:

- Natural Resource Protection
- Urban Forest Enhancement
- Multi-Benefit Green Stormwater Infrastructure
- Critical Infrastructure Protection
- Coastal Defense



Source: The Conservation Fund

Green Infrastructure Definitions



City and Regional Open Space

An interconnected network of natural areas and other open spaces that conserves natural ecosystem values and functions, sustains clean area and water, and provides a wide array of benefits to people and wildlife.



Green Stormwater Infrastructure

Systems and practices that use or mimic natural processes to infiltrate, evapotranspire, or reuse stormwater on the site where it is generated.

Green Infrastructure Across Scales

Region

- Working farms and forests
- Regional parks and nature preserves
- River corridors and greenways



City

- Urban forest / tree canopy
- Urban parks
- Parkways and boulevards



Green Infrastructure Across Scales

Neighborhood

- Local parks
- Constructed wetlands
- Green streets



Site / Building

- Stormwater planters
- Rain gardens
- Green roofs



Green Infrastructure Co-Benefits

Environmental

- Absorbs/treats stormwater
- Improves air and water quality
- Maintains native ecosystems/habitat



Economic

- Creates job opportunities
- Stimulates retail sales
- Attracts visitors, residents, businesses to a community



Social

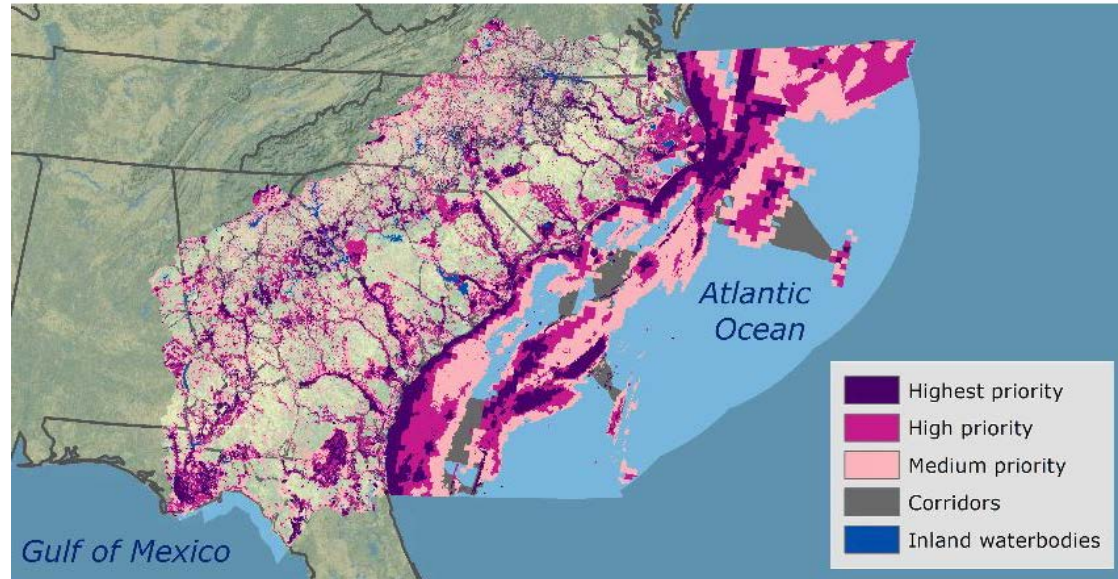
- Provides outdoor recreation
- Connects people to nature
- Improves environmental health



Connecting Conservation and Urban Planning through Green Infrastructure: The South Atlantic Conservation Blueprint

Project Purpose

“...examine how large scale green infrastructure definitions and urban scale green infrastructure definitions can be bridged... and identify areas of shared conservation interest across the rural-urban continuum.”



South Atlantic Conservation Blueprint 2.2

Project Context: The Piedmont Megaregion

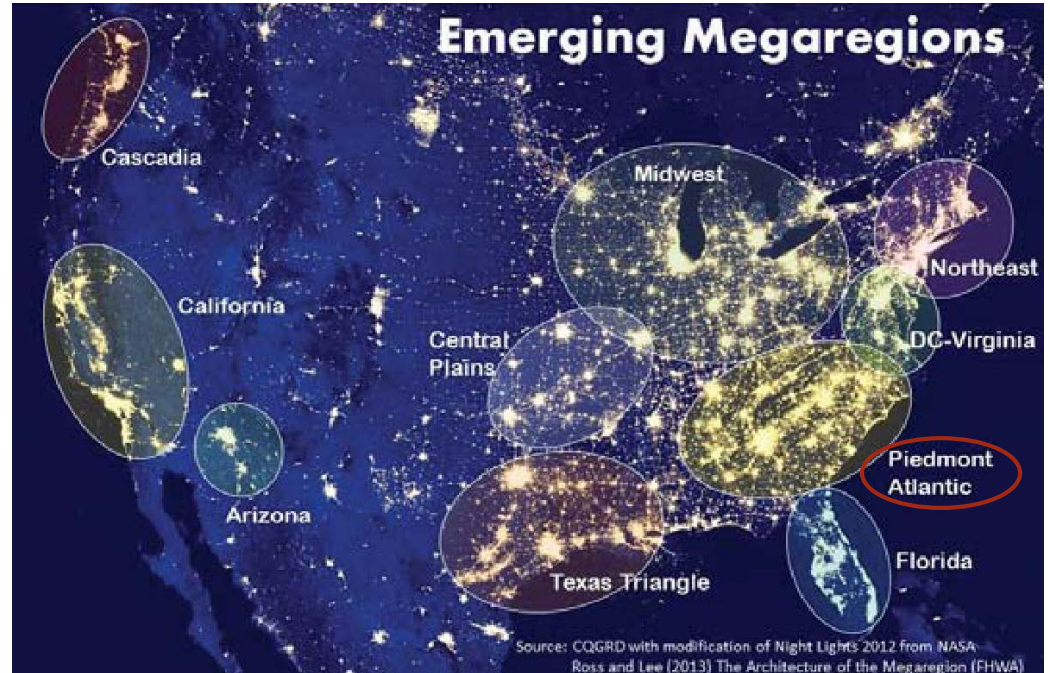
2000 population: 47 million
2050 population (projected): 82 million

Major metropolitan areas:

- Atlanta
- Charlotte
- Raleigh-Durham

Trends

- Urban/suburban expansion
- Ecosystem stresses
- Habitat fragmentation



Source: Center for Quality Growth and Regional Development, Georgia Tech

Connecting People and Nature Through Green Infrastructure: Megaregional Connections



East Coast Greenway

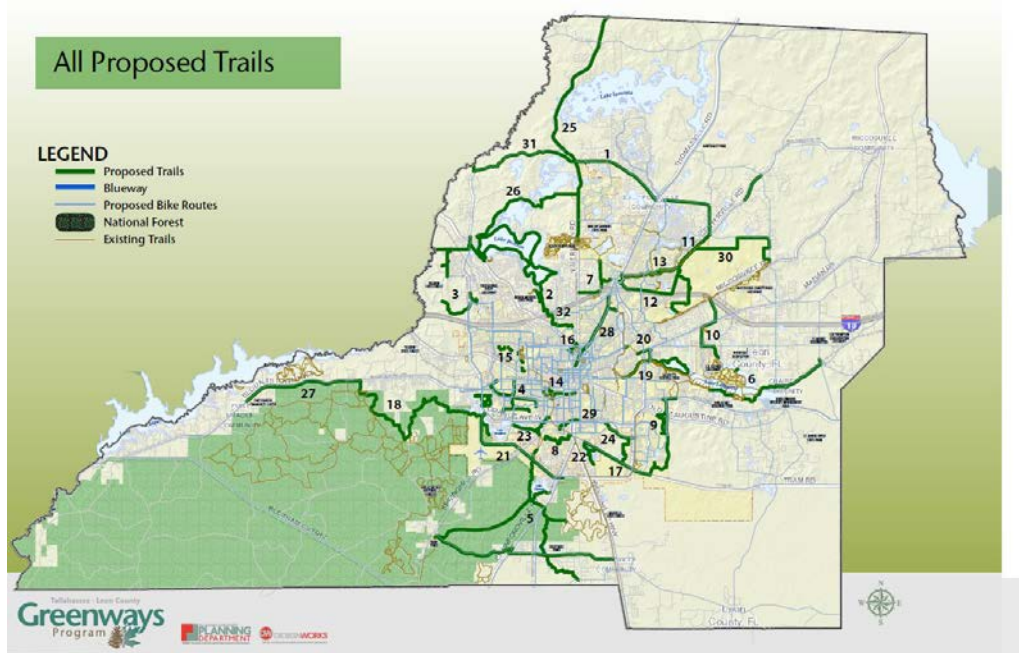
The Carolina Thread Trail is one of the largest and most exciting projects ever planned for our region. Its legacy will permanently celebrate this region's history, beauty, and diversity, while conserving local lands and providing a broad range of community benefits. The Thread will link more than two million citizens with hundreds of miles of pedestrian and bicycle trails that wind through 15 counties in North and South Carolina, connecting points of regional significance.

THE CAROLINA THREAD TRAIL IS A REGIONAL NETWORK OF GREENWAYS, TRAILS AND BLUEWAYS THAT REACHES:

250	2	100	15	2.3
MILES OF TRAILS	STATES	MILES OF OPEN BLUEWAY	COUNTIES	MILLION PEOPLE

Carolina Thread Trail

Connecting People and Nature Through Green Infrastructure: Regional Connections



Tallahassee-Leon County Greenways Master Plan



Connecting People and Nature Through Green Infrastructure: Urban Planning

Why Planners Should Integrate Local Planning with the Blueprint

Co-Benefits of Environmental Conservation for Planning

Environmental conservation is often only one of many competing priorities for local planners, if it is even a priority at all. However, even if conservation is not identified as a focus within a community, successful conservation efforts can result in a host of desirable co-benefits that help accomplish goals related to economic development, social equity, community health, and other broad priorities.

Conservation Activity	Results	Community Benefits
Source water protection	Improved water quality Flood mitigation Storm water protection Wildlife habitat enhancement Biodiversity Recreational opportunities	Reduced need for water treatment facilities Increased tourism revenue
Flood mitigation/storm water management	Reduced frequency of flood events Smaller areas of flood events Improved water quality	Less costly public drainage infrastructure Reduced flood-related costs for property owners
	Reduced erosion Reduced sedimentation	
Open space and farmland preservation	Flood control Water quality Recreational opportunities	Continued production Increased tourism revenue
Forest preservation and enhancement	Wildlife habitat enhancement Timber source Carbon storage Stormwater retention Recreational opportunities Increased shade	Reliable sources of wood fiber Increased tourism revenue Higher property values Lower energy use
Restoring coastal features	Wildlife habitat enhancement Recreational opportunities Improved water quality	Increased tourism revenue Higher property values

Figure 4 This table summarizes several conservation activities, the results of those activities, and their benefits for cities and people. (Naturally Resilient Communities, 2017 and National Association of Conservation Districts, 2010).

Planners at the local level influence landscape change through plans, development regulations, and capital improvement programs.

Conservation is often one of many competing priorities in the political environment in which planners work.

The green infrastructure concept can be used to advance conservation goals while achieving desirable co-benefits such as economic development, public health, and cost savings for local governments.

Opportunities for Integration: Plans

Comprehensive Plans

Open Space Plans

Park and Recreation Plans

Green Infrastructure Plans

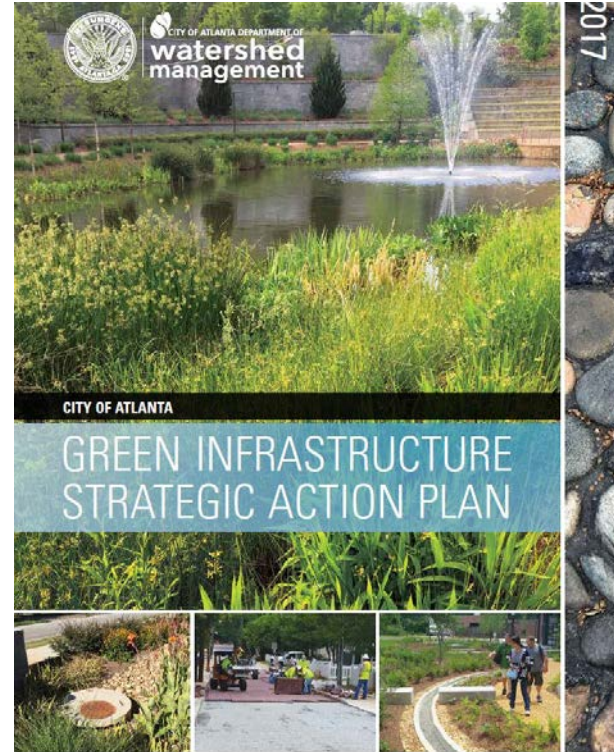
Hazard Mitigation Plans

Climate Action/Adaptation Plans

Community Wildfire Protection Plans

Watershed Plans

Transportation/Mobility Plans



Green Infrastructure Strategic Action Plan, Atlanta

Opportunities for Integration: Zoning and Regulatory Tools

- Conservation Subdivisions
- Conservation Zoning Districts
- Conservation Overlay Districts
- Transfer of Development Rights
- Low Impact Development Standards
- Urban Forestry/Landscaping Standards
- Site Design Standards
- Open Space Dedication Requirements/
Incentives



Lake Ogletree Conservation Overlay District, Auburn, AL

Opportunities for Integration: Capital Investment and Programmatic Tools

- Fee Simple Acquisition
- Purchase of Development Rights/Easements
- Stormwater Management Projects
- Environmental Restoration Projects
- Tree Planting/Greening Projects
- Land Conservation Programs
- Forest Conservation Programs
- Tree Planting Programs
- Volunteer Restoration Programs
- Technical Assistance Programs
- Educational Programs



Volunteer tree planting, TreesCharlotte

Urban Conservation Summit, Atlanta, September 2016



Conservation Challenges

Conservationists

1. Coordination
 - Unclear conservation objectives
 - Lack of regional links
 - Uncoordinated planning
2. Education
 - Time/ability to engage stakeholders
 - Developer/landowner education
 - Political appetite for conservation

Planners

1. High growth area of the country with significant development pressure
2. Private property rights
3. Availability of funding
4. General awareness/understanding
5. Political will
6. Lack of capacity in small/rural communities

Effective Strategies to Limit/Mitigate Development

Conservationists

1. Zoning
2. Tax incentives
3. Quality development (high density, good connectivity, conservation design)
4. Multi-use conservation areas
5. Showing the economic value of conservation

Planners

1. Land acquisition
2. Conservation easements
3. Public education
 - To support zoning restrictions
 - To support taxes that fund conservation
 - To support spending \$ on conservation
 - Marketing/branding an area



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