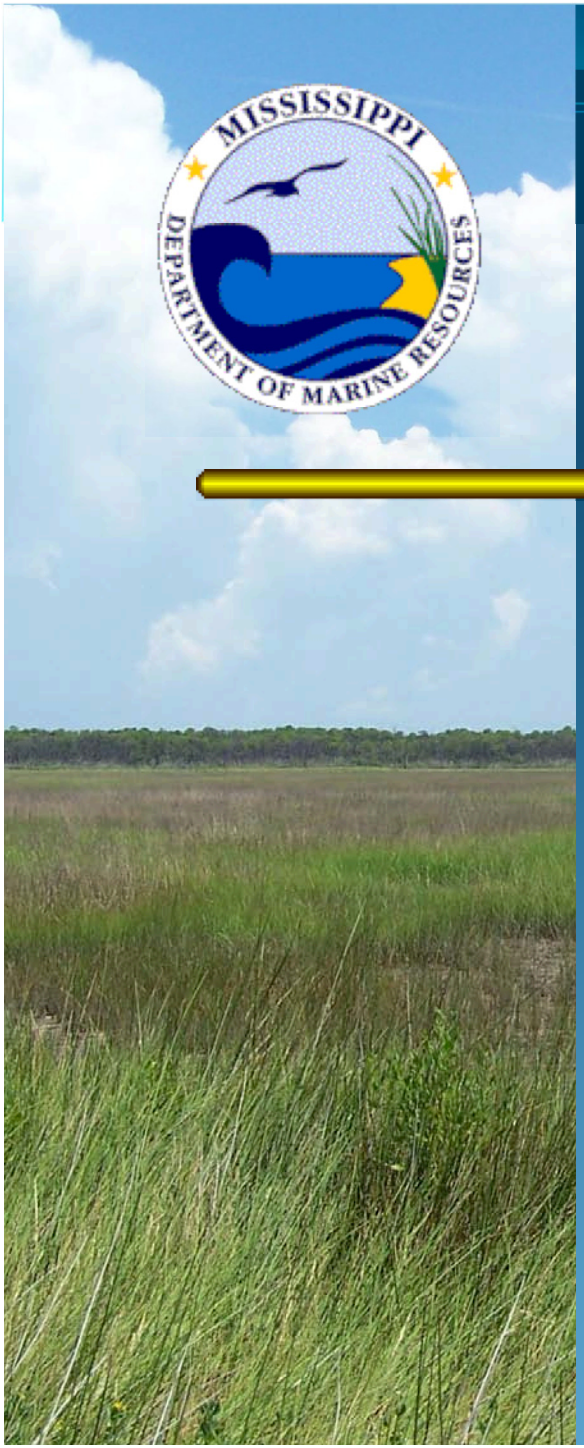
Comparing Coastal Responses to Promote Regional Resiliency

Tina Shumate, MS Department Marine Resources
Kimberly Miller, Eco-Systems, Inc.

For More Information: www.dmr.ms.gov

Tina Shumate, MS Department Marine Resources
Tina.shumate@dmr.ms.gov

Kimberly Miller, Eco-Systems, Inc.
Kimberly.miller@eco-systemsinc.com



Mississippi Department of Marine Resources

Office of Coastal Management and Planning

Tina Shumate
Office Director

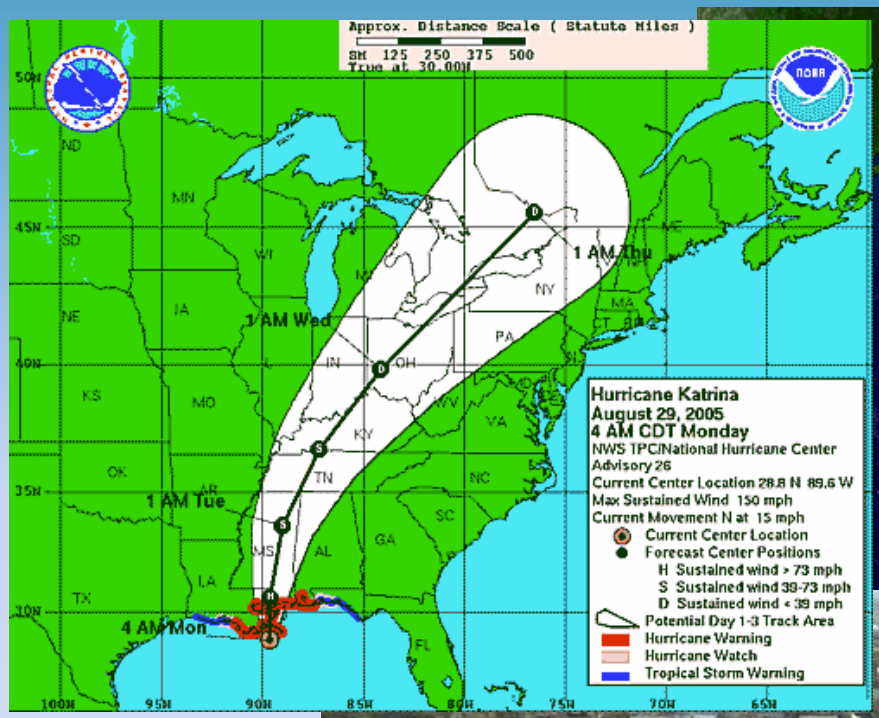
MISSISSIPPI GULF COAST SMART GROWTH

Smart Growth Initiative

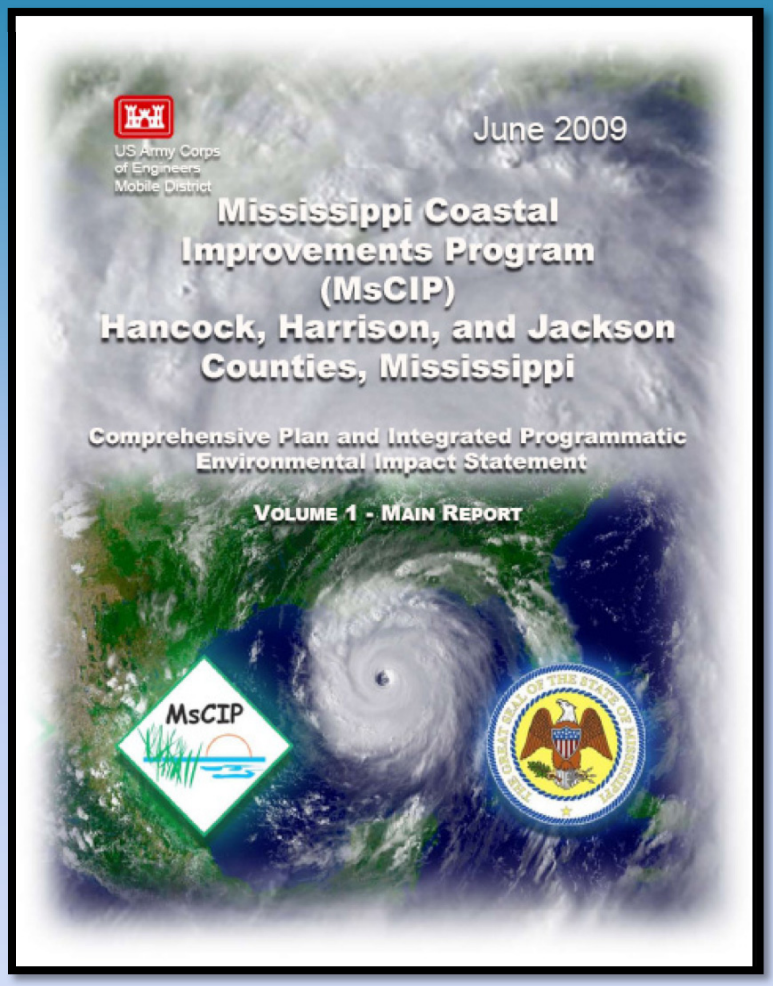
- Began as a result of the boom of casino development on beachfront
- Formed Coastal Resource Management Plan, held stakeholder meetings
- Host annual Coastal Development Strategies Conference since 1999
- Wrath of Hurricane Katrina, Aug. 2005—loss of view-shed and natural assets

Mississippi Gulf Coast

Hurricane Katrina

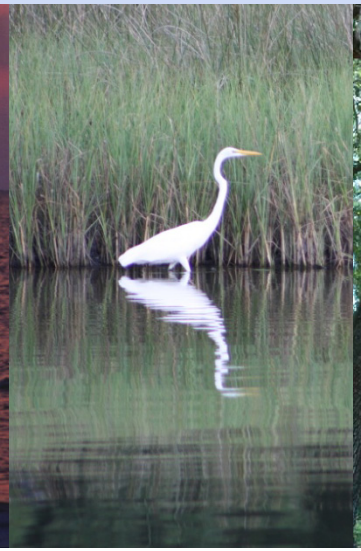


Building Resiliency



What do we want to look like?

- Need to maintain the unique heritage of the Mississippi Gulf Coast (Sense of place). Six coast counties designated National Heritage Area.
- Development of Smart Growth Toolbox



Partners

Chevron

DuPont DeLisle Plant

Mississippi Power — A Southern Company

Land Trust for the Mississippi Coastal Plain

National Oceanic and Atmospheric Administration — NOAA — U.S. Department of Commerce

Mississippi Gulf Coast National Heritage Area

MDEQ

Coast Chamber — Harrison County, Mississippi

Gulf Coast Business Council — Leadership for Regional Solutions.

Gulf Coast Heritage Trails Partnership

Harrison, Jackson, Hancock, Pearl River, Stone and George counties

Cities of Pascagoula, Gautier, Moss Point, Lucedale, Biloxi, Gulfport, D'Iberville, Long Beach, Pass Christian, Bay St. Louis, Waveland, Wiggins, Picayune, Poplarville

National Park Service

Smart Growth & Sustainability for the Mississippi Gulf Coast

MS Department Marine Resources
Eco-Systems, Inc.

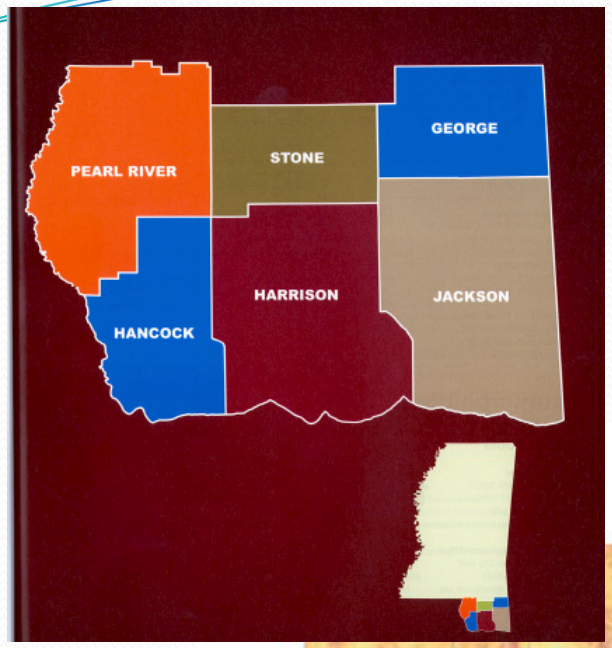
Tina Shumate, Kimberly Miller
February 2, 2012

Mississippi Gulf Coast Communities

Achieving Sustainability through a Respect for the Gulf Coast's Natural and Cultural Heritage

Hattiesburg
59
59
55
12
12
10
10
HARRISON
JACKSON
65
Mobile
10
Gulf of Mexico
New Orleans

Geographic Context



- 6 Coastal Counties
- 11 Coastal Municipalities
- Mississippi Sound, Wolf & Pascagoula Rivers, Bay of St. Louis, Biloxi Bay

Half Shell

MS Department of Marine Resources:
Office of Coastal Management & Planning

- Building the capacity of state and local governments to manage and protect coastal wetlands and marine resources
- Providing planning assistance to assist the 11 coastal cities and six coastal counties
- Preserving over 300 Years of Gulf Coast Cultural and Environmental Heritage
- Mentoring Mississippi's Coastal Communities in Smart Growth Concepts, Stormwater Management, Resilient Practices, and Sustainable Development Methods
- Promoting Clean Marinas
- Managing Coastal Impact Assistance Program (CIAP)

Toolbox for Smart Growth, Sustainable Development and Coastal Resilience

- Five Concepts based on 10 Smart Growth Principles:
  - Community character
  - Growing green
  - Transportation choices
  - Policy in practice
  - Coastal resilience
- Fifteen Resource Guides on five Concepts
- Tools and References

‘Concepts’ Defined

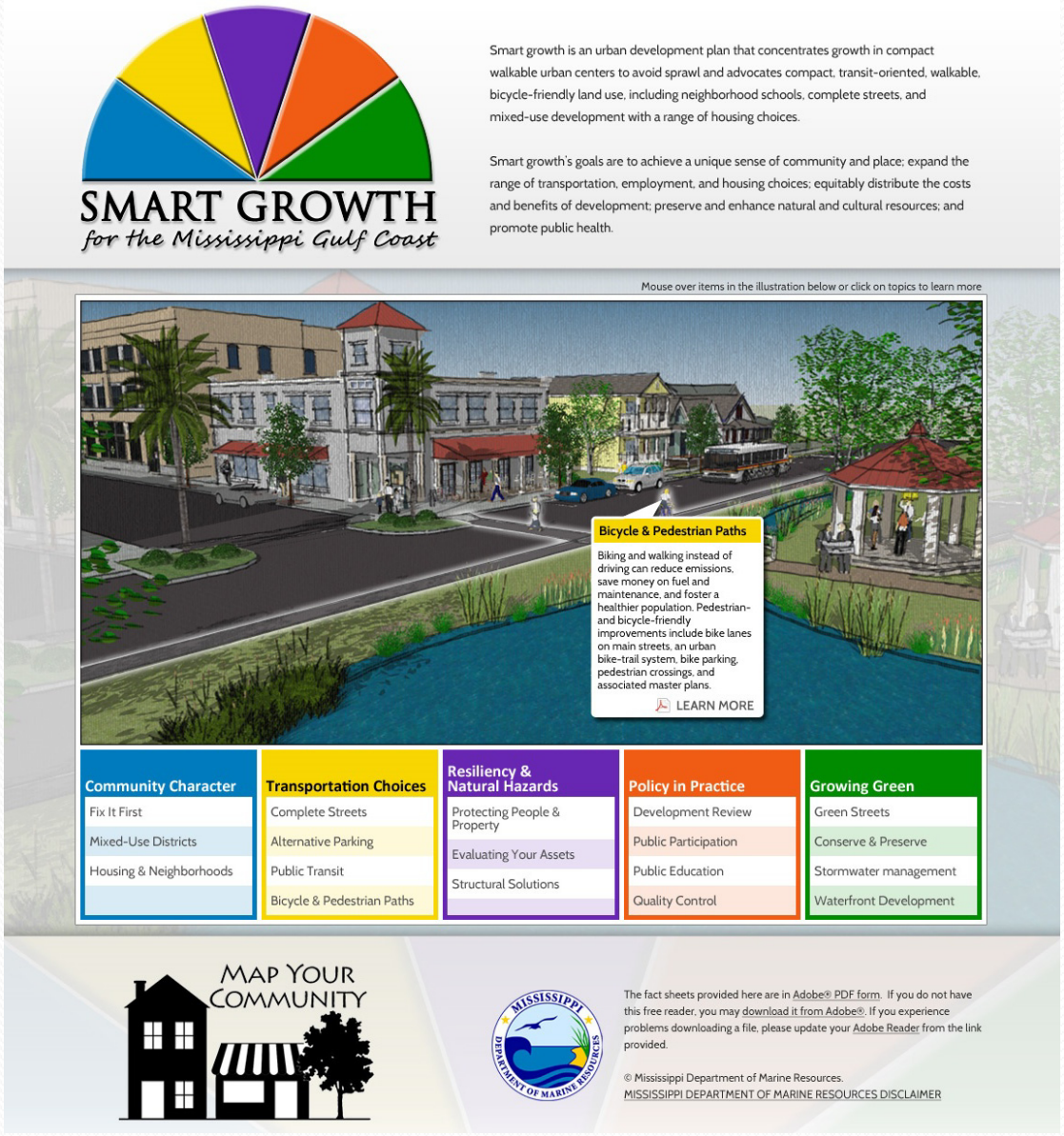
- Comprehensive framework for sustainable growth in MS Gulf Coast communities.
- Context for the practices outlined in resource guides.
- Reform your Approach = Reach Smart Growth Goals
  - Enhanced Community Character
  - More Transportation Choices
  - Promote Green, Environmentally Sustainable Growth
  - Policies Promote Sustainable Development over Sprawl
  - Improved Community Resilience to Natural Disasters

Resource Guides

- Resource guides explain how to implement the 5 Smart Growth Concepts
- Each Concept has at least Three Resource Guides:
  - Three Smart Growth strategies, w/following content
    - Definitions
    - Illustrations
    - Tools & References

Toolbox Homepage

- Illustration links to Concepts, Resource Guides as PDF documents
- Download
- Save
- Print



Interactive Website – Smart Growth Scene

Elements in scene represent concepts in the categories of Smart Growth

Resource Guide Topic

Live Link to Tool

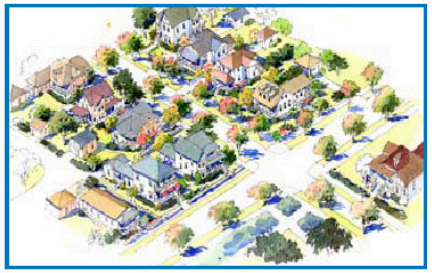
Tools & Resources

SMART GROWTH
for the Mississippi Gulf Coast

Community Character: Housing & Neighborhoods

Safe and walkable street networks connect homes and neighborhood to each other and to surrounding areas. A mixture of uses throughout a community provides for better security through 24-hour activity and more 'eyes on the street'. Architectural elements like front porches and compact building design reduce areas for undesirable [illegible] The Walkability Checklist encourages its users to take a walk with a child and then answer a series of questions about traffic safety in their neighborhood.

Above: Sidewalks and front porches encourage more "eyes on the streets", providing for safer neighborhoods.



Above: An illustration from the Mississippi Urban Renewal Pattern Book shows a walkable neighborhood with houses set close to the street.

Right: Common open space and narrow streets help produce a sense of security among residence of Glenwood Park in Atlanta.

Actions	Policies • Tools • Techniques
Create a range of housing opportunities and choices	Allow zoning flexibility to build housing units of varied sizes and prices Adopt Inclusionary Zoning to incentivize or require affordable units Create Community Land Trusts that lower the cost of housing
Foster distinctive, attractive communities with a strong sense of place	Identify unique architectural characteristics of Mississippi neighborhoods Determine the characteristics that make a place special and how to enhance them Preserve the community's history
Create walkable neighborhoods	Incorporate safe infrastructure for walking in the local roadway system Create trails to promote fitness and reduce traffic Encourage walking to promote health in Mississippi

www.dmr.state.ms.us/SmartGrowth

Tools and References

PRINCIPLES	TOOLS and LINKS
Housing & Neighborhoods: Create a range of housing choices and opportunities	**Provide a range of local housing types for people at all stages of life** *Affordable Housing & Smart Growth: Making the Connection* www.epa.gov/smartgrowth/pdf/epa_ah_sg.pdf *Aging in Place Initiative* http://www.aginginplaceinitiative.org/ **Create Community Land Trusts to lower the cost of housing** *Community Land Trust Network* www.cltnetwork.org/ *North Gulfport Community Land Trust* www.ngclt.org/ **Model Ordinances and Permits** *Getting to Smart Growth: 100 Policies for Implementation* http://www.smartgrowth.org/pdf/gettosg.pdf *Inclusionary Zoning Model Ordinance* www.planning.org/research/smartgrowth/pdf/section44.pdf *Accessory Dwelling Unit Permit, Town of Cary, N.C.* http://www.townofcary.org/Assets/Planning+Department/Applications/Accessory+Use+(dwelling)+Permit+Jun+09.pdf

9270.01 091311 PUB R04 D Resource Guides.pdf - Adobe Reader

File Edit View Document Tools Window Help

Bookmarks

- Cover Page
- Introduction
- Community Character
  - Fix It First
  - Mixed-Use Districts
  - Housing & Neighborhoods
- Transportation Choices
  - Complete Streets
  - Tackling Traffic
  - Bicycle and Pedestrian Paths
  - Alternative Parking
- Resiliency & Natural Hazards
  - Evaluating Your Assets
  - Protecting People & Places
  - Structural Solutions
- Policy in Practice
  - Development Review
  - Public Participation
  - Quality Control
- Growing Green
  - Green Streets
  - Conserve &

Print

SMART GROWTH & SUSTAINABILITY

for the Mississippi Gulf Coast

A Guide to Sustainable and Resilient Living Along the Mississippi Gulf Coast

MISSISSIPPI DEPARTMENT OF MARINE RESOURCES

©2011

start | 10 Adobe ... | 2012 Brownf... | 16 Microso... | Microsoft Ex... | 2 Internet ... | Microsoft Po...

SMART GROWTH
for the Mississippi Gulf Coast

Smart, sustainable growth in coastal areas creates close-knit communities that enjoy both the environmental and economic value of their natural surroundings. By discouraging sprawl and producing compact, transit-oriented, walkable neighborhoods, cities can meet the growing desire of homeowners and business to invest not just in a property, but a place. Coastal areas will find solutions in this Toolbox to achieve a unique sense of community; expand the range of transportation, employment, and housing choices; equitably distribute the costs and benefits of development; preserve and enhance natural and cultural resources; and improve their resiliency from natural hazards.

Click on items in the illustration or on topics below to learn more | Download *Toolbox for Smart Growth & Sustainability for the Mississippi Gulf Coast*

Identify Policy Problem

Communit

Community cha
to live. Businesse
strengths of esta
before expandin
money for new i
resilient to natur
growth creates v

Oyster Bayou is
Mexico. Aware c
help protect the

Oyster Ba
offers a lar
couple tou
neighbors.
the nearby
similar life
homeown
right there

hoices of where
ilds up the
nfrastructure
ties to save
opment is more
hrough new

to the Gulf of
Growth can

nt town. It
visiting, the
tween
e safe path to
nities for a
s for
what they need

SMART GROWTH & SUSTAINABILITY for the Mississippi Gulf Coast

Community Character: Fix It First

One of the main goals of Smart Growth is to reduce urban sprawl and create close-knit communities. This can be achieved by prioritizing growth and development in existing neighborhoods. Some of the most successful strategies to reach this goal incorporate "working with what you have," such as the ones listed below.

- Preservation of Historic Areas
- Fix-It-First Infrastructure Programs
- Reusing Vacant Lots and Brownfield

Preservation of Historic Areas

Preserving historic buildings and neighborhoods protects community character while reducing economic and environmental impacts associated with demolition and disposal. The National Trust for Historic Preservation found that repairing historic structures has a positive impact on investment and real estate values. Historic structures become desirable places to live and work largely because of their architectural uniqueness. Historic renovation projects also generate more jobs than the new construction of similar-sized projects.

Historic buildings, like this former bus station renovated by the Gulfport Main Street Program, offer architectural uniqueness. Photo provided by Gulfport Main Street.

A historic bank building in downtown Gulfport, MS, gets a facelift after suffering damage from Hurricane Katrina. Photo by Kimberly Miller, AICP.

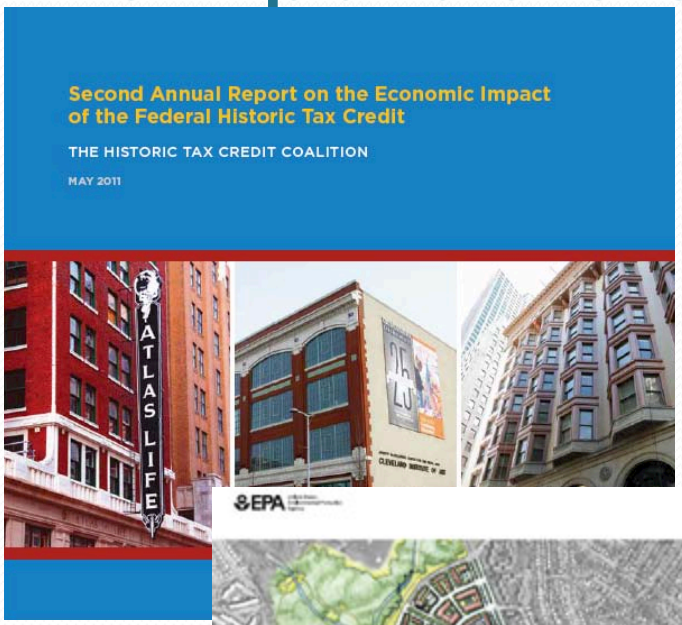
Fix-It-First Infrastructure Programs

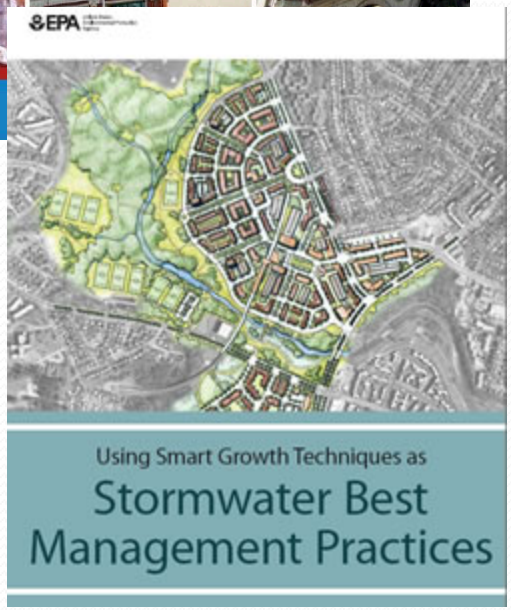
When cities repair and maintain existing infrastructure before extending new roads, water and sewer lines into undeveloped areas, they create incentives to invest in settled areas. In the EPA's book, Using Smart Growth Techniques as Stormwater Best Management Practices, authors explain how a public works department might reduce sprawl by implementing a 'Fix-it First' budgetary policy. This would place the first spending priorities on repair, operations and maintenance. A sample goal might be to fix 25% of existing water infrastructure over five years.

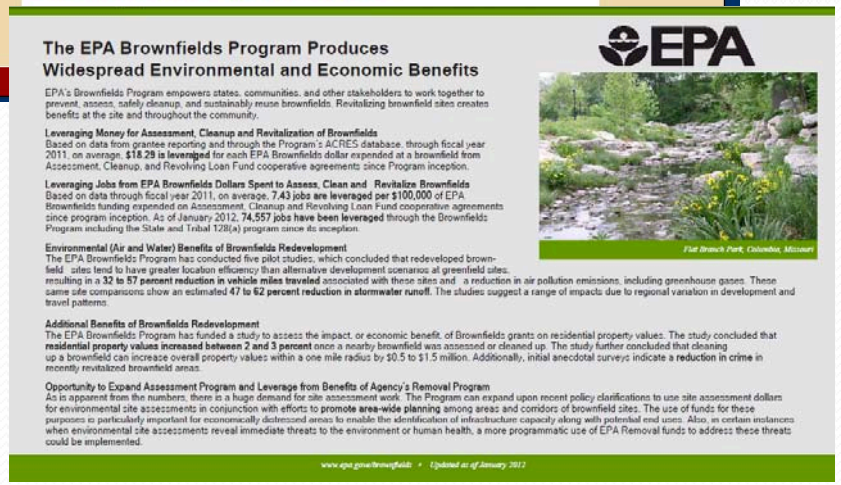
Infrastructure investment lays the foundation for development, redevelopment, or infill of land in existing neighborhoods and business districts. Redevelopment occurs in areas that have already been developed. It can take place site-by-site or as part of a larger effort to spur investment and development activity. Gulfport, Mississippi's Main Street Program attracted developers to reinvest in downtown after Hurricane Katrina with financial and regulatory incentives. It is currently restoring the exteriors of more than eighty buildings in Downtown Gulfport. Redevelopment also helps preserve open land in surrounding areas, thus lowering flood risks and stormwater management expenses.[1]

www.dmr.ms.gov

Comparable Sustainable Approach

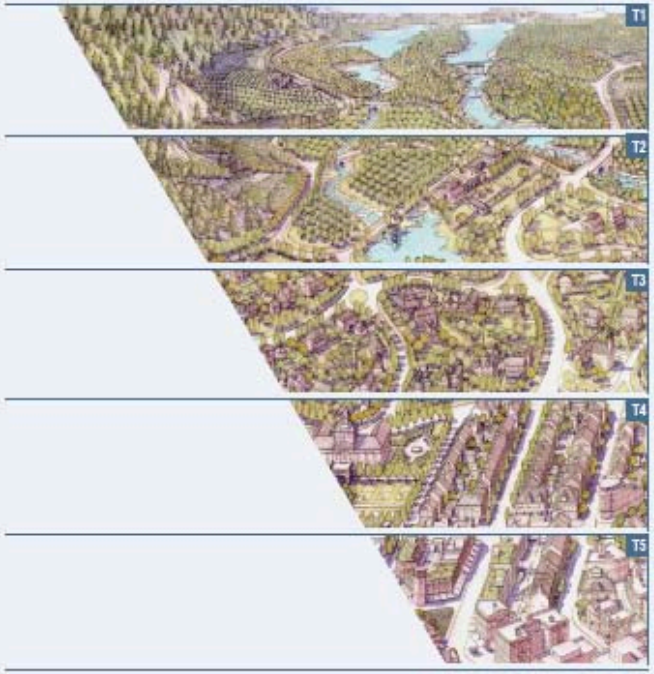






Find Model Ordinance

PASS CHRISTIAN SMARTCODE



Complete Including Text of Adopted Community Plans

City of Pass Christian, Mississippi
Version 1.12 Approved 16 June 2009

TABLE OF CONTENTS

ARTICLE 1. GENERAL TO ALL PLANS
1.1 AUTHORITY
1.2 INTENT
1.3 APPLICABILITY
1.4 PROCESS
1.5 APPROVAL OF PLANS; WARRANTS AND VARIANCES
1.6 INCENTIVES

ARTICLE 2. SECTOR-SCALE PLANS
2.1 INSTRUCTIONS
2.2 SUCCESSION
2.3 (O-1) PRESERVED OPEN SECTOR
2.4 (O-2) RESERVED OPEN SECTOR
2.5 (G-1) RESTRICTED GROWTH SECTOR
2.6 (G-2) CONTROLLED GROWTH SECTOR
2.7 (G-3) INTENDED GROWTH SECTOR
2.8 (G-4) INFILL GROWTH SECTOR
2.9 (SD) SPECIALIZED DISTRICT

ARTICLE 3. NEW COMMUNITY-SCALE PLANS
3.1 INSTRUCTIONS
3.2 TRANSECT ZONES
3.3 COMMUNITY TYPES
3.4 DENSITY CALCULATIONS
3.5 ENVIRONMENTAL REQUIREMENTS
3.6 STREETSCAPE REQUIREMENTS
3.7 CIVIC FUNCTIONS
3.8 SPECIAL REQUIREMENTS

ARTICLE 4. EXISTING COMMUNITY-SCALE PLANS
4.1 INSTRUCTIONS
4.2 TRANSECT ZONES
4.3 COMMUNITY TYPES
4.4 CIVIC FUNCTIONS
4.5 SPECIAL REQUIREMENTS
4.6 PRE-EXISTING CONDITIONS
4.7 DENSITY REQUIREMENTS

ARTICLE 5. BUILDING-SCALE PLANS
5.1 INSTRUCTIONS
5.2 SPECIFIC TO T1 & T2 ZONES
5.3 SPECIFIC TO T3 ZONES
5.4 SPECIFIC TO T4 ZONES
5.5 SPECIFIC TO T5 ZONES
5.6
5.7 CIVIC FUNCTIONS
5.8 SPECIAL REQUIREMENTS
5.9 PRE-EXISTING CONDITIONS
5.10 BUILDING & FLOOD CODE COMPLIANCE
5.11 HISTORIC PRESERVATION DISTRICT
5.12 SPECIAL EMERGENCY PROVISIONS
5.13 DENSITY LIMITS, BONUSES, TRANSFERS

ARTICLE 6. STANDARDS & TABLES
TABLE 1 TRANSECT ZONE DESCRIPTIONS
TABLE 2 SECTOR/COMMUNITY ALLOCATION
TABLE 3A VEHICULAR LANE DIMENSIONS
TABLE 3B VEHICULAR LANE/PARKING ASSEMBLIES
TABLE 3C THOROUGHFARE ASSEMBLIES
TABLE 4A PUBLIC FRONTAGE - GENERAL
TABLE 4B PUBLIC FRONTAGE - SPECIFIC
TABLE 5 PUBLIC LIGHTING
TABLE 6 PUBLIC PLANTING
TABLE 7 PRIVATE FRONTAGE
TABLE 8 BUILDING CONFIGURATION
TABLE 9 BUILDING DISPOSITION
TABLE 10 BUILDING FUNCTION - SPECIFIC
TABLE 11 BUILDING FUNCTION - GENERAL
TABLE 12 PARKING CALCULATION
TABLE 13 CIVIC SPACE
TABLE 14 SUMMARY OF TRANSECT ZONES
TABLE 15 SUMMARY OF SPECIAL DISTRICTS
TABLE 16 DEFINITIONS ILLUSTRATED

ARTICLE 7. DEFINITIONS OF TERMS

ARTICLE 8. ADOPTED COMMUNITY PLANS

Survey of Potential Users

- Majority of respondents said a Smart Growth and Resiliency Toolbox would be “Very useful”
- Smart growth tools and Coastal sustainability and resiliency were the subjects of greatest interest
- Fewer than 50% that they were aware of Smart Growth practices in place in their own jurisdictions
- 83% of respondents with a Smart Growth program wanted to see a more effective use of local **Practices**
- More than half get their Smart Growth info from State Agency websites and want the toolbox available online

Intended Outcomes

- Gulf Coast Communities Adopt Sustainable Development Policies
- Resilience to Natural Hazards is Improved as a Result of Better Education, Siting and Construction Practices
- County & City Departments Incorporate Best Management Practices for Infrastructure and Routine Operations
- A New Sustainable Project Will be Planned as a Site-Specific Demonstration of How to Use the Toolbox