

Stormwater Strategies to Create More Livable and Resilient Communities



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Livability: “The sum of the factors that add up to a community’s quality of life – including the built and natural environments, economic prosperity, social stability, equality, educational opportunity, and cultural, entertainment and recreation possibilities.”

(Partners for Livable Communities)





Resilience: “The ability to prepare and plan for, absorb, recover from, and more successfully adapt to adverse events.” (Urban Land Institute)

Resilient strategies are good for both a community citizens and businesses as they help manage risk, protect lives, maintain or increase property values and associated revenues, and enhance livability.



RESILIENT SHELBY



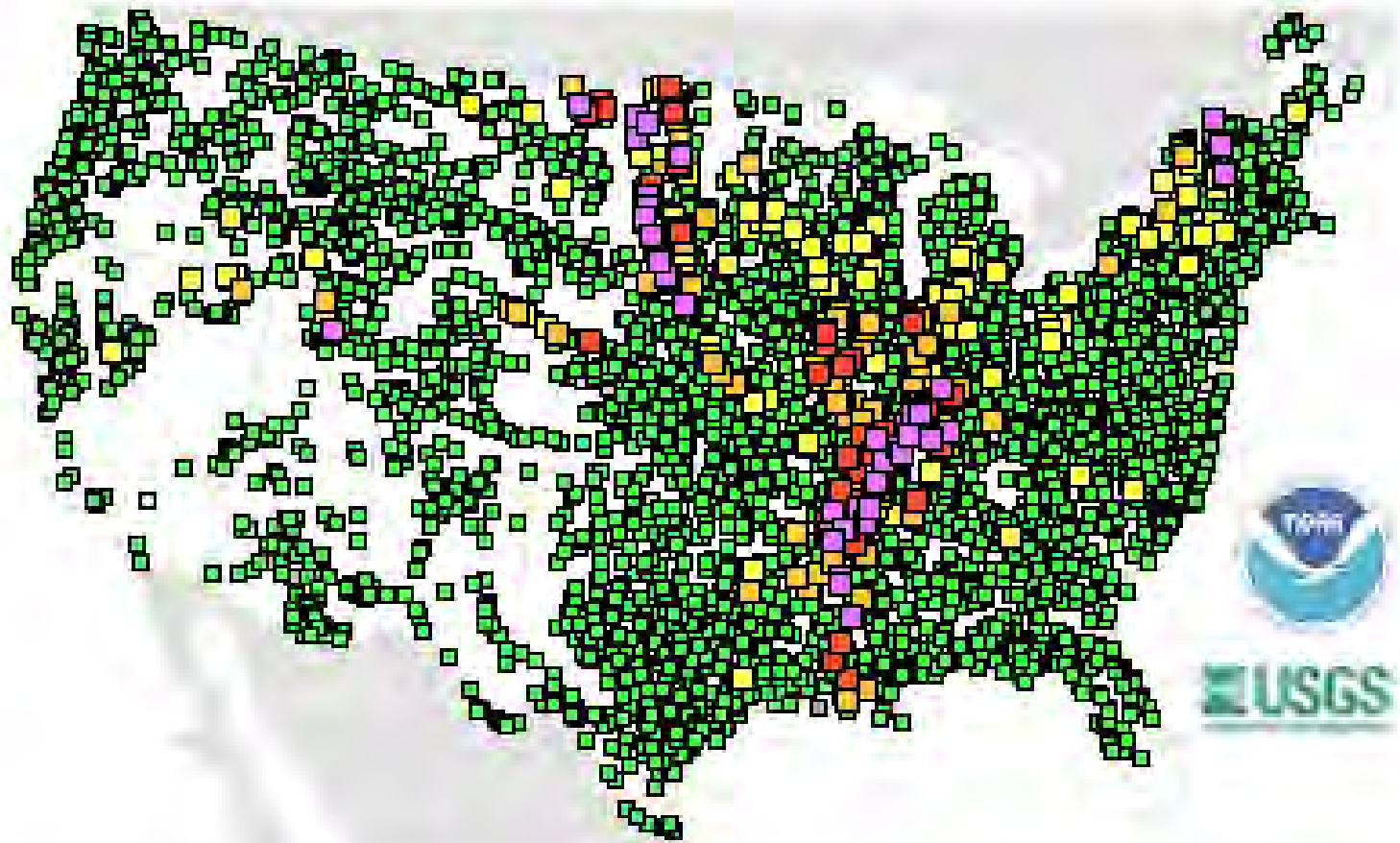
<http://resilientshelby.com>



**Mecklenburg County
Park and Recreation**

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4851 Total Gauges

193 Locations in Flood

- 302 Gauges: Observations older than 24 hours
- 7 Gauges: Out of Service

- 48 Gauges: Major Flooding
- 52 Gauges: Moderate Flooding
- 93 Gauges: Minor Flooding
- 118 Gauges: Near Flood Stage
- 4231 Gauges: No Flooding

Last updated: 05/05/2011 08:00 AM (GMT-7) Version: 1.0 00/0000



AP Photo/Danny Johnston



AP Photo/Mark Humprey



AP Photo/Jeff Robertson



Scott Olson/Getty Images



National Disaster Resilience Competition



Meet the winners.

Announced by President Obama in 2014, the **National Disaster Resilience Competition** was developed to help U.S. communities recover from prior disasters through innovative resilience projects.

67 disaster-affected communities

13 competition winners

1 billion dollars to rebuild *better*

#RebuildBETTER



**Executive
Summary
Exhibit A**

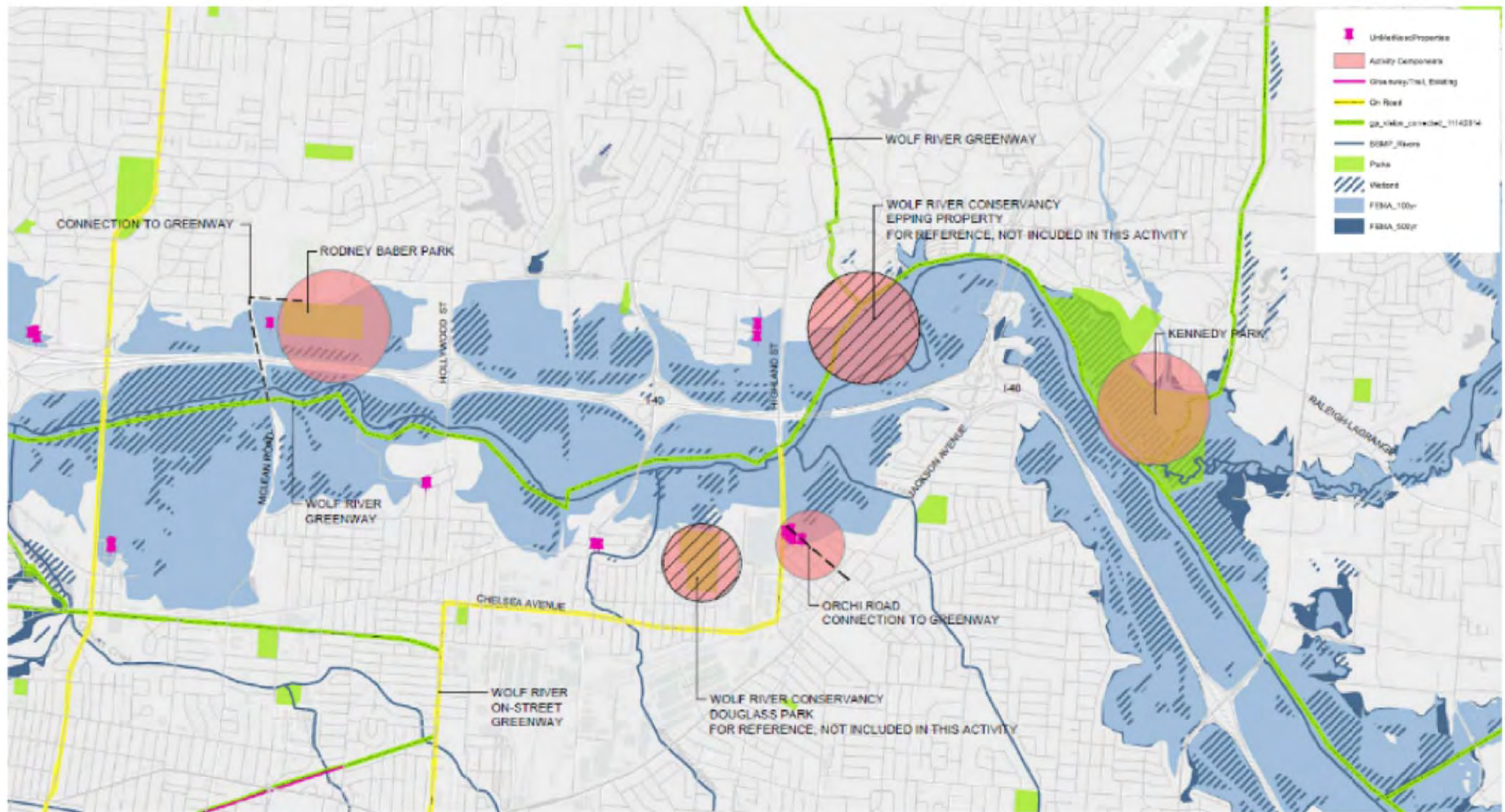
**RESILIENT
SHELBY**

Shelby County, Tennessee
Greenprint for Resilience
National Disaster Resilience Competition
Phase Two - October 27, 2015
ExhibitAExSumShelbyCOTN.pdf

Making Room for The River

Shelby County Application Overview and Key Points

- Protect lives and improve quality of life through creation of wetlands and other flood storage to protect communities and create green assets.
- Reduce community burden of vacancy and vulnerable housing by removing residents from homes at risk of continued flooding and developing a vacant lot program to reduce 47% vacancy rates in Memphis.
- Establish connectivity to opportunities and community assets, building on the regional Greenprint with nearly 30 miles of new trails or bike paths connecting to green space, housing and jobs.
- Implement the regional sustainability plan integrating scalable, resilient solutions by creating innovative solutions to flood prone communities along Greenprint corridors.



RESILIENT SHELBY

SHELBY COUNTY, TN
 National Disaster Resilience
 Competition-Phase II
 U.S. Department of Housing
 and Urban Development

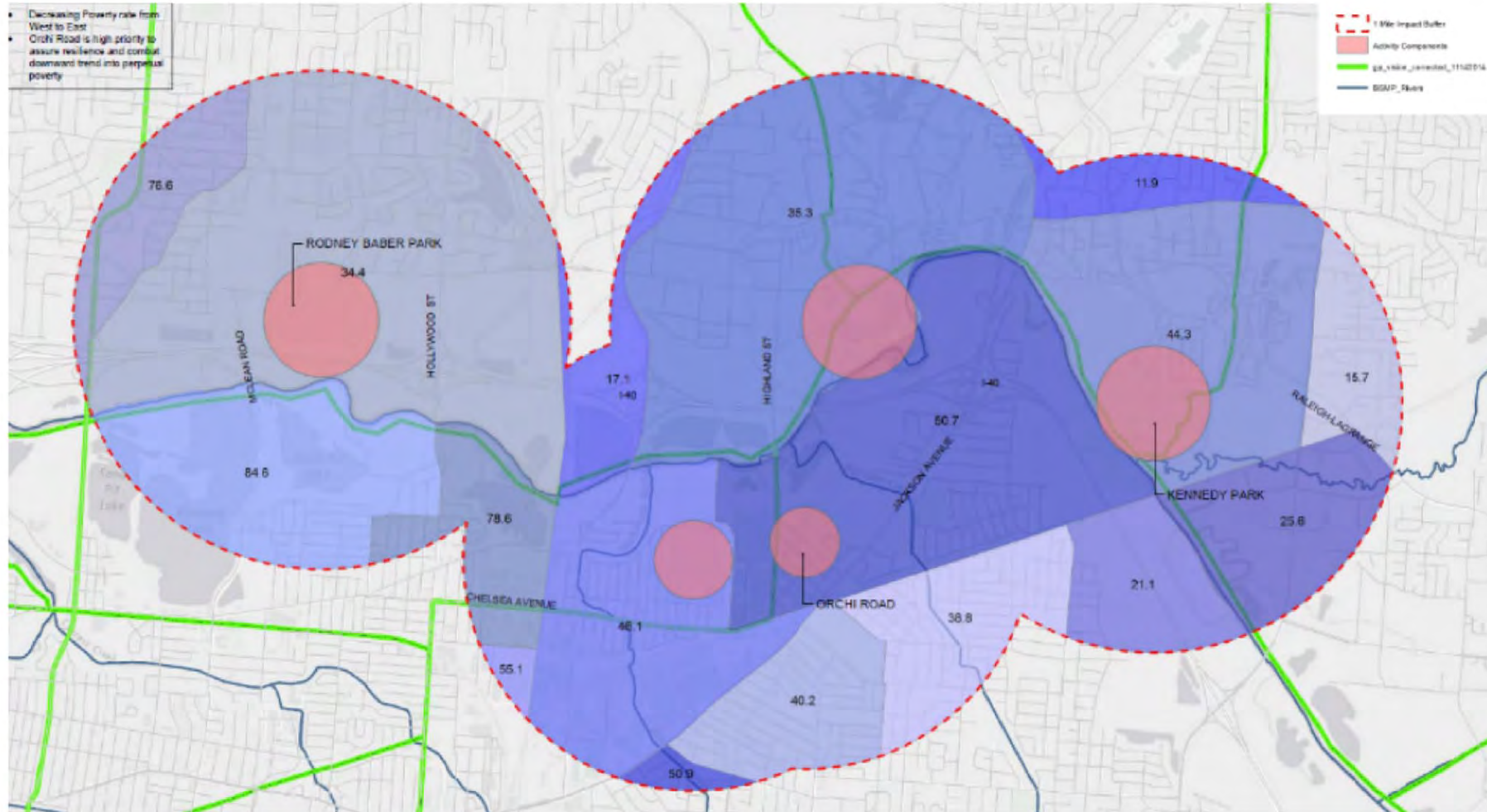


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GREENPRINT FOR RESILIENCE
 MAKING ROOM FOR THE RIVER
 Figure 2.6
 RIVER ACTIVITY COMPONENTS

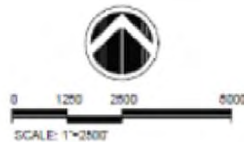

CONNECTING COMMUNITIES

- Decreasing Poverty rate from West to East
- Orch Road is high priority to assure resilience and combat downward trend into perpetual poverty



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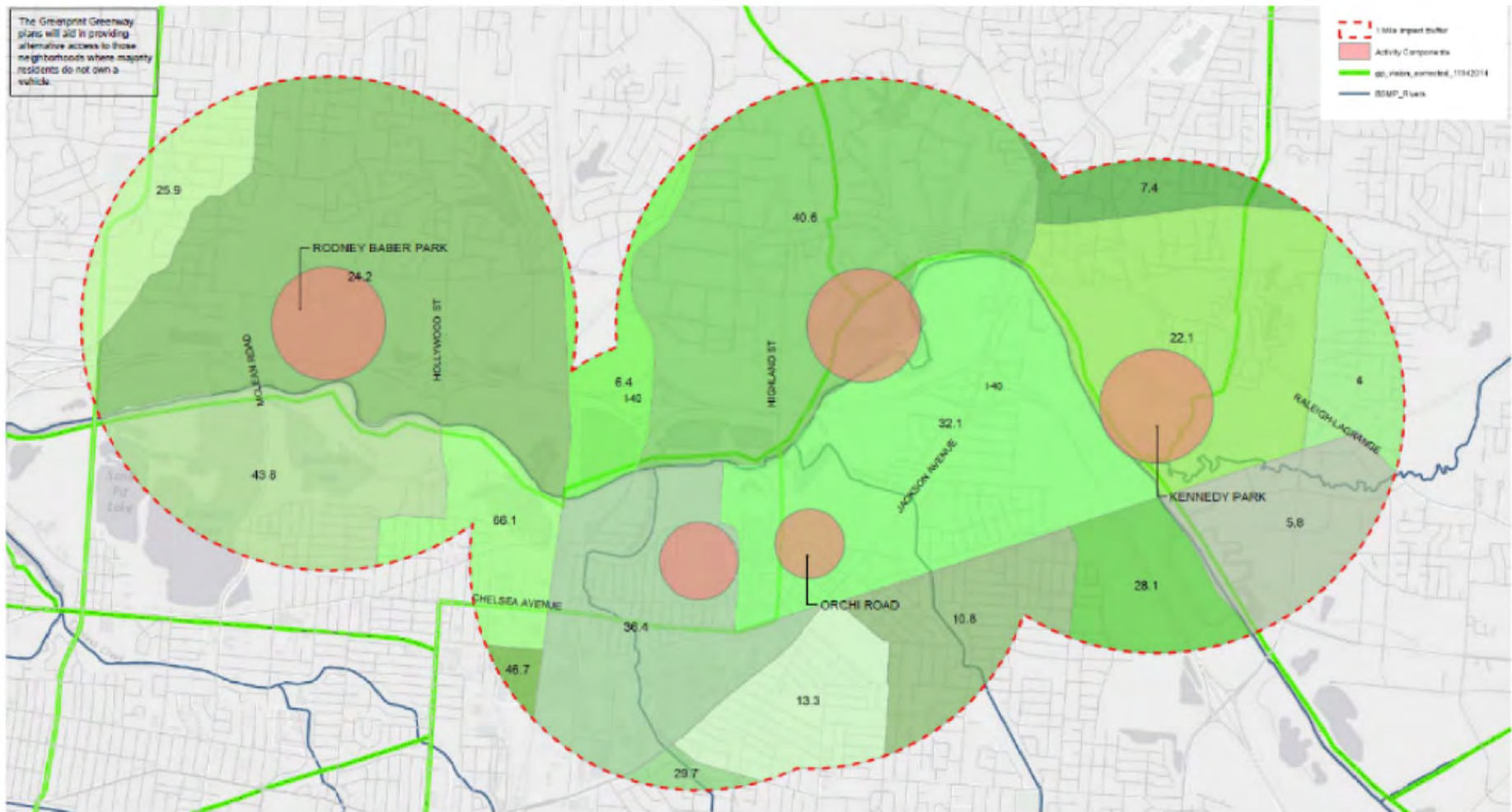


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GREENPRINT FOR RESILIENCE
MAKING ROOM FOR THE RIVER
Figure 2.12
POVERTY RATE AS PERCENTAGES


**CONNECTING
COMMUNITIES**

The Greenprint Greenway plans will aid in providing alternative access to those neighborhoods where majority residents do not own a vehicle.



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GREENPRINT FOR RESILIENCE
MAKING ROOM FOR THE RIVER
Figure 2.14
RESIDENTS WITHOUT A VEHICLE
AS PERCENTAGES


**CONNECTING
COMMUNITIES**



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GREENPRINT FOR RESILIENCE
MAKING ROOM FOR THE RIVER
Figure 2.4
RODNEY BABER PARK CONCEPT PLAN -
PHASE 2

**CONNECTING
COMMUNITIES**

- LEGEND:**
-  Bike lane on-street - existing
 -  Shared use/greenway - proposed
 -  Wolf River Greenway - proposed



RITCHIE SMITH ASSOCIATES



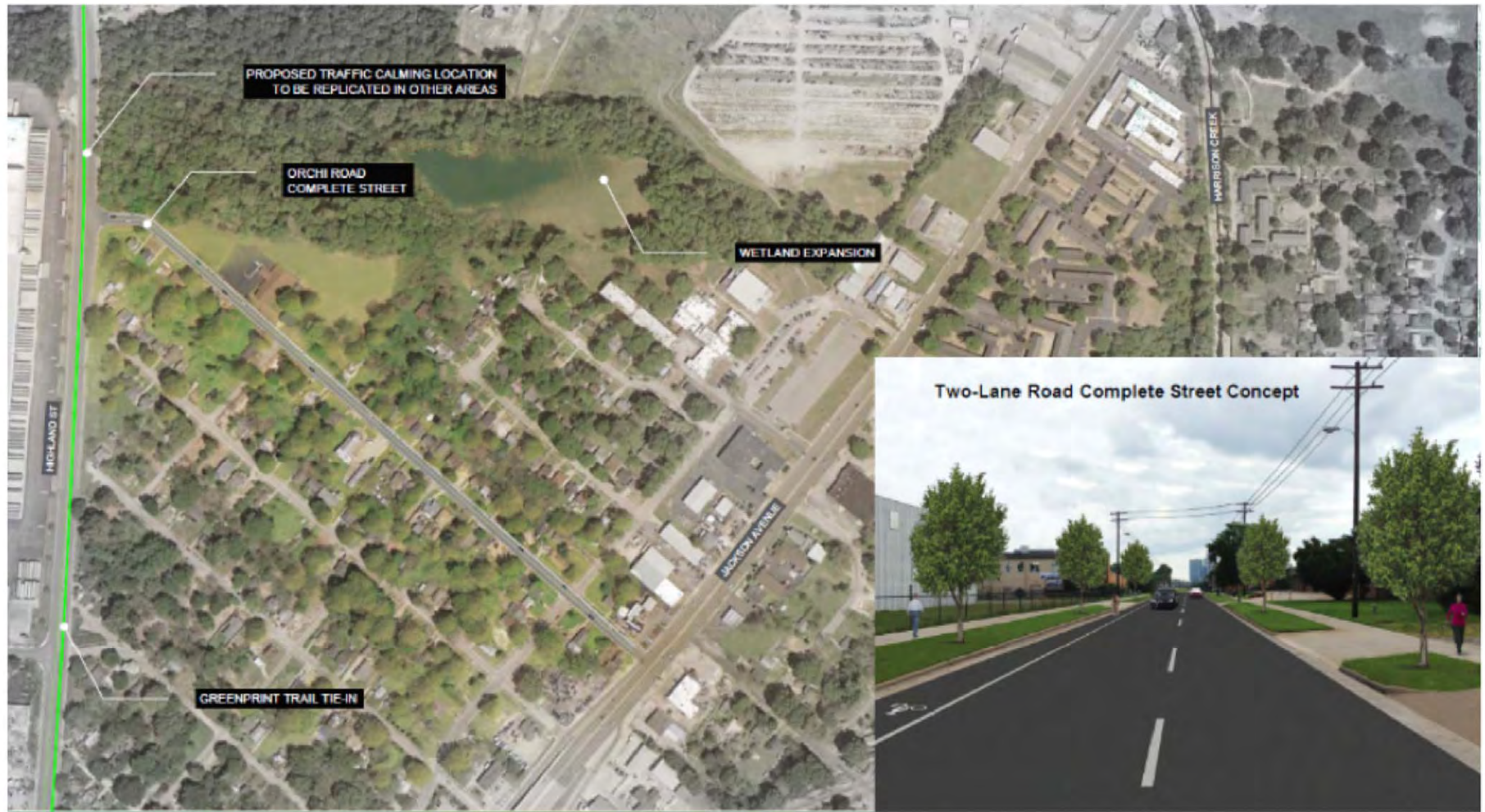
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GREENPRINT FOR RESILIENCE
 MAKING ROOM FOR THE RIVER

Figure 2.1
 KENNEDY PARK CONCEPT PLAN - PHASE 1





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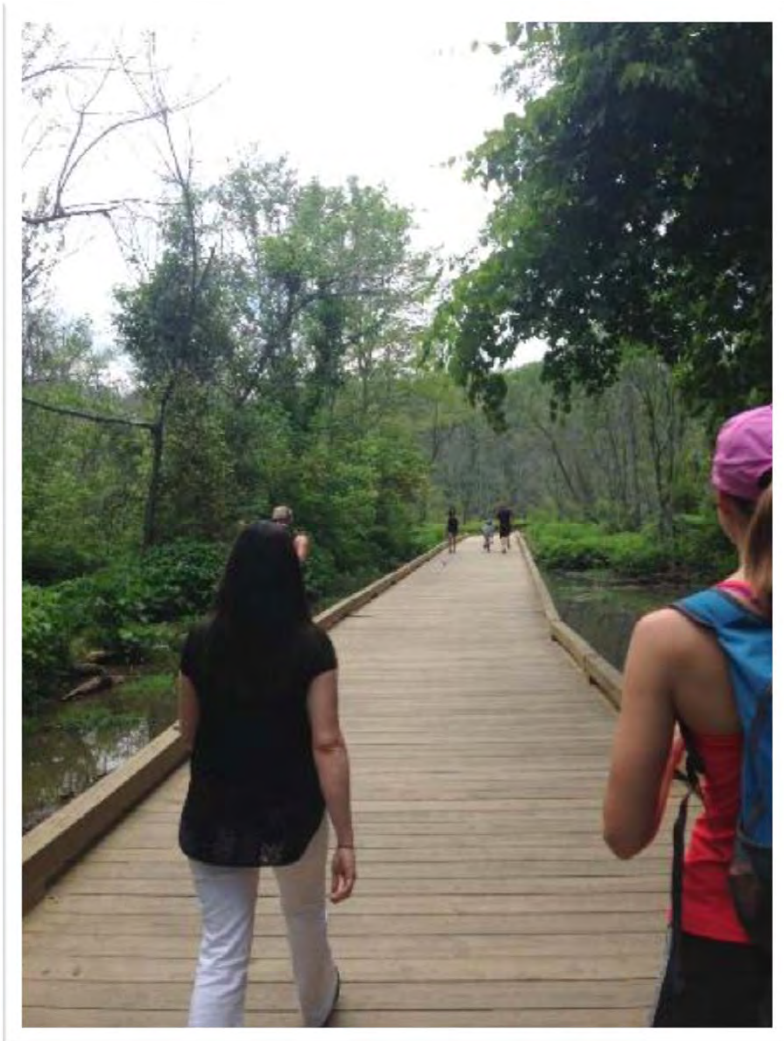
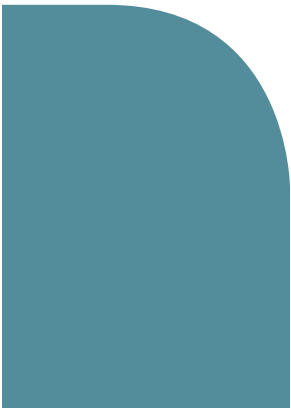
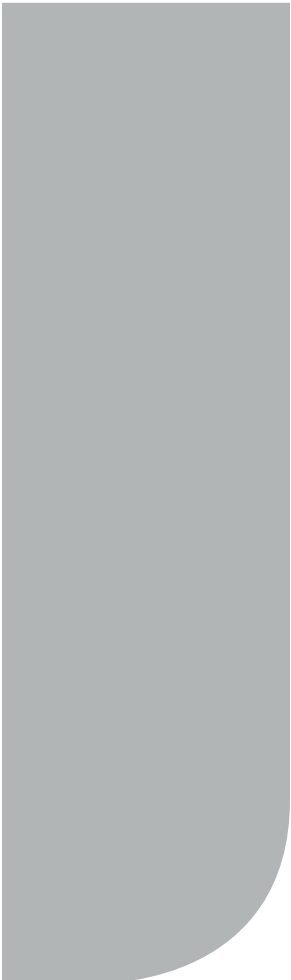
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GREENPRINT FOR RESILIENCE
 MAKING ROOM FOR THE RIVER
 Figure 2.15
 ORCHI ROAD
 COMPLETE STREET CONCEPT


**CONNECTING
COMMUNITIES**



<http://videoblocks.com>

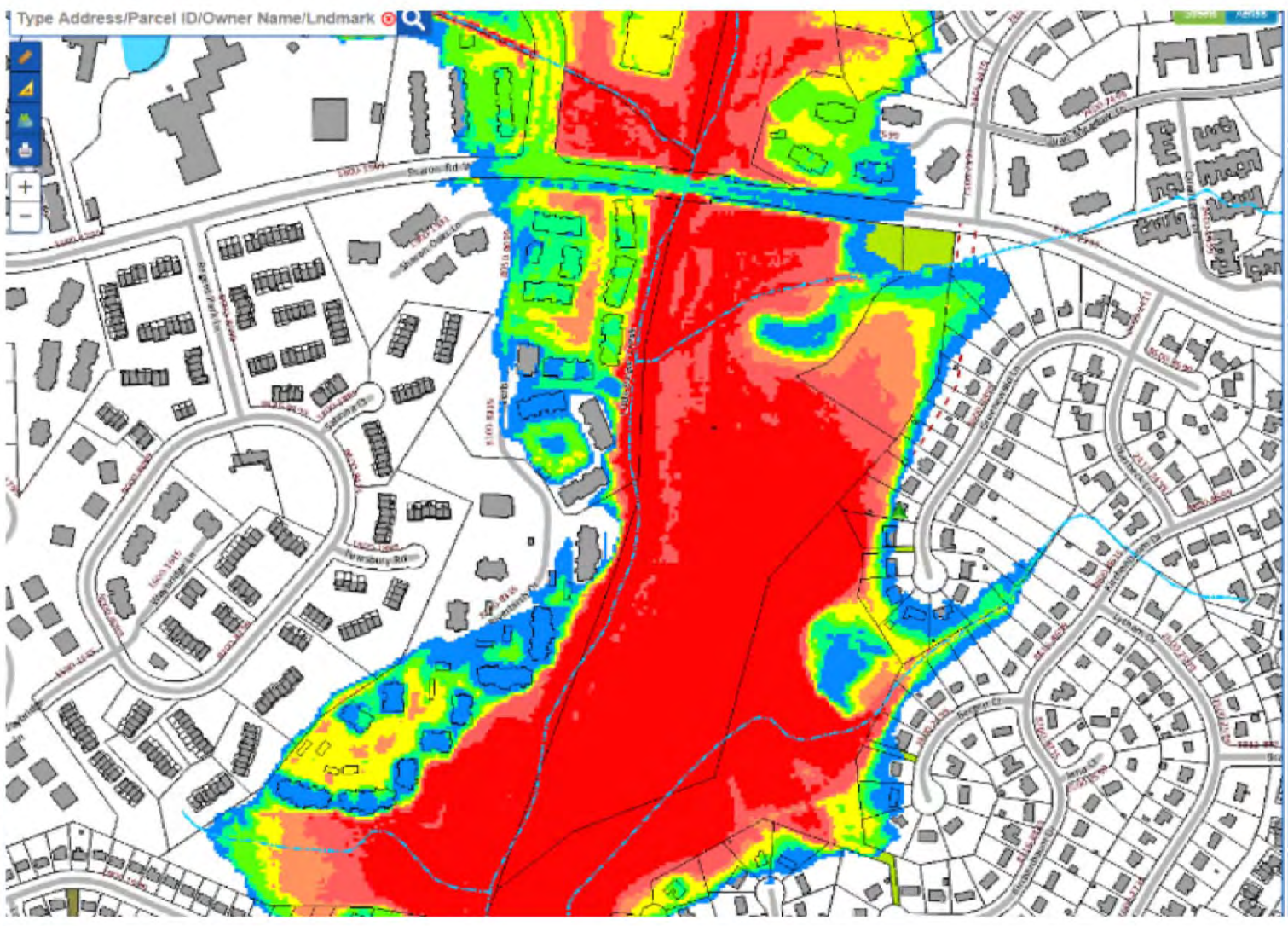


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Type Address/Parcel ID/Owner Name/Lndmark

- Structure not in Floodplain by FEMA Letter
- FIRM Reference Points
- Cross Section Data
- Topographic
- Map Change Area

FIRM Current

- FEMA Floodplain
- Community Floodplain
- FEMA Floodways
- Community Floodways

Use FIRM Current for flood insurance and local regulatory purposes.

3D Floodlines

Shallow Deep

Annual Chance Floodlines

Future - Future

0.2% - 100yr

1% - 100yr

2% - 50yr

4% - 25yr

10% - 10yr

20% - 5yr

50% - 2yr

Play Stop

Annual Chance of Flooding

- 0.2% - 1%
- 1% - 2%
- 2% - 4%
- 4% - 10%
- 10% - 20%
- 20% - 50%
- Above 50%

Enhanced datasets are non-regulatory and derived from latest available flood models, which may not be reflected on FIRM Current.

2004/2009 FIRM Floodlines

- FEMA Floodplain

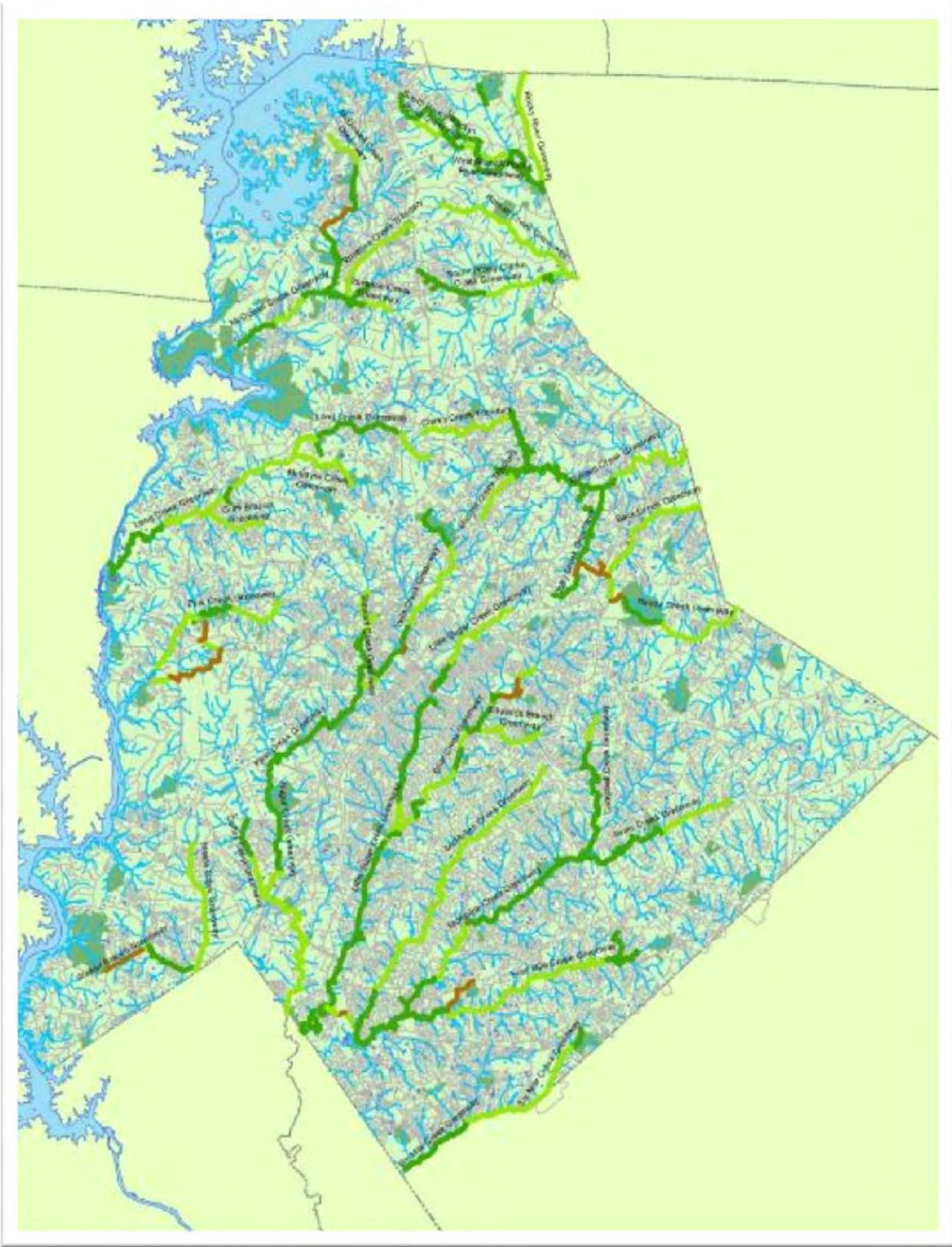
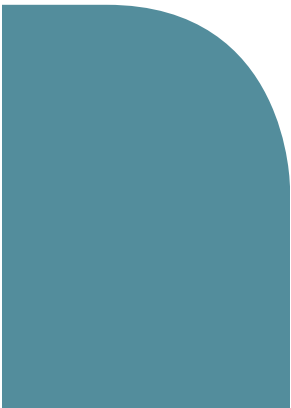
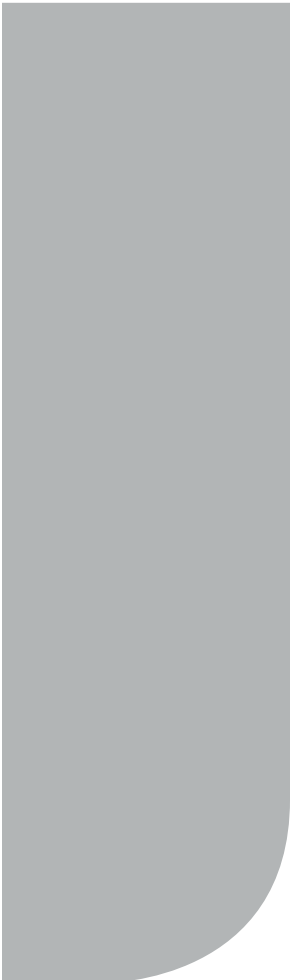














Photo Credit: Nancy Pierce



Little Sugar Creek 1894

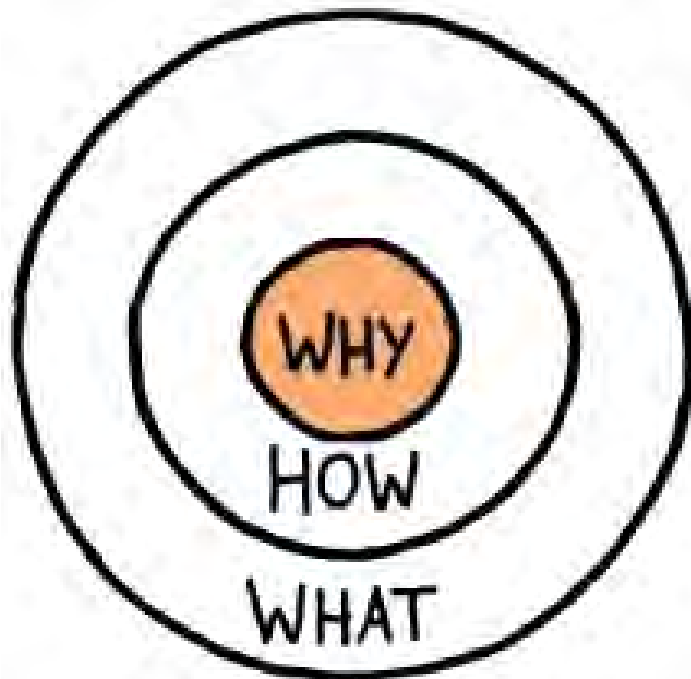


Little Sugar Creek 2016

1894 Photo
Courtesy of Rusty Rozzelle



Act, Think & Communicate from the **INSIDE OUT!**



WHY – Your Purpose

Your motivation? What do you believe?

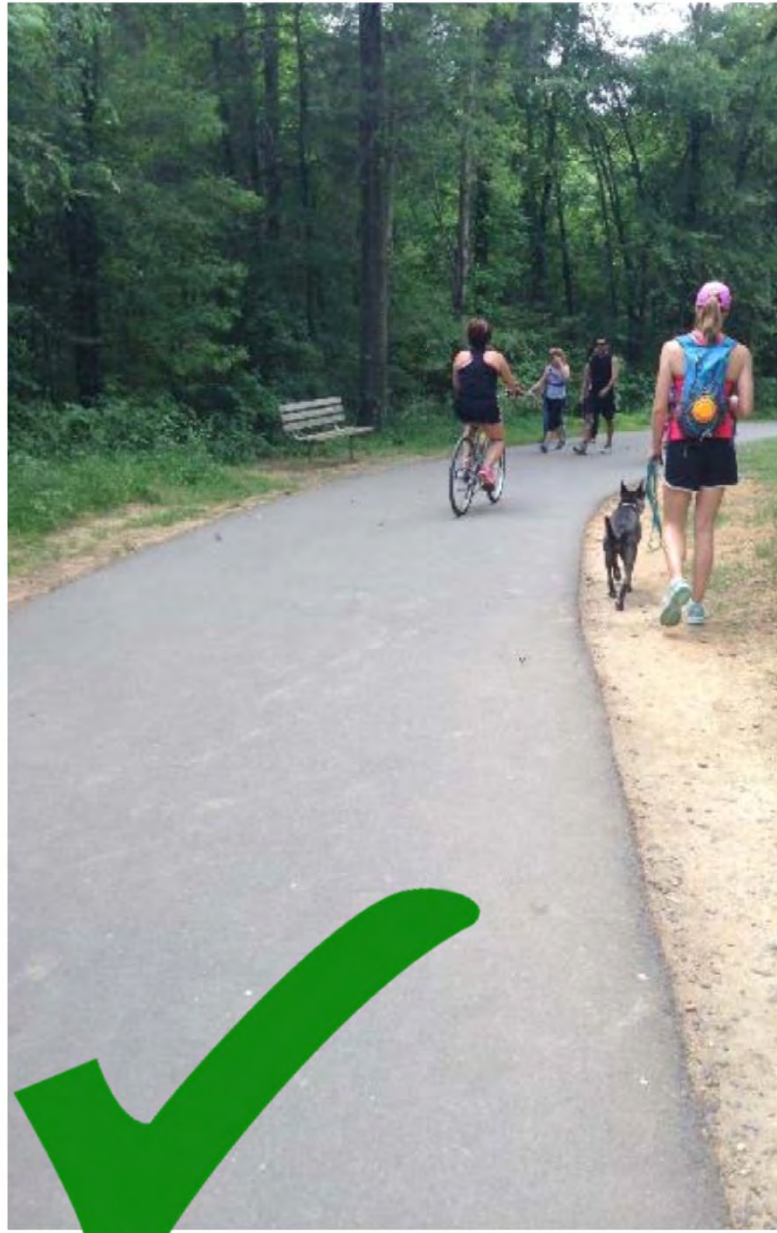
HOW – Your Process

Specific actions taken to realize your Why

WHAT – Your Result

What do you do? The result of Why. Proof

Simon Sinek





THANK YOU

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