

# Green and Resilient Affordable Housing

**December 8, 2023**



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Moderator: **Shelby D. Green**, Esq., *Professor of Law, Elisabeth Haub School of Law, Pace University*

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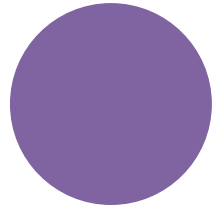
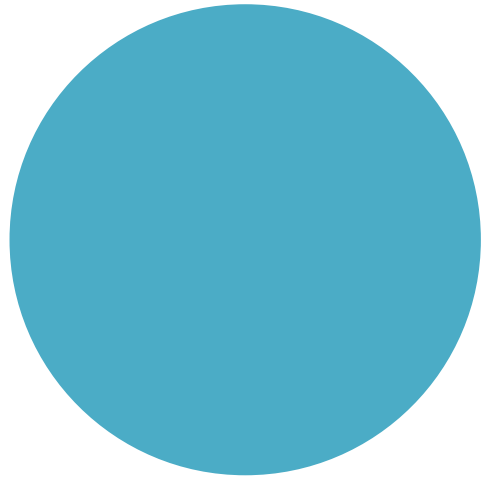
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# **Weaving the Policy Framework for Green & Resilient Affordable Housing**

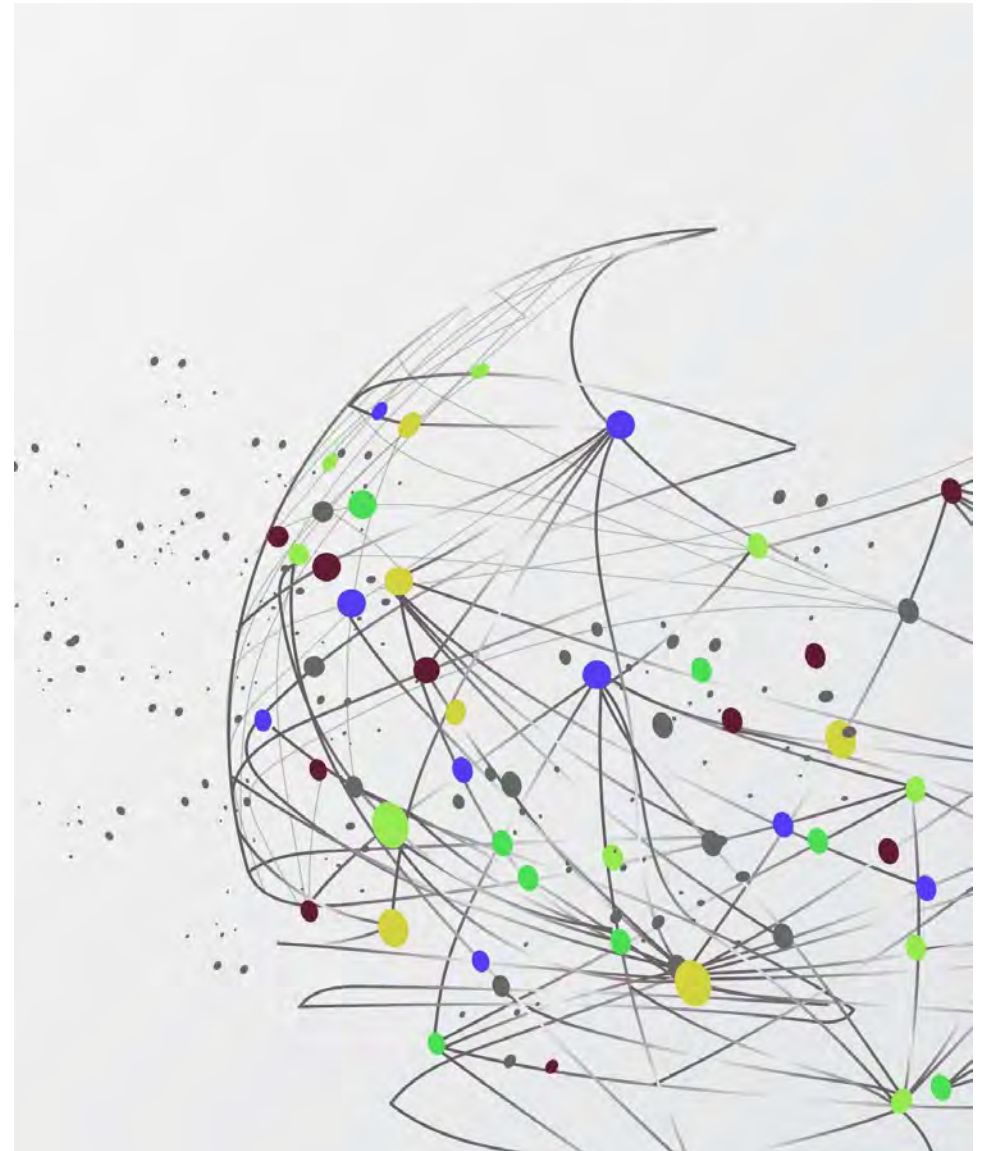
22<sup>nd</sup> Annual Land Use & Sustainable Development Conference  
Pace Land Use Law Center—December 8<sup>th</sup>, 2023

Joe Schilling, Senior Policy and Research Associate  
Urban Institute's Research to Action Lab

[Jschilling@urban.org](mailto:Jschilling@urban.org)

# GRA Requires a Cohesive **Green** Policy and Planning Framework

- Local Government Third Generation Sustainability Policy Goals
  - Climate Resilience
  - Environmental Justice & Equity
  - Green Economic & Community
- The 5Ps—Policy, Plans, Programs, Projects and Practices
- Climate Resilient/Equity Plans
- Green Zoning & Green Zones
- Green Intermediaries
- Immediate Policy and Planning Actions





LINCOLN INSTITUTE  
OF LAND POLICY

# Greening America's Smaller Legacy Cities



<https://go.lincolninst.edu/l/153411/2023-07-07/pqpfpsy>

## Green Policy Evolution in Local Governments

Generation	First Generation	Second Generation	Third Generation
<b>Policy Actions</b>	<ul style="list-style-type: none"> <li>• Green government operations</li> <li>• Redevelop brownfields and offer related job training</li> <li>• Build recycling and stormwater infrastructure</li> <li>• Enact smart growth planning and codes</li> <li>• Enable urban greening and vacant property reclamation</li> <li>• Extend green business networks and best practices</li> </ul>	<ul style="list-style-type: none"> <li>• Create Climate Action Plans (CAPs) and GHG inventories</li> <li>• Implement green building codes and standards</li> <li>• Establish green development zones and ecodistricts</li> <li>• Create area-wide brownfields redevelopment plans and multipurpose brownfields grants</li> <li>• Collaborate with regional, state, and national intermediaries</li> <li>• Partner with local universities and/or nonprofits</li> </ul>	<ul style="list-style-type: none"> <li>• Launch and enforce sustainability plans, sustainable development codes, climate resilience plans, climate equity plans, and environmental justice commissions, screens, and codes</li> <li>• Prioritize renewable energy, decarbonization, and energy efficiency</li> <li>• Expand policy ecosystem for green industries, businesses, and jobs</li> <li>• Elevate environmental justice in all green regeneration actions</li> </ul>
<b>Capacity-Building Actions</b>	<ul style="list-style-type: none"> <li>• Hire part-time sustainability coordinator or expand a current role to include such responsibilities</li> </ul>	<ul style="list-style-type: none"> <li>• Hire full-time sustainability manager with part-time staff</li> <li>• Offer peer learning through professional green networks and local government associations</li> </ul>	<ul style="list-style-type: none"> <li>• Hire full-time sustainability director</li> <li>• Dedicate office and full-time staff to sustainability</li> <li>• Expand capacity through regional, state, and national intermediaries</li> </ul>

# Promising 3<sup>rd</sup> Generation Sustainability Policies, Plans and Programs

- Climate Equity & Resilience in Local Plans and Codes
- Blue-Green Infrastructure
- Vacant Property Reclamation
- Urban Greening—Urban Forestry
- Brownfields Redevelopment and Green Buildings
- Energy Equity and Renewable Energy Infrastructure





Climate Equity Plans  
Climate Resilient  
Development

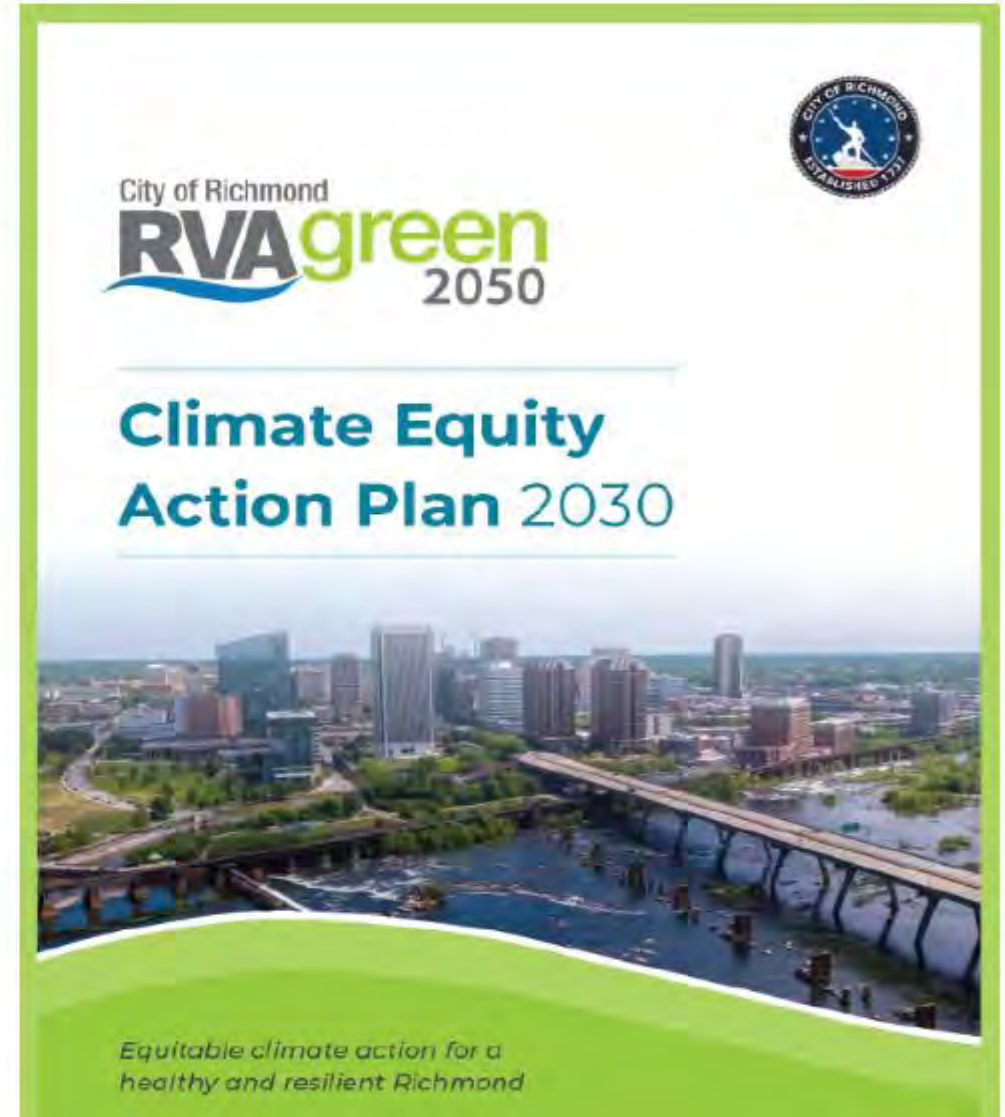


RVAgreen 2050: Climate Equity Action Plan 2030 is an equity-centered, community based, integrated climate action and climate resilience plan. It is a roadmap that lays out how to reduce greenhouse gas emissions 45% by 2030, achieve net zero greenhouse gas emissions by 2050 and help the community adapt to Richmond's climate impacts of extreme heat, precipitation, and flooding.

The Plan's Vision is that All Richmonders, regardless of their identity or neighborhood, thrive in a climate-resilient and climate-neutral community. There are 49 strategies across five pathways: Buildings and Energy, Community, Environment, Transportation and Mobility, Waste Reduction and Recovery. To ensure the Plan moves forward and strategies are implemented equitably, the Office of Sustainability developed a Shared Accountability Framework. The Plan also includes a set of twelve high-level Outcomes focused around community priorities to measure progress.

The Plan represents the culmination of involvement from hundreds of stakeholders over thousands of hours to ensure that the planning process and plan contents incorporated diverse and representative voices. The Office of Sustainability convened residents from frontline communities, community organizations serving frontline communities,

<https://www.rvagreen2050.com/>



# Providence's Climate Justice Plan



## ANNOUNCING THE RELEASE OF PROVIDENCE'S CLIMATE JUSTICE PLAN!

Providence's Climate Justice Plan, co-developed by the City of Providence's Department of Sustainability and the Racial and Environmental Justice Committee of Providence, includes seven key objectives, 20+ targets, and over 50 strategies aiming to create a truly equitable, low-carbon, climate resilient city.

The Plan sets forth concrete carbon-reduction targets in buildings and transportation sectors while promoting clean energy sources. It also addresses the system-level changes that are needed in our governance structures, our economic system, and the overall health of our communities to ensure a just and equitable transition away from fossil fuels. The Plan provides near-term policy and program recommendations to meet these targets and highlights the incredible climate action already taking place within the Providence community.

Read the Plan (English)

Read the Plan (Spanish)

Read the Executive Summary (English)

Read the Executive Summary (Spanish)

<https://www.providenceri.gov/sustainability/climate-justice-action-plan-providence/>

Green Zoning  
Green Zones  
Eco-Districts



# Sustainable Development Code

## 1. ENVIRONMENTAL HEALTH AND NATURAL RESOURCES

- 1.1. Climate Change
- 1.2. Low Impact Development and Green Infrastructure
- 1.3. Natural Resource Conservation/Sensitive Lands Protection
- 1.4. Water Conservation
- 1.5. Solid waste and recycling

## 2. NATURAL HAZARDS

- 2.1. Floodplain Management
- 2.2. Wildfires in the Wildland-Urban Interface
- 2.3. Coastal Hazards
- 2.4. Steep Slopes

## 3. LAND USE AND COMMUNITY CHARACTER

- 3.1. Character and Aesthetics
- 3.2. Urban Form and Density
- 3.3. Historic Preservation

## 4. MOBILITY & TRANSPORTATION

- 4.1. Transit Oriented Development
- 4.2. Mobility Systems
  - 4.2.1. Complete Streets
- 4.2.2. Pedestrian and Bicycle Systems
  - 4.2.3. Public Transit
- 4.3. Parking

## 5. COMMUNITY

- 5.1. Community Development
- 5.2. Public Participation and Community Benefits

## 6. HEALTHY NEIGHBORHOODS, HOUSING, FOOD SECURITY

- 6.1. Community Health and Safety
- 6.2. Affordable Housing
- 6.3. Housing Diversity and Accessibility
- 6.4. Food Production and Security

## 7. ENERGY

- 7.1. Renewable Energy: Wind (small- and large-scale)
- 7.2. Renewable Energy: Solar (including solar access)
- 7.3. Energy Efficiency and Conservation

## 8. LIVABILITY

- 8.1. Noise
- 8.2. Lighting
- 8.3. Visual Elements

SEARCH

**HELP MAKE  
COMMUNITIES MORE  
SUSTAINABLE**

**DONATE TODAY**

**VIEW ALL SUBCHAPTER ACTIONS »**

**BEST**

**BETTER**

DENSITY BONUS FOR INSTALLATION  
OF SOLAR ENERGY SYSTEMS

## Green Zones

*Brandon Hanson (author), Jonathan Rosenbloom & Christopher Duerksen (editors)*

### INTRODUCTION

Green zones (also known as “ecodistricts”) are stationary or floating districts created by a local government to promote sustainable practices, to help reduce environmental impacts, and to help revitalize an area. Green zones are areas that provide local governments with the flexibility to focus on a variety of issues related to sustainability. For example, a local government may use green zones to help promote healthy lifestyles, reduce pollution, and/or provide affordable housing and sustainable jobs. Green zones can be created in a variety of ways, including zoning a specific area as a stationary “Green Zone” or green zones can be drafted to create floating zones, whereby a neighborhood can petition to adopt the floating zone.

Local governments can use multiple strategies within green zones to help reduce pollution. For example, local governments may give higher scrutiny for proposed sources of pollution

# The Case for Climate-Informed Zoning

## A Study of Fiscal Impact in Norfolk, VA

*Katherine Burgess, Michael Rodriguez, Jordan Howard, Jared Klukas,  
and Megan Wright*

June 2023 | English

PDF | Free | 56 pages

[DOWNLOAD PDF](#)

[EXECUTIVE SUMMARY](#)

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As the impacts of climate change continue to intensify, zoning presents a key tool to direct development to protect communities from climate events. Norfolk, Virginia, a city at severe risk from sea level rise due to climate change, is among the first cities in the US to use climate adaptation as a core consideration for future development.

This report examines the economic and social impact of resilience zoning in Norfolk, Virginia, which offers a cutting-edge example of climate-informed  
the adoption of two land use plans—planNorfolk2030 to guide

<https://www.lincolnst.edu/publications/working-papers/case-climate-informed-zoning>



### **Southside Green Zone Council**

Uses the Southside Work Plan to improve community health and well-being in the Phillips community



### **Northside Green Zone Task Force**

Uses the Northside Work Plan to improve social, economic and environmental health and justice in North and Northeast



### **Climate Equity**

Reducing the impact of climate change



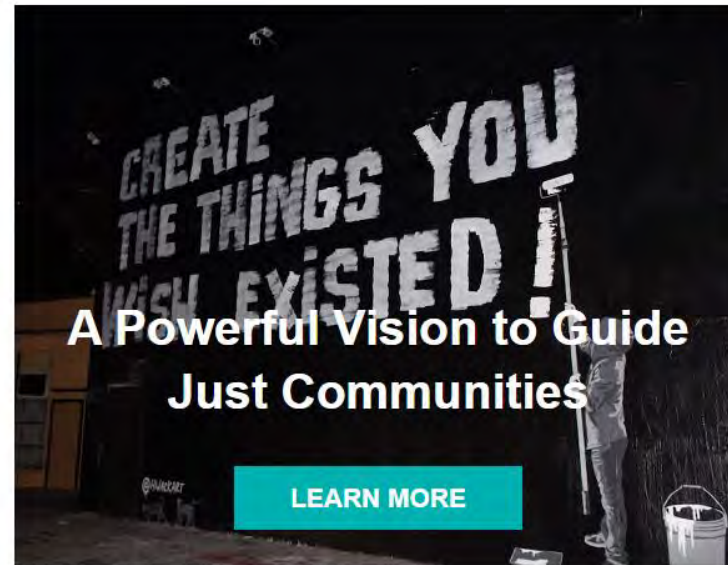
### **Clean Energy Partnership**

Working together to support the Minneapolis Climate Action Plan.

# Minneapolis's Green Zones



# Eco Districts—Just Communities



<https://www.planetizen.com/blogs/111005-eco-districts-green-justice-zones>

Core  
Recommendations—  
*Where can we start???*



- Leverage Greener Land Use Plans and Code
- Embed Environmental Justice
- Decarbonize Energy Infrastructure and Elevate Energy Equity
- Empower a Stand-Alone Sustainability Office
- Deploy Equitable Community Engagement
- Support Small Business
- Act Regionally
- **Build Cross-Sector Capacity, Networks and Policy Advocacy**



# Green Intermediaries and Networks



[About](#) ▾[Resources](#) ▾[Campaigns](#) ▾[Careers](#)[Blog](#)[Events](#) ▾[Donate](#)[Membership](#)[Volunteer](#)

# PUSH BUFFALO'S GREEN DEVELOPMENT ZONE

## About the Green Development Zone

In 2008, PUSH Buffalo established the Green Development Zone (GDZ) – a 25-square block area on Buffalo's West Side that is the hub of PUSH's programming and the heart of our community-driven work.

Our work in the GDZ encompasses green affordable housing construction, community-based renewable energy projects, housing weatherization, green jobs training, green infrastructure, and vacant land restoration projects, to name a few.

Join us for a tour to see for yourself!

**GDZ Tour contact:** Renee Perry ([rperry@pushbuffalo.org](mailto:rperry@pushbuffalo.org))

## Upcoming Tour Dates

**Check back soon for upcoming tour dates!**

**Sign up to attend one of our upcoming tours and we will reach out to you to confirm!**

**Check back soon for upcoming tour dates!**





# Groundwork USA Network

Linking Communities in the Pursuit of Equity and Sustainability

START A NEW TRUST

WHO WE ARE

WHAT WE DO

NEWS & RESOURCES

CONNECT

OUR NETWORK

DONATE

What does housing discrimination have to do with climate change? Click the images below to learn how Groundwork communities are using maps and data to build resilience to extreme heat and flooding.

ABOUT THE PROJECT

IN THE NEWS

TAKE ACTION

<https://groundworkusa.org/climate-safe-neighborhoods/>



[About Us](#) [Our Work](#) [Take Action](#) [Events](#) [News](#) [Learn](#) [Connect](#)

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# Climate Solutions Accelerator

of the Genesee-Finger Lakes Region

[VIEW THE GENESEE-FINGER LAKES CLIMATE ACTION STRATEGY](#)

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<https://www.climategfl.org/>



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## OUR MISSION

Sustainable Hudson Valley's mission is to speed up, scale up, jazz up and leverage progress against climate change, creating communities where people and nature thrive. We are the only regional organization devoted to on-the-ground programs and projects that concretely reduce greenhouse gas emissions, draw carbon out of the atmosphere and create economic opportunities in the process.



# Green Communities

## Resilience

Building Resilient Futures

## Green Communities

Health & Housing

Enterprise Green Communities is the only national green building program created with and for the affordable housing sector.

Launched in 2004, the comprehensive program has evolved to address the growing threats of our changing climate. What hasn't shifted is our focus on residents' health and well-being.

# Detroit Future City Strategic Framework Plan



## EXECUTIVE SUMMARY

See a summary of the full plan here [MORE](#)



## ECONOMIC GROWTH

The economic growth element proposes five strategies to grow Detroit's economy in a way... [MORE](#)



## NEIGHBORHOODS

This element proposes six specific strategies to create a diverse range of neighborhood styles... [MORE](#)



## CITY SYSTEMS

This element describes the imperative of moving toward a more affordable, efficient, and environmentally... [MORE](#)



## LAND USE

The land use element offers land use strategies that are situated between the city's... [MORE](#)



## PUBLIC LAND

To transform the vacant land of Detroit into a potential asset for the city's... [MORE](#)





# RE-IMAGINING CLEVELAND

## VACANT LAND RE-USE PATTERN BOOK

<http://www.youtube.com/watch?v=D6sw6u-FCWs>

Joe Schilling, Senior Policy and Research Associate  
Urban Institute's Research to Action Lab

[Jschilling@urban.org](mailto:Jschilling@urban.org)  
[@EcoCityJoe](https://twitter.com/EcoCityJoe)

# Green & Resilient Affordable Housing



Jennifer Li

Harrison Institute for Public Law

Georgetown University Law Center

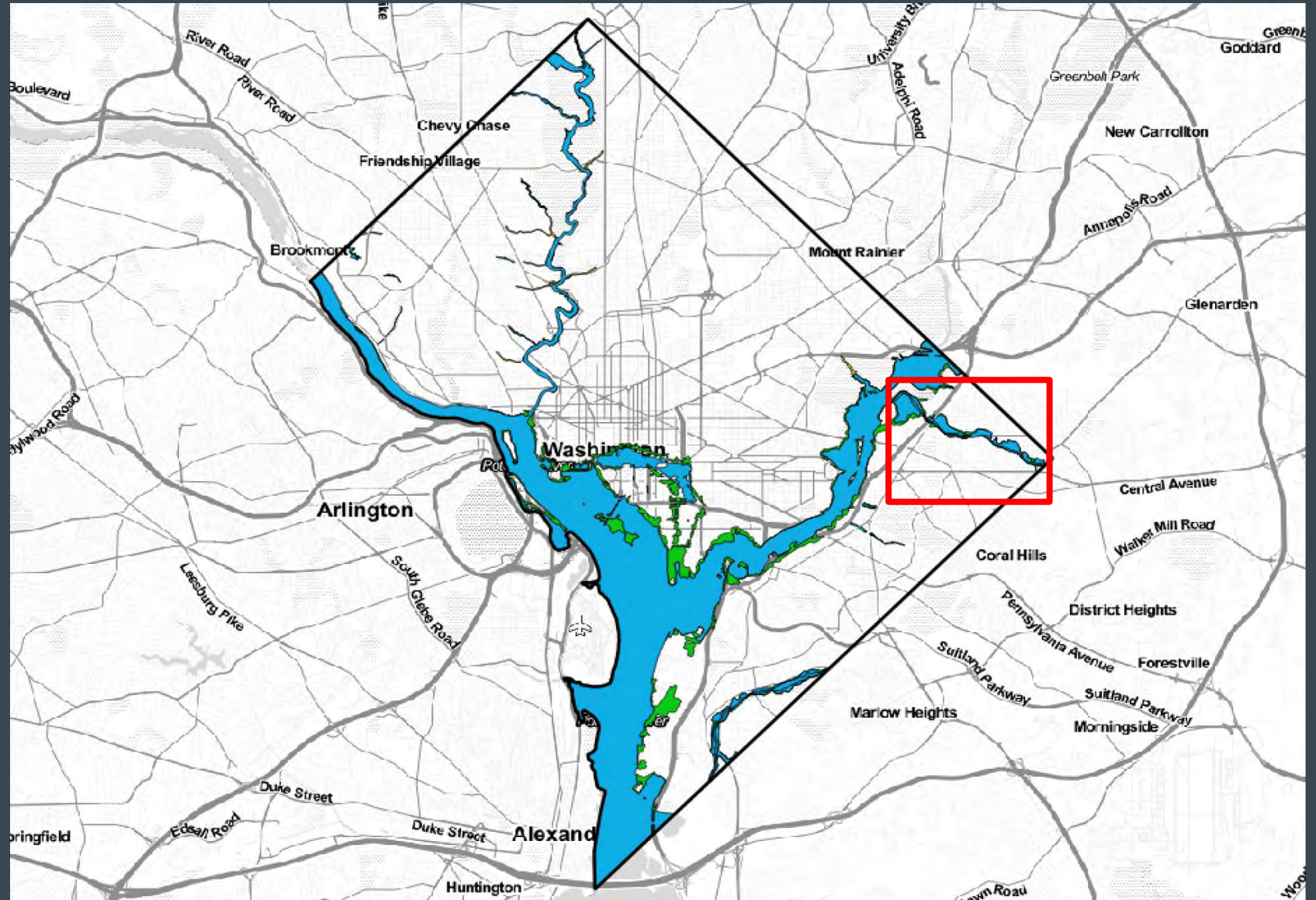
December 8, 2023

## VULNERABILITY & RISK ASSESSMENT

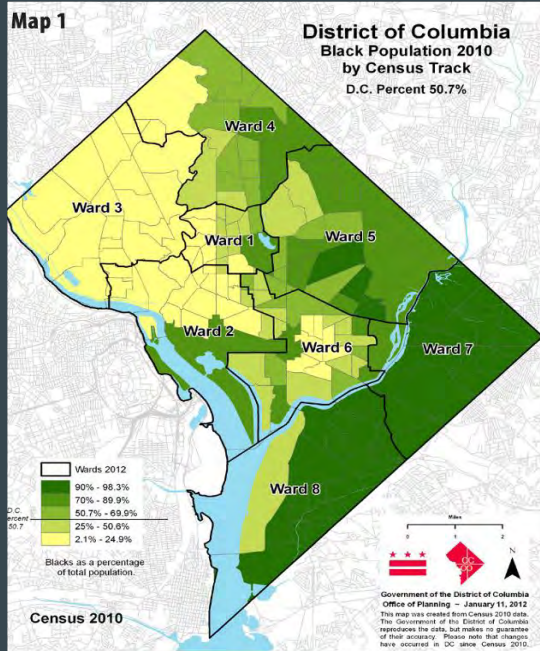


### Social Indicators:

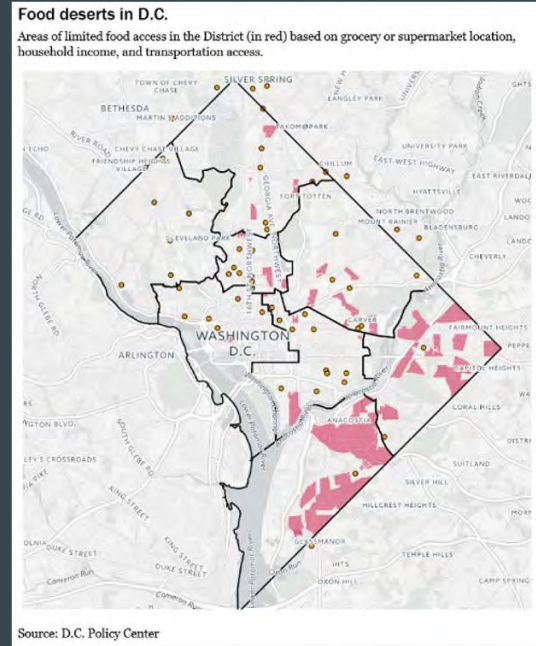
- Unemployment
- Educational attainment
- Poverty prevalence
- Obesity
- Adult asthma
- Age (65+)



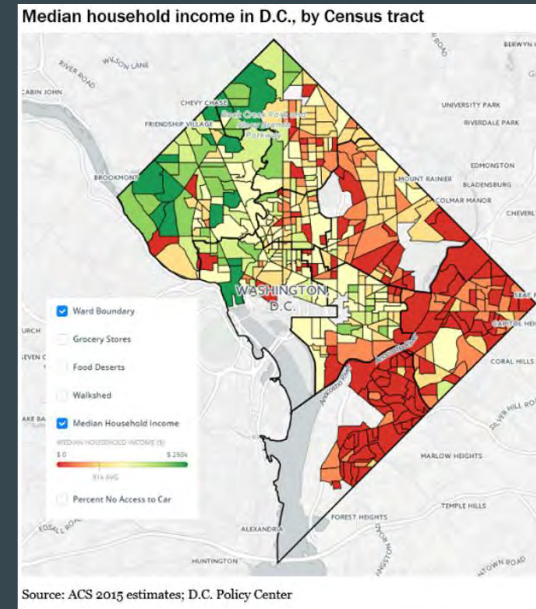
# WASHINGTON, DC



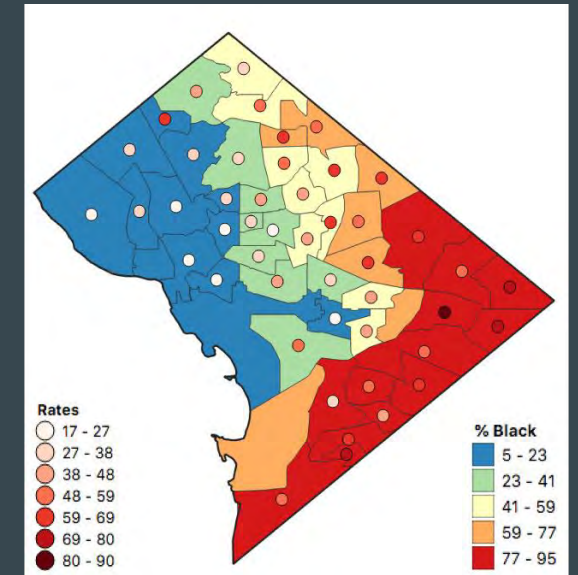
Racial Segregation



Food Deserts

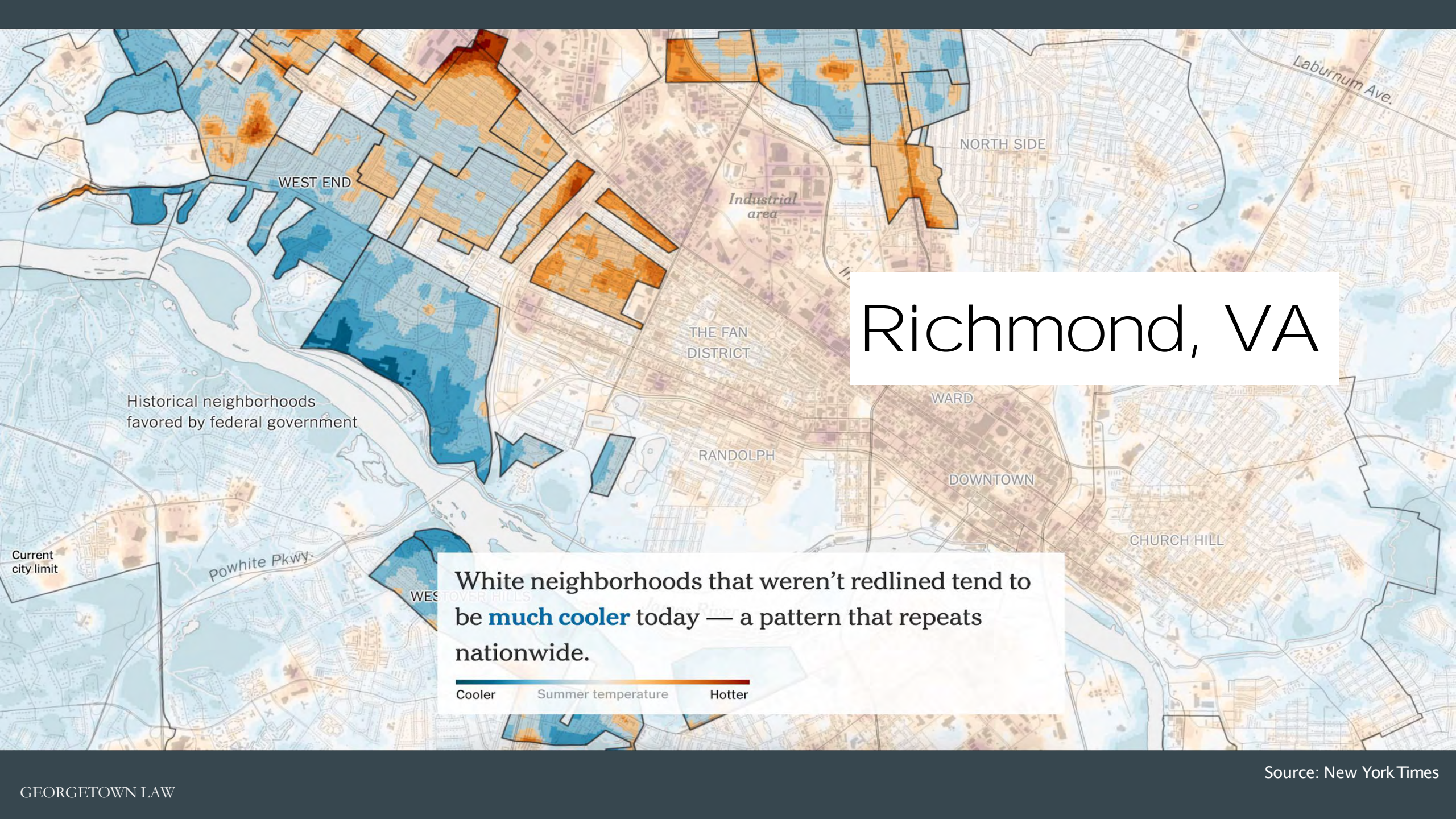


Income



Susan Anenberg /GW University

Air Pollution



# Richmond, VA

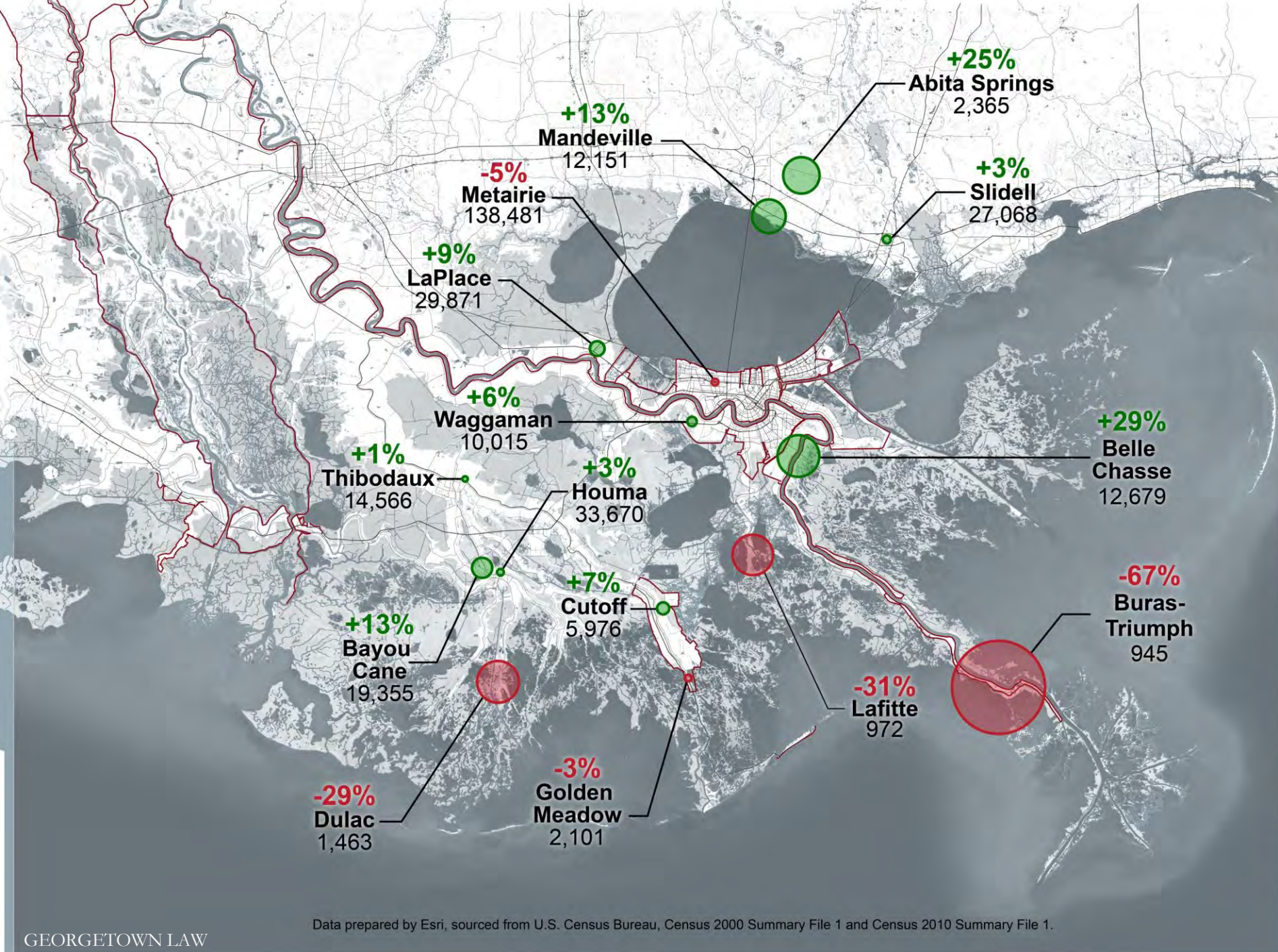
Historical neighborhoods favored by federal government

Current city limit

White neighborhoods that weren't redlined tend to be **much cooler** today — a pattern that repeats nationwide.

Cooler Summer temperature Hotter





Population changes, Louisiana coast (2000-2010)

Data prepared by Esri, sourced from U.S. Census Bureau, Census 2000 Summary File 1 and Census 2010 Summary File 1.

Source: Louisiana Strategic Adaptations for Future Environments (LA SAFE) Regional Population Shift, LA SAFE (2018)

# RiverSmart (Washington, DC)

Local gvt provide incentives for green stormwater infrastructure



RiverSmart Homes

RiverSmart Rebates

RiverSmart  
Rooftops


Source: Georgetown Climate Center, Adaptation Clearinghouse

# Community Rating System

Incentivize new development toward low flood risk areas

Community	CRS Class
Caroline	8
Dorchester	8
Cambridge	N/A
Kent	N/A
Queen Anne's	N/A
Talbot	8
Oxford	8


### A Guide to Flood Safety



#### Know Your Hazard!


- Inland flooding is a leading weather-related cause of death in the United States.
- Identify the flood zone for your neighborhood and business.
- Are you in a repetitive flood prone area?
- Know the difference between a flood WATCH and a flood WARNING.
- Have a Family Emergency Plan and a Disaster Supply Kit ready in case you need to evacuate.

#### Turn Around, Don't Drown!



Did you know...


### Your homeowner's insurance does not cover a flood?



Floods are the #1 natural disaster in the United States and can happen anytime and anywhere. Types of flooding vary and include riverine flooding, ponding in streets and low-lying areas, as well as flooding from storm surge.

FEMA's **National Flood Insurance Program (NFIP)** provides homeowners with a safeguard from financial loss caused by a flooding event.

Depending on your property location, your home is either considered at high-risk or at moderate-to-low risk for a flood. Your insurance premium will vary accordingly.



### A Guide to Flood Mitigation




#### What is Mitigation?

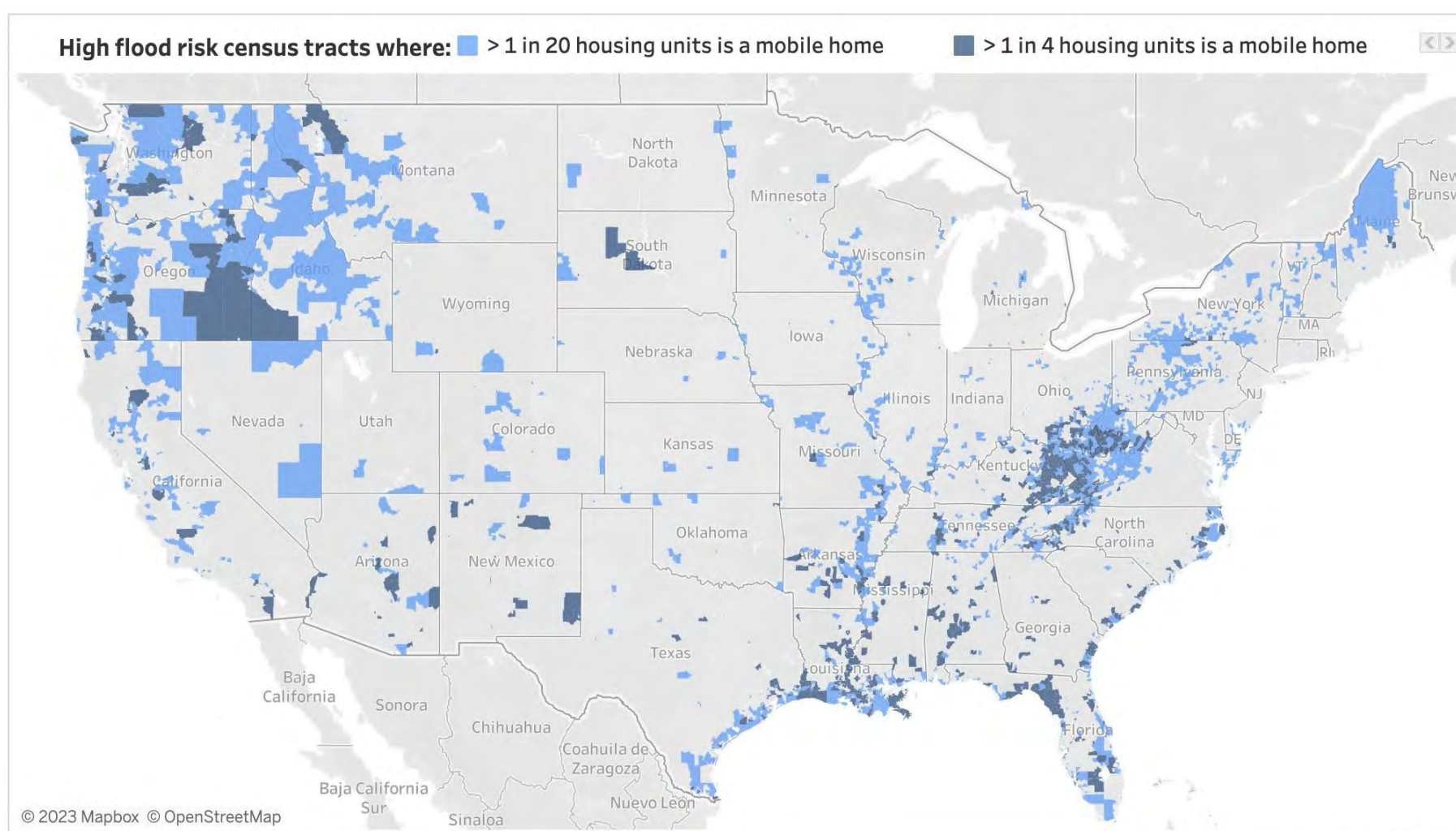
Mitigation is the effort to reduce loss of life and property by lessening the impact of disasters. Take action now before the next disaster to reduce human and financial consequences later.

#### Build Responsibly

- If you plan on improving your home, or your home has sustained damage where repairs cost 50% or more of the building pre-damaged, you will be required to bring your structure up to current building and floodplain standards.
- Get a permit before you build and work with a licensed contractor.



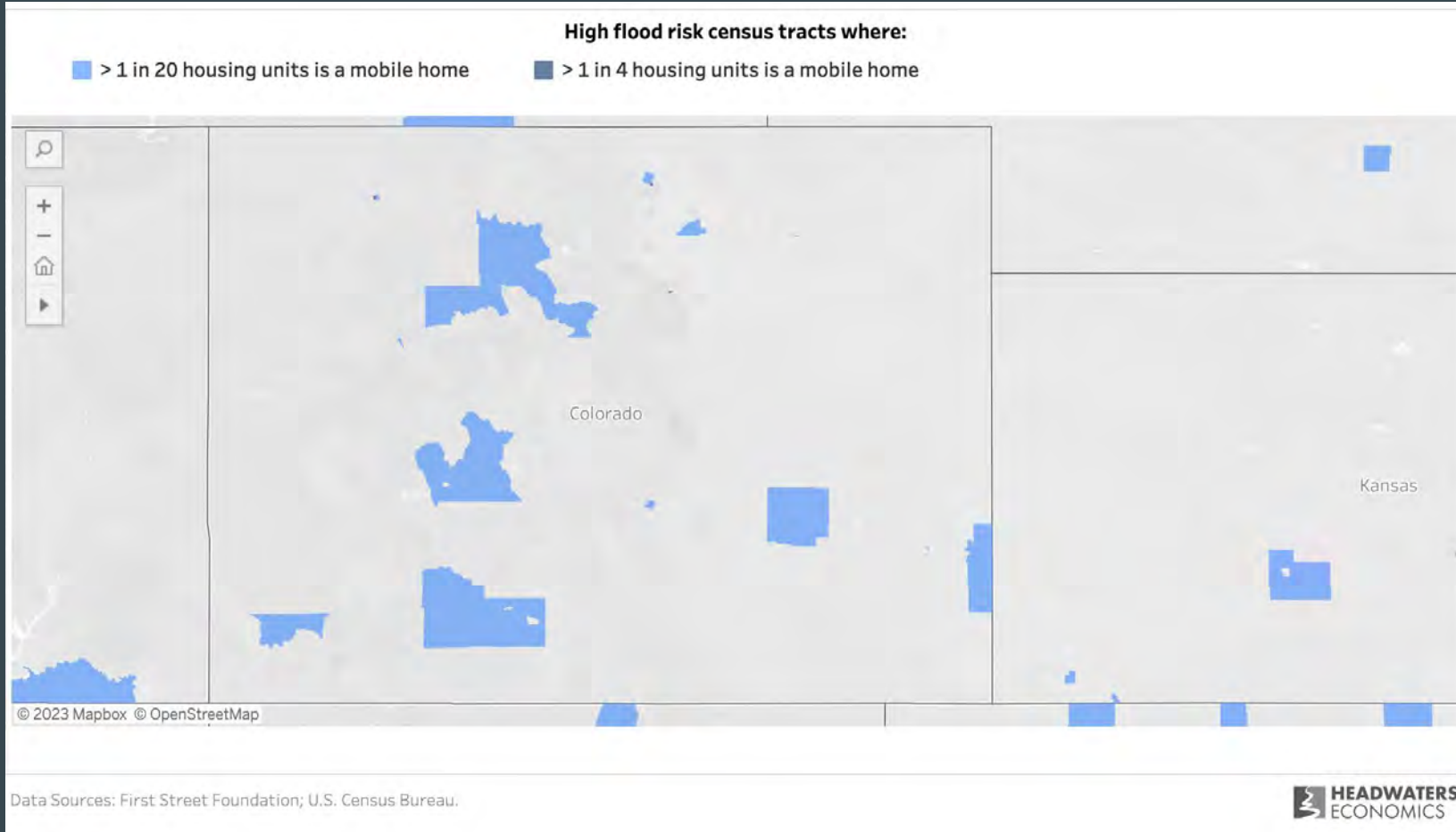
# “Mobile homes in areas of high flood risk”



Data Sources: First Street Foundation; U.S. Census Bureau.

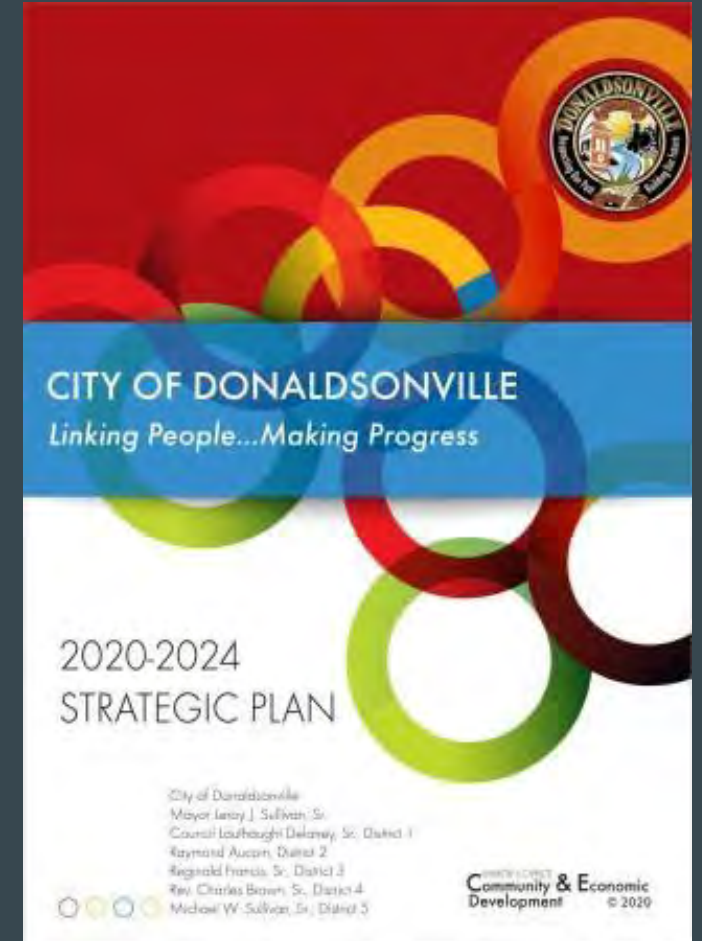
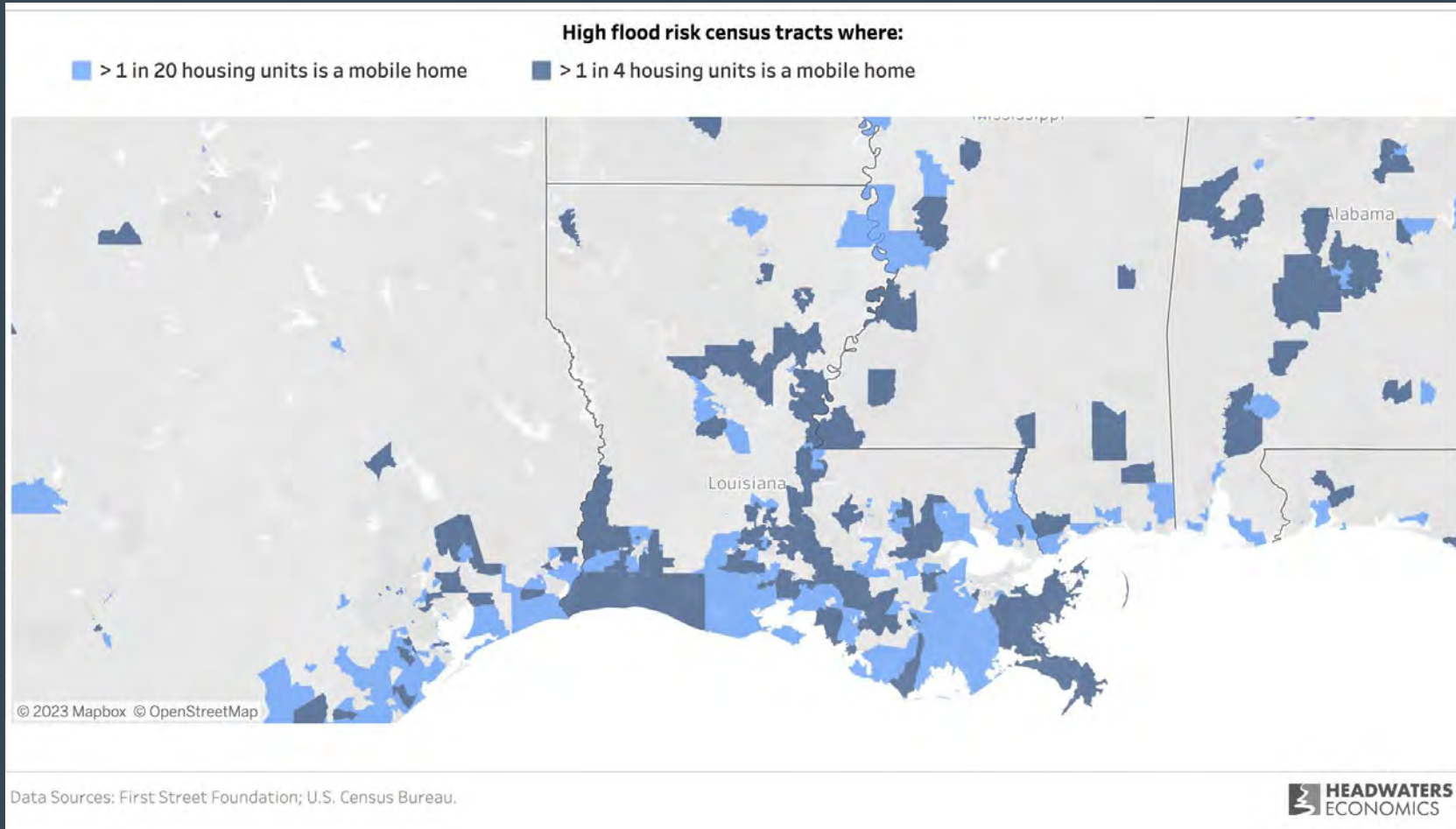
# Boulder, CO

*Alleviate barriers to the development of manufactured and modular homes*



# Donaldsonville, LA

*Alleviate barriers to the development of manufactured and modular homes*



**Shelby O'Neill**, *Program Director, Initiatives,*  
*Enterprise Community Partners, Inc.*



# Green and Resilient Affordable Housing

Land Use and Sustainable Development Conference-12.8.23



# Westhab, Inc.

## Building Communities. Changing Lives.

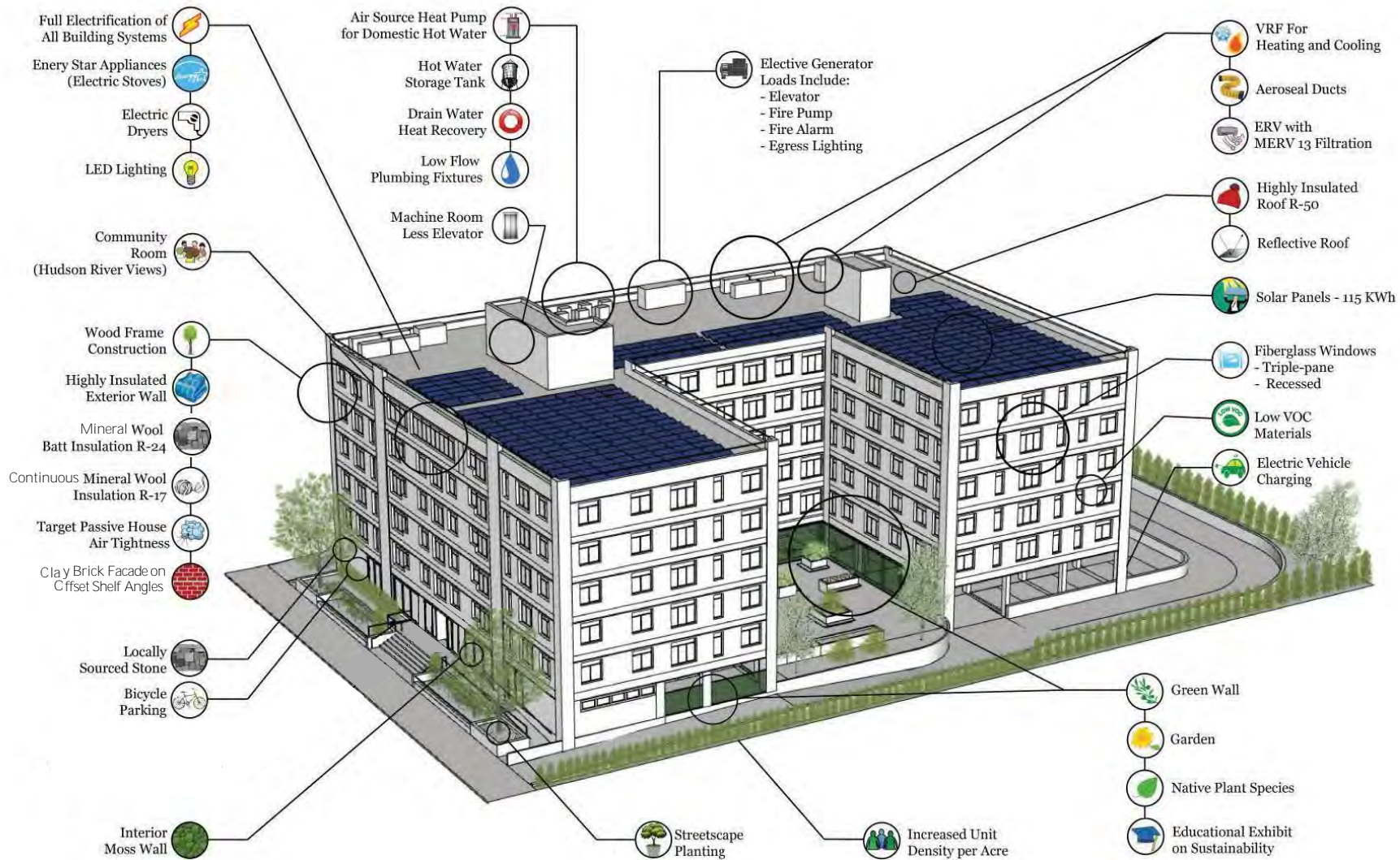
- Westhab is the largest non-profit developer of affordable housing and provider of related community development services in the Hudson Valley
- Westhab has built, rehabbed, or financed almost 1,500 units of affordable, supportive, and transitional housing with a total investment of over \$458 Million
- Westhab's properties include supportive housing and service-enriched housing programs for seniors, young adults, veterans, and people with disabilities.
- Westhab has also developed a comprehensive service model which provides community-based employment programs, youth centers, and social services, among other services



# Summit on Hudson - NYSERDA Buildings of Excellence Award



# SUSTAINABILITY DIAGRAM



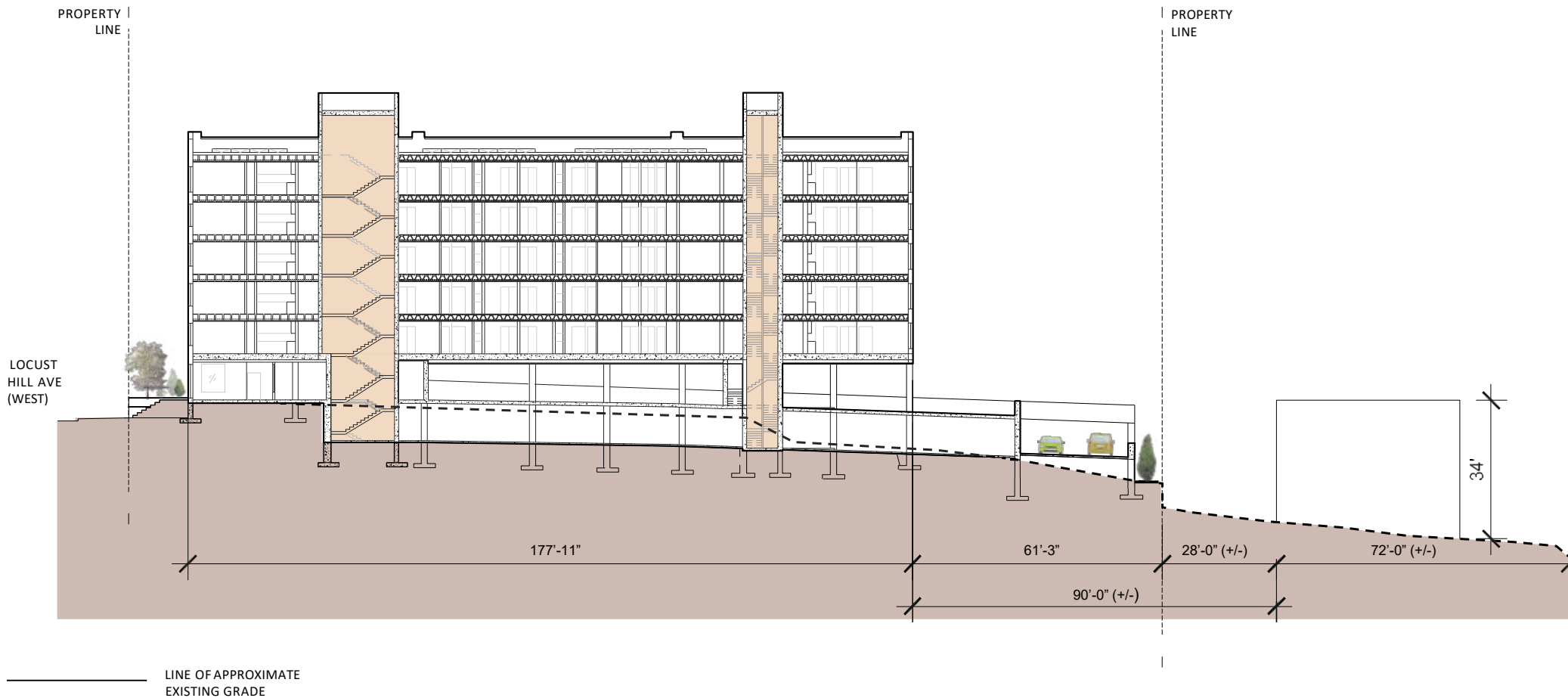
# ROOF PHOTOVOLTAIC PLAN



# EAST-WEST BUILDING SECTION



AMIE GROSS  
ARCHITECTS



# 1940 Jerome Avenue , Bronx, NY

## Contextual Design that Incorporates Green Building Strategies

- Contextual design, reflecting and complementing the surrounding neighborhood
- Passive House certified design
- Building systems will be 100% electric
  - Heating and cooling will be provided via air source heat pumps
  - Energy recovery ventilators (ERVs) will be used for filtered fresh air
- The building will have a robust building envelope including high levels of continuous insulation and high-performance triple-pane windows
- ENERGY STAR certified appliances, ultra high efficiency LED light fixtures, and water-saving low-flow plumbing fixtures
- Emergency generator for backup power and resiliency
- Future Housing Initiative Award - Funding from NYC HPD and NYSERDA to certify the building as Passive House.



# Public-Private Partnership

## Addressing the Challenge of Housing Affordability in the Village of Haverstraw



### *The Problem:*

- Village Officials recognize the growing challenge of high housing cost in Haverstraw and throughout Rockland County
- Haverstraw renters suffer from a heavy rent burden:
  - 30% of renters in the area earn less than \$30,000 annually
  - 60% of renters pay more than 35% of their income on rent

### *The Solution:*

- The Village of Haverstraw (VOH) and Westhab are partnering on a new venture to address the housing challenge by bringing much needed low and very-low income affordable housing to downtown Haverstraw
- Village Officials identified a municipally owned development site and committed to enter into a 99-year ground lease with Westhab with no upfront payment and no ongoing lease payment.
- Westhab has committed to developing approximately 79 units of affordable housing, affordable to residents earning up to 60% of area median income (AMI) and parking for residents and the community.
- The VOH and Westhab have developed a proposed zoning overlay which can be applied to this project, and which will facilitate the development of more affordable housing in the Village in the future

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