

Southern Solutions

How Federal Funding is Sparking Climate Progress



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This report was prepared by Hua Nani Partners for the Southern Environmental Law Center. The mission of the Southern Environmental Law Center is to protect the basic right to clean air, clean water, and a livable climate; to preserve our region's natural treasures and rich biodiversity; and to provide a healthy environment for all.

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Neither Hua Nani Partners nor the Southern Environmental Law Center take credit for the many great projects that are summarized in this report. We are highlighting these projects and the hard work poured into them to elevate examples for other local or state governments or partner groups to use as inspiration in their own communities.

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Southern Solutions

How Federal Funding is Sparking Climate Progress

Our nation has recently experienced an unprecedented surge of federal investments in projects and programs to address the climate crisis. Over the past three years, the landmark Bipartisan Infrastructure Law (BIL) and Inflation Reduction Act (IRA) have earmarked a staggering \$373.8 billion¹ to combat escalating climate pollution and impacts. Southern cities, facing an array of climate challenges — such as rising temperatures, extreme precipitation, flash floods, sea level rise, and severe weather events — are taking action to respond and adapt. This report explores how five Southern cities are harnessing federal funding in innovative ways to slash pollution, spur local economies, create new high-quality jobs, and enhance community resilience.

Strategic investments in local capacity are setting the stage for sustained progress and future funding opportunities. To date, the five cities featured in this report, Birmingham, AL; Columbia, SC; Brunswick, GA; Knoxville, TN; and Memphis, TN — representing over 1.2 million people — have received over \$572.2 million in federal funding,² with many grants still in the pipeline. The six states where SELC operates (Alabama, Georgia, North Carolina, South Carolina, Tennessee, and Virginia) have already secured more than \$18.3 billion³ in federal funding to meet state and local needs, with more grant award opportunities still to come.

These diverse case studies highlight the broad-based approaches and bold actions empowered by new federal investments. They provide a blueprint for other Southern communities eager to tap into the remaining billions in climate funds to create transformative local impact.

Memphis, Tennessee

CHAMPIONING ENVIRONMENTAL JUSTICE AND CLEAN ENERGY INITIATIVES

The city of Memphis, located on the east bank of the Mississippi River, has a history rooted in resilience. Initially developed on the Fourth Chickasaw Bluff, the city was shielded from flooding during its early industrialization in the 1800s. However, flood risk has dramatically increased over time, with a striking 14.4% of homes now vulnerable to inland flooding. The city's development has been marked by deep systemic health and wealth disparities,⁴ exacerbated by discriminatory land use policies and decisions and widespread industrial pollution.

Residents of Memphis face significant challenges, including high levels of pollution exposure⁵ and extreme energy burdens.⁶ South Memphis, in particular, which is made up of predominantly Black neighborhoods, continues to be overburdened with industrial facilities that impact air quality and threaten the health of nearby communities. Furthermore, half of the city's low-income households spend 13.2% of their gross income on energy costs — more than double the national average. These energy impoverished⁷ households tend to use more electricity and are often renters who lack control over factors affecting energy consumption, such as appliances, insulation, weatherization, thermostats, and HVAC systems.

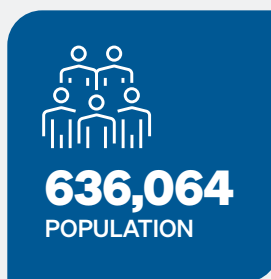
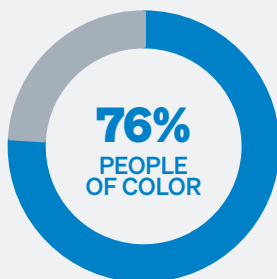
In recent years, Memphis has begun taking steps to alleviate these burdens. The city's Division of Housing & Community Development plays a vital role in conserving energy and controlling soaring bills through its administration of the DOE Weatherization Assistance Program⁸ that funds energy-saving projects such as installation of insulation and improving air filtration in low-income homes. Additionally, Memphis Light, Gas and Water's EnergySmart Memphis Program⁹ offers energy conservation classes and provides eligible customers with support to install energy efficient technologies and DIY repair kits. These initiatives are crucial for low-income households and communities of color, who disproportionately bear the brunt of pollution and energy costs. This is positive progress and charts a path for securing even more funding, which will be necessary to more comprehensively address energy burdens in Memphis going forward.

ADDRESSING HISTORICAL INJUSTICES

Challenging Harmful Infrastructure Projects

In 2021, a grassroots coalition in Memphis gained national attention for its successful campaign against the Byhalia crude oil pipeline, which threatened to contaminate the city's primary drinking water source¹⁰ and bisect several majority-Black neighborhoods. Sustained pressure from the community, led by a coalition of environmental and social justice advocates,

Memphis, Tennessee Federal Climate Spending



City politics and plans
Mayor: Paul Young (D)
Mid-South Climate Action Plan
(Priority Climate Action Plan)

State politics and plans
Governor: Bill Lee (R)
Tennessee Volunteer Emission Reduction Strategy
(Priority Climate Action Plan)



STEVE JONES

resulted in the project’s cancellation,¹¹ underscoring Memphis’ commitment to protecting the health and safety of its communities and natural resources.

Embracing More Options for Affordable Clean Energy

In 2023, Memphis Light, Gas and Water (MLGW) boldly rejected a long-term power supply contract with the Tennessee Valley Authority (TVA)¹² that would have limited the city’s bargaining power and unquestionably locked it into a long-term reliance on fossil energy.¹³ Instead, MLGW opted for a flexible 5-year agreement that maintained its ability to explore clean energy generation.¹⁴ This decision, driven in large part by advocacy from Protect Our Aquifer¹⁵ and Memphis Community Against Pollution,¹⁶ makes MLGW the only major utility to reject the 20-year contract, reaffirming Memphis’ resolve to pursue an affordable clean energy future.

Local Leadership and Strategic Planning

Former Mayor Jim Strickland and current Mayor Paul Young have recognized the importance of local government leadership in achieving long-term financial, social, and environmental health.¹⁷ Since joining the Global Covenant of Mayors for Climate & Energy in 2015, Memphis has developed a comprehensive Climate Action Plan,¹⁸ with ambitious targets for reducing greenhouse gas (GHG) emissions. The plan outlines strategies to achieve a 15% reduction in GHGs below 2016 levels by 2020; 51% below 2016 levels by 2025; and 71% below 2016 levels by 2050. In March 2024, Memphis was selected as one of 25 cities to join the Bloomberg American Sustainable Cities (BASC)¹⁹ program, which aims to “turbocharge... efforts to leverage historic levels of federal funding.”

Leveraging Investments to Meet Shared Goals

In 2020, Shelby County began investing over \$1 million annually in public transit and a green bus fleet to meet the city’s transportation pollution reduction goals, an investment which puts them above and beyond other localities in the area. To alleviate the city’s extreme energy burden, a target has been set to increase the number of low-income homes served by weatherization and retrofit programs by 500% over five years. Local leaders have pursued funding for these projects through DOE’s Green and Resilient Retrofit Program, a CPRG Implementation Grant, and DOE’s Training for Residential Energy Contractor Program. In 2024, Tennessee secured \$83.7 million for energy efficiency retrofits, with nearly \$7 million specifically earmarked for low-income households. Memphis’ proactive planning and leadership have positioned the city to put these federal funds where local needs are greatest.

COLLABORATIVE CLIMATE ACTION: ENGAGING COMMUNITIES AND LEADERS

Integrative and Inclusive Planning

Memphis takes a collaborative approach to climate action, engaging regional governments, universities, and community-based organizations alike. This integrative planning is exemplified by the Mid-South Priority Climate Action Plan (PCAP),²⁰ which highlights the disproportionate impacts of climate change on low-income and underserved communities: those “...with the least resources to protect themselves from climate hazards.” Residents, businesses, and community groups provided valuable insights into local hazards, such as inland flooding, extreme heat, and damaging winds. Led by the University of Memphis, the stakeholder engagement process informed the identification of reduction measures that reflected potential co-benefits to community health, economic prosperity, and socio-economic mobility.

Participants offered feedback on actions such as tree planting to combat extreme heat, expanding public transit funding, and investing in energy efficiency and green jobs in low-wealth neighborhoods.²¹ By combining rigorous data analysis with community input, Memphis ensures that its climate planning processes effectively allocate resources to address local needs and concerns, paving the way for a more resilient and equitable future.

Priority Reduction Measures Impact Summary

Reduction Measure	Cumulative Greenhouse Gas Reductions (mtCO ₂ e)		Estimated Project Cost (2022)	LIDAC Impacted	Co-Benefits
	2025-2030	2025-2050			
E1: Retrofit Outdoor Streetlights to LED Fixtures	117,225	373,350	\$21,060,278	20%	EQTY ENV EWD PH RSL
E2: Local Government Energy Audits and Renewable Electricity Installations	11,893	207,685	53,021,353	Not Estimated	ENV EWD RSL
R1: Low-Income Residential Energy Efficiency Retrofit	68,980	485,771	621,895,238	Not Estimated	EQTY ENV EWD PH RSL
T1: Enhance Public Transit	31,988	388,756	1,120,500,000	23%	EQTY ENV EWD PH
T2: Connected Greenways Network	102.23	865.91	398,496,095	60%	EQTY ENV EWD PH RSL

Figure 1: Memphis Priority Climate Action Plan.²²

Co-benefits that may occur upon implementation of the reduction measure.

(EQTY) Equity (ENV) Environmental
(EWD) Economic and Workforce Development
(PH) Public Health (RSL) Resilience

Putting the PCAP into action

Memphis is already taking decisive steps to implement its PCAP, demonstrating how strategic planning can lead to concrete outcomes. After submitting the PCAP to the EPA, the city incorporated the plan’s insights into various other grant applications. In June 2024, the U.S. Department of Transportation awarded Memphis over \$21.8 million²³ to complete the final mile of the Wolf River Greenway.²⁴ This funding will support the construction of a bicycle and pedestrian bridge over a railroad and an underpass beneath a busy road to improve safety and connectivity. Identified as a priority during the PCAP planning process, the greenway showcases how community-driven planning can attract essential funding and resources. Thanks to these efforts, Memphis residents will soon enjoy improved walking and biking options and increased connectivity between neighborhoods and natural areas.

Piloting public solar projects

In another groundbreaking initiative, Shelby County and the City of Memphis received an Energy Efficiency and Conservation Block Grant (EECBG) from the U.S. Department of Energy (DOE). A \$670,000 grant²⁵ will be used by the Memphis Zoo to install solar panels, expand clean energy education programs, and conduct a waste characterization study alongside a regional solid waste master plan. This DOE funding marks the first solar installation on a public building in the area, serving as a pilot project to establish best practices for rooftop solar installations at public facilities. The anticipated success of this EECBG-funded project will provide valuable insights for future solar initiatives funded through the U.S. EPA Greenhouse Gas Reduction Fund Solar for All grant,²⁶ paving the way for broader adoption of affordable clean energy solutions in Memphis.



Program Spotlight: Solar for All

In April 2024, the Environmental Protection Agency (EPA) launched a transformative initiative to boost solar uptake and access across the United States. The program awarded nearly \$1 billion to six southern states²⁷ through new leasing and power purchase programs, multifamily installations, and workforce development pathways. This initiative is part of a larger \$7 billion national effort,²⁸ and these investments are set to make a lasting impact in the South by lowering energy bills, improving air quality, and transforming energy systems.

- Tennessee’s Department of Environment & Conservation (TDEC) received \$156 million from this program to expand rooftop solar installations and promote equitable access to solar energy. This statewide initiative will provide financial assistance for rooftop and community solar projects, leveraging existing state programs and resources to maximize impact and deliver cost savings to consumers.
- The North Carolina Solar for All coalition received \$156 million to launch the EnergizeNC program. This initiative aims to install rooftop solar systems on low-income single-family and multifamily homes and expand access to community solar projects, ensuring that a broader range of North Carolinians can benefit from clean, renewable energy.
- The Capital Good Fund, a nonprofit community development institution in Georgia, was awarded \$156 million to implement the Georgia BRIGHT²⁹ solar leasing program. This program is designed to make solar energy more accessible to households facing financial barriers due to high upfront costs or ongoing maintenance expenses. Solar for All funding allows the Capital Good Fund to offer solar leasing with no upfront costs and free maintenance for eligible low-income households and some commercial settings. Both residential and commercial programs are set to begin in early to mid-2025.
- The South Carolina Office of Resilience will use its \$124 million Solar for All grant to enhance solar resilience and energy efficiency across the state. Its comprehensive program³⁰ includes developing community solar projects, establishing an innovation fund to incubate creative solar solutions, and providing workforce training and development. The initiative also focuses on coordinating with existing weatherization and energy efficiency programs to ensure comprehensive support for South Carolina residents.

Brunswick, Georgia

BUILDING CLIMATE RESILIENCE THROUGH COMMUNITY COLLABORATION

Brunswick, a small coastal city with a population of just over 14,000, is leveraging strong collaboration between government and local organizations to tackle its unique environmental challenges. Located near one of the nation’s busiest ports, this predominantly Black, low-income community has historically attracted polluting industries, resulting in significant contamination³¹ of surface water, groundwater, air, and soil. With the increasing impacts of climate change,³² there is a heightened risk of these toxins spreading into the broader community — endangering public health, disrupting local economies, and damaging coastal ecosystems.

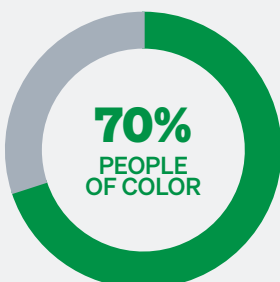
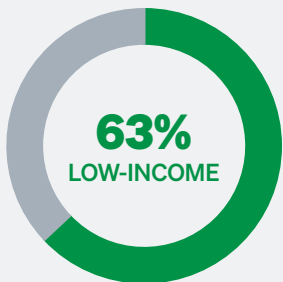
Despite its modest 25-square-mile area, Brunswick is home to four Superfund sites, accounting for one-fifth of all such sites³³ in Georgia. Decades of industrial pollution have left hazardous waste that poses serious health burdens to residents. Despite living on the coast, residents are advised against consuming local seafood³⁴ due to contamination risks. Elevated levels of hazardous chemicals, including mercury and polychlorinated biphenyls (PCBs), have been found in the blood³⁵ of long-time residents and can be linked to adverse health outcomes such as cancer and organ failure.




GLYNN ENVIRONMENTAL COALITION

The residents of Brunswick are deeply connected to their community and are actively working towards solutions to these environmental challenges. For example, the Glynn Environmental Coalition was established over thirty years ago by concerned citizens to serve as a crucial resource and platform for addressing environmental injustices. This form of social infrastructure is vital for communities as they plan and adapt to the growing impacts of climate change.

Brunswick, Georgia Federal Climate Spending



	City politics and plans Mayor: Cosby H. Johnson (I) No Priority Climate Action Plan	State politics and plans Governor: Brian Kemp (R) Peach State Voluntary Emission Reduction Plan (Priority Climate Action Plan)
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SELC STAFF

Nature-based solutions for mitigating flood risks

Chronic flooding, exacerbated by climate change, presents significant challenges for both coastal and inland communities. The South is particularly vulnerable; the increasing intensity of storms is leading to more frequent and severe flooding, worsened by poorly planned development that results in deforestation and increased impervious surfaces. These conditions often result in large volumes of water being delivered in short bursts, overwhelming outdated stormwater infrastructure and causing dangerous flash floods.

Additionally, rising sea levels in the Gulf of Mexico and Southeastern Atlantic Ocean — rising at a rate three times³⁹ the global average since 2010 — are elevating tides, cutting off road access, and increasing storm surge and flooding. In response, Southern communities are adopting smarter building strategies inspired by natural ecosystems. These initiatives reflect a growing recognition of the need to integrate natural and engineered solutions to address the complex challenges posed by climate change.

PROTECTING STORM BUFFERS

The Alabama Department of Conservation and Natural Resources is strengthening tidal marsh protections in Mobile County with a \$1.1 million⁴⁰ NOAA grant. Wetlands and marshes act as natural buffers against waves and storm surges, reducing the risks of flooding and erosion. This project aims to enhance these critical natural defenses for greater community protection.

RESTORING ECOSYSTEM STRENGTHS

Efforts to restore natural floodplains and stream functions are making a notable impact across the South. Funding from the National Coastal Resilience Fund⁴¹ supports projects such as floodplain and wetland restoration in Charleston, South Carolina,⁴² and the protection of tribal lands in the Chesapeake Bay Watershed.⁴³ Additionally, the Building Resilient Infrastructure and Communities (BRIC) funding from FEMA is facilitating stream restorations in rural North Carolina communities. The Department of Interior is also investing \$20 million in nature-based flood solutions for the Lower-Mississippi watershed, including Tennessee. These initiatives not only protect biodiversity and preserve cultural heritage but also enhance carbon sequestration and mitigate catastrophic flood damage.

COMBINING GREEN AND GRAY IN THE CITY

In Virginia Beach, VA, a \$25 million BRIC grant is supporting the installation of rain gardens and bioswales along the frequently inundated Eastern Shore Drive. This project combines green infrastructure, such as rain gardens, with traditional grey infrastructure like piping and concrete, to protect nearby businesses and critical facilities.

CONSERVING COASTAL CARBON SINKS

The EPA's CPRG Implementation Grants Program is funding the protection and restoration of coastal plain habitats across Maryland, North Carolina, South Carolina, and Virginia through a \$421 million multi-state grant, one of the largest in the agency's history. This grant supports 21 projects focused on reforestation, land revitalization, and native planting to enhance natural carbon sinks and contribute to overall coastal climate resilience.



MOBILIZING FEDERAL RESOURCES

The coordinated efforts of state, regional, and local partners have brought critical federal dollars to Brunswick. Key partners like the Georgia Department of Natural Resources (GDNR), Glynn County Board of Education, and Glynn Environmental Coalition have secured \$2.5 million in federal climate funding since 2022.³⁶ This funding supports various initiatives that emphasize community involvement in building coastal resilience.

Community-driven resilience networks

In 2022, the National Fish and Wildlife Foundation's (NFWF) National Coastal Resilience Fund awarded the Glynn Environmental Coalition a \$282,100 grant³⁷ to establish a coastal resilience network in Glynn County. This initiative, in collaboration with partners like Georgia Interfaith Power and Light, A Better Glynn, and the Georgia chapter of The Nature Conservancy, aims to foster community-driven resilience planning. The project emerged in response to a need for better coordination following several major storms and a consistent lack of meaningful community engagement.

Adaptive community engagement

The NFWF project partners are committed to engaging historically underserved communities by meeting them where they are, and adapting strategies as needed. Initially, community meetings held during weekday evenings had low attendance. The approach was adjusted to engage residents at community-led events, significantly boosting participation and better identifying local coastal resilience priorities.

Land acquisition for flood mitigation

In a significant step toward flood mitigation, the NOAA Coastal Zone Management Program awarded GDNR over \$1.3 million for the Lanier Boulevard Flood Resilience through Acquisition Project.³⁸ This project involves acquiring vacant property in flood-prone areas to mitigate risks from coastal flooding, high tides, sea level rise, and stormwater runoff. A prime site near a middle school parcel represented a chance for GDNR, in partnership with the Glynn County Board of Education and the City of Brunswick, to purchase the land that gives space to send floodwaters and lay the groundwork for future nature-based solutions in the neighborhood.

Birmingham, Alabama

ENHANCING EQUITABLE TRANSPORTATION THROUGH PUBLIC AND PRIVATE PARTNERSHIPS

Birmingham, a city grappling with long-standing environmental justice concerns, is leveraging federal funding to address legacy pollution and improve equitable access to transportation. Known for high levels of industrial pollution affecting air, soil, and water, Birmingham ranks among the highest metro areas in the nation for air quality risks,⁴⁴ which disproportionately harms Black residents. This disparity is rooted in historically discriminatory land use, transportation, and housing policies, such as redlining, which forced many Black residents into highly polluted areas.⁴⁵ North Birmingham,⁴⁶ a historically Black residential and industrial zone, is particularly affected due to its proximity to a carcinogen-emitting⁴⁷ coke plant.⁴⁸

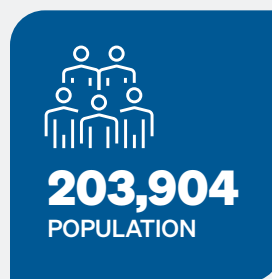
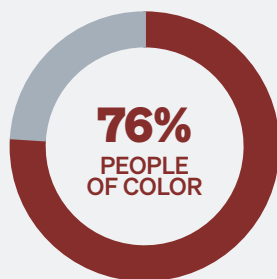
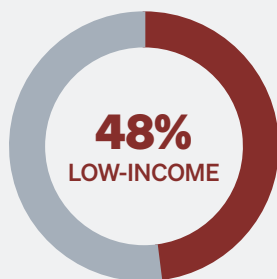
Birmingham's lack of public transportation and high per-capita gasoline usage⁴⁹ have further exacerbated poor air quality and adverse health outcomes. The limited availability of public transit disproportionately affects underserved communities, restricting their access to jobs and essential services. However, community organizations like the Greater Birmingham Alliance to Stop Pollution (GASP) are empowering residents to advocate for environmental



justice. In 2021, GASP received an Environmental Justice Small Grant⁵⁰ from the EPA to tackle air quality issues and community food deserts. This project takes a community-centered approach, utilizing citizen science and the lived experiences of affected communities. GASP trains residents as community AirKeepers, equipping them to monitor and report air quality issues and engage in public discourse about these challenges. This grassroots effort is laying the groundwork for future initiatives targeting environmental justice in Birmingham.

Birmingham, Alabama

Federal Climate Spending



City politics and plans
Mayor: Randall Woodfin (D)
Birmingham-Hoover MSA
Priority Climate Action Plan

State politics and plans
Governor: Kay Ivey (R)
Alabama Department of Environmental
Management Priority Climate Action Plan



RON SHERMAN

TRANSFORMING TRANSPORTATION THROUGH FEDERAL FUNDING

Birmingham has taken decisive action to address the intertwined issues of air pollution, transportation, and environmental justice. In 2018, the City Council mandated that transportation projects prioritize walking, biking, and bus options.⁵¹ This led to the launch of the Birmingham On-Demand pilot micro transit ridesharing program⁵² in collaboration with the Community Foundation of Greater Birmingham and private transportation company Via. In 2022, federal funding enabled a partnership with the Birmingham Jefferson County Transit Authority (BJCTA) to establish a Bus Rapid Transit (BRT) system, connecting residents across 25 neighborhoods to essential services, employment, and healthcare facilities.⁵³

Significant Investments in Transportation

Since 2022, Birmingham, in partnership with Birmingham City Schools, BJCTA, and the Regional Planning Commission of Greater Birmingham, has secured over \$69 million from federal transportation programs.⁵⁴ This funding supports cleaner, more equitable transportation solutions, including over \$36.2 million for pedestrian, bus, and bike routes; nearly \$6 million for zero-emission school buses, and \$13.7 million for low- and zero-emission public buses.

Reconnecting Communities

In 2023, two new projects were announced to reconnect previously divided neighborhoods and business districts. Funded by a \$14.6 million Reconnecting Communities grant and a \$21.7 million RAISE grant, these initiatives will improve access to historic Black business districts and redevelop 2.5 miles of roads using a Complete Streets approach.⁵⁵ The projects also

include the development of the Birmingham Urban Trail and Multimodal Corridor,⁵⁶ a multi-use urban path that will highlight historical and cultural landmarks from the Civil Rights Movement. This initiative is supported by strong community partnerships⁵⁷ between the City of Birmingham, BJCTA, community groups, and economic development nonprofits.

Empowering Strategic Planning

In 2024, Birmingham received \$1 million from the EPA's Climate Pollution Reduction Grants (CPRG) to develop a priority climate action plan⁵⁸ in partnership with the Regional Planning Commission of Greater Birmingham. This plan focuses on accelerating air pollution mitigation through equitable, climate-positive transportation projects, including electric vehicle charging stations, city vehicle fleet conversion, an electric bike voucher program, transit-oriented development, and bus fare vouchers for residents. The development of this plan marks a significant achievement for Birmingham, representing the city's first comprehensive community-level greenhouse gas reduction strategy. The Office of Resilience and Sustainability is empowered to lead on climate action and ensure climate planning is an intergovernmental priority for all projects.



Program Spotlight: Community Change Grants

The EPA's Community Change Grants⁶⁸ program allocates \$2 billion in funding to community-based organizations (CBOs), Tribes, local governments, and institutions of higher education to implement projects that benefit underserved communities. A key feature of the program is its emphasis on community-driven initiatives, mandating that all eligible applicants apply in partnership with a CBO. This requirement ensures that projects are grounded in the needs and perspectives of local communities. With robust local activism and active community groups in the South, this region has a prime opportunity to pursue this funding before applications close in November 2024.



GETTY/SKYNESHER

Community-Driven Climate Justice

The South is home to many under-resourced and overburdened communities that bear the brunt of climate and pollution impacts. Efforts like the Justice40 Initiative⁵⁹ aim to integrate environmental justice more intentionally into climate planning. Many of these communities, particularly those in unincorporated communities where about 30% of U.S. residents live,⁶⁰ struggle to access available resources and funding.

In the face of underinvestment and a lack of public support, residents often turn to partnerships with churches, community organizations, local colleges, and other nonprofits to meet their needs. For the first time, federal legislation has unlocked “direct pay” provisions and new funding programs that enable these partner groups to secure funding for energy efficiency improvements, rooftop solar installations, and other community climate solutions.

NASHVILLE, TENNESSEE

In 2023, the Tennessee Environmental Council, a nonprofit organization, received nearly \$500,000 from the EPA Environmental Justice Collaborative Problem Solving (EJCPS) Program.⁶¹ This funding will support the expansion of Nashville’s Community Recycling Roundup Series program, address local environmental issues, enhance solid waste strategies to reduce landfill reliance, and reach new overburdened communities.⁶² The EJCPS program builds on President Biden’s Executive Orders to designate funding exclusively for small nonprofits.⁶³

ORANGEBURG, SOUTH CAROLINA

Historically Black Colleges and Universities (HBCUs) have a rich legacy of advancing social and environmental justice in the South. Institutions like Claflin University, in partnership with the HBCU Climate Change Consortium, equip students with the knowledge and skills to champion equitable climate solutions. The university also received \$4 million from the DOE to invest in STEM programs⁶⁴ and promote diversity and inclusivity in science and technology. The disproportionate impact of climate change on communities of color uniquely positions HBCUs⁶⁵ to empower students to facilitate an equitable clean energy transition.

BUCKSPORT, SOUTH CAROLINA

In Bucksport, South Carolina, an unincorporated community in the floodplains of Horry County, residents have suffered repetitive property damage and a tenfold increase in flood insurance costs.⁶⁶ Despite being a predominantly low-income and Black population, Bucksport does not qualify as a disadvantaged community under current federal environmental justice screening tools, excluding it from federal Justice40 climate resilience funding. In response, Bucksport residents formed the Bucksport Community Partnership, a collaborative of local and regional nongovernmental organizations and academic institutions. This partnership provides critical support to the community through advocacy, capacity building, and technical assistance, aiming to secure federal grants and implement nature-based flooding resilience solutions.⁶⁷

Knoxville, Tennessee

RECONNECTING HISTORICALLY UNDERSERVED COMMUNITIES AND FOSTERING ECONOMIC GROWTH

Knoxville has taken considerable steps to address environmental health and justice issues stemming from legacy pollution and compounding climate impacts. Despite the city's commitment to ambitious GHG emissions reduction targets, emissions continue to rise⁶⁹ and contribute to persistently poor air quality. Collaboration and leadership across local, regional, and national levels are pivotal in Knoxville's efforts to curb emissions. The Mayor's Climate Council regularly convenes a diverse set of 65 cross-sectoral members — including clean energy experts, conservation activists, equity advocates, neighborhood representatives, developers, business leaders, and representatives from the Knoxville Utilities Board and Tennessee Valley Authority — to craft strategies to achieve community climate goals. In 2021, the Council created the City of Knoxville's Energy & Sustainability Work Plan,⁷⁰ outlining priority climate strategies across transportation, buildings, energy, and waste management.

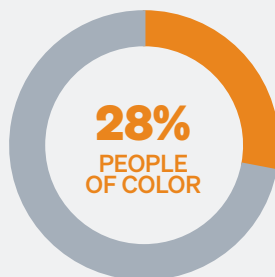
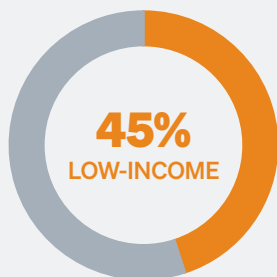
Most recently, Knoxville developed a priority climate action plan⁷¹ for the EPA's CPRG program in partnership with the Knoxville Regional Transportation Planning Organization. This

comprehensive plan outlines key emissions reduction measures and significant involvement from community-based organizations to help develop rooftop and community solar initiatives. To ensure inclusivity, the Mayor's Climate Council established an Equity Working Group to ensure historically marginalized voices are represented in the plan's decision-making processes.

Knoxville's concentration of toxic air pollutants ranks it as the 25th worst city in the country for air quality.⁷² While the population is predominantly white, Black residents face disproportionate exposure to pollution-related health risks. More than three-quarters of Black residents live in neighborhoods with the highest risk for cancer and respiratory illnesses due to toxic air pollutants.⁷³ Additionally, over half reside in areas with the highest risks for toxic discharges into nearby waterways, and nearly half face significant risks of exposure to potential lead and other contaminants from hazardous facilities.

Many of these racial disparities and disproportionate health burdens trace back to urban renewal efforts in the 1960s and 1970s when the Knoxville Housing Authority systematically acquired and relocated predominantly Black neighborhoods to make way for large-scale public infrastructure projects.⁷⁴ The displacement of 2,500 families,⁷⁵ mostly Black, perpetuated cycles of marginalization and poverty. Since taking office in 2019, Mayor Indya Kincannon

Knoxville, Tennessee Federal Climate Spending



City politics and plans
Mayor: Indya Kincannon (D)
Knoxville, TN MSA Priority
Climate Action Plan

State politics and plans
Governor: Bill Lee (R)
Tennessee Volunteer Emission Reduction Strategy
(Priority Climate Action Plan)



has prioritized addressing the harmful legacy of urban renewal. In 2020, the City Council reinforced this commitment by approving a progressive \$100 million funding plan⁷⁶ for marginalized communities.

LEVERAGING FEDERAL FUNDING TO ADDRESS HISTORICAL INEQUITIES

Reconnecting Communities with Multi-Modal Investments

In 2023, Knoxville secured its largest federal grant to date, totaling \$42.6 million from the Reconnecting Communities and Neighborhoods Grant Program. This funding is part of the City Council's \$100 million pledge⁷⁷ to reconnect communities affected by urban renewal. The project will expand Knoxville's greenway system with 10 miles of multimodal pathways, linking displaced communities in East and South Knoxville to businesses and community activities. This work will improve access to urban green spaces, reestablish connections to educational and economic opportunities, and combat local air pollution.

Urban Forestry

Knoxville also received \$1.7 million⁷⁸ through the Urban and Community Forestry Program⁷⁹ to increase equitable access to urban green spaces. This funding supports the creation, enhancement, and protection of urban and community forests in disadvantaged communities.⁸⁰ Trees Knoxville, a

local nonprofit, is partnering with the city to plant 7,500 trees⁸¹ along streets, schools, parks, and public housing. Complimenting this effort, the University of Tennessee at Knoxville received \$2.6 million⁸² to install gravel and tree stormwater systems and integrate public education and workforce development components. These projects are designed to improve air quality and climate resilience by providing shade, cooling effects, and rainfall and stormwater storage and absorption capacity.

Transportation Solutions for Safety and Health

Knoxville was awarded \$8 million⁸³ from the Safe Streets For All Grant Program⁸⁴ in 2023 to implement the Vision Zero Action Plan,⁸⁵ aiming to eliminate all traffic fatalities on city-managed roads by 2040. The plan prioritizes three locations with disproportionately high numbers of severe⁸⁶ crashes and includes a Speed Management Plan,⁸⁷ shared-use paths, enhanced crosswalk visibility, pedestrian islands, and bike lanes. Additionally, Knoxville Area Transit received \$3.6 million from the Low or No Emissions Grant Program⁸⁸ to install overhead bus chargers at Knoxville Station, enabling battery-electric buses to operate for up to fifteen consecutive hours. These comprehensive strategies reflect Knoxville's commitment to addressing both historical and contemporary challenges through a community-centric lens.



GETTY/ALEX WONG

Passenger Rail: Linking Communities, Fighting Pollution

State and local leaders in Virginia, North Carolina, and Gulf Coast states are leveraging federal dollars to expand transportation choices. Success stories from the South demonstrate how new federal funds are delivering tangible transportation benefits to the region — especially when coupled with state and local funds.

CONNECTIONS IN VIRGINIA

In 2009, Virginia funded its first state-sponsored passenger rail line, connecting Lynchburg with Washington, D.C. The route quickly exceeded expectations, seeing more than three times the anticipated ridership⁸⁹ in its first year. Virginia has continued to expand rail service and saw record ridership last year.⁹⁰ Building on this success, the BIL has allocated an \$8.2 billion to fund ten passenger rail projects across Virginia, North Carolina, and the District of Columbia⁹¹ via the Federal-State Partnership for Intercity Passenger Rail Program (FSP).⁹²

As part of a \$4.5 billion 2023 FSP grant cycle, North Carolina was awarded \$1.1 billion⁹³ to develop a key part of a new passenger rail route between Raleigh, NC and Richmond, VA⁹⁴ — the third largest grant⁹⁵ awarded under the program that year. Once completed with additional funding, this route will reduce the travel time between the two state capitals by an estimated 90 minutes.⁹⁶ The fourth largest FSP grant that year (\$729 million) is for improvements from DC to Richmond, primarily for expanding Long Bridge across the Potomac River — which is the biggest bottleneck for passenger rail from the Southeast to the Northeast.

These rail systems are set to spur regional economic growth and contribute significantly to Virginia and North Carolina's climate goals by reducing auto emissions and alleviating congestion, generating annual savings equivalent to \$4 million and \$60.9 million,⁹⁷ respectively.

GULF COAST PASSENGER RAIL

In September 2023, the DOT's Consolidated Rail Infrastructure and Safety Improvements (CRISI) program awarded \$1.4 billion for rail safety and supply chain upgrades,⁹⁸ with over \$200 million dedicated to passenger rail improvement in Tennessee and the Gulf Coast states. The region's passenger rail network suffered significant setbacks after Hurricane Katrina in 2005. To revive this corridor, Amtrak partnered with the Southern Rail Commission and secured more than \$178.4 million⁹⁹ in CRISI funds to restore passenger rail service in Alabama, Louisiana, and Mississippi. These federal investments will improve existing tracks and introduce two new daily roundtrip services between New Orleans and Mobile. Once operational, the Gulf Coast Corridor Improvement Project will deliver tangible reductions to congestion, noise, and auto emissions.¹⁰⁰

Columbia, South Carolina

ADVANCING AFFORDABLE ENERGY SOLUTIONS TO ACHIEVE 100% CLEAN ENERGY

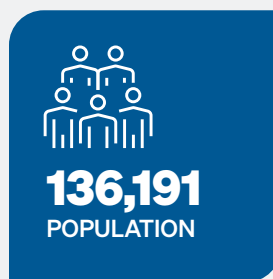
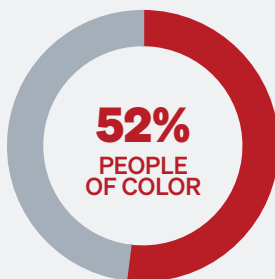
Over the past decade, the city of Columbia has aggressively pursued federal funding and philanthropic partnerships to drive transportation electrification in schools and reduce high energy burdens in low-income and underserved communities. South Carolina ranks among the states with the highest low-income energy burdens,¹⁰¹ with low-income households consuming 36% more electricity¹⁰² than the national average. These households also spend a larger portion of their household budget on electricity compared to wealthier residents. The combined effects of climate impacts and the prevalence of energy-inefficient homes have led to some of the highest levels of energy consumption in the country.¹⁰³

In a groundbreaking move in 2017, Columbia's City Council unanimously adopted a resolution committing to a community-wide transition to 100% clean and renewable energy by 2036,¹⁰⁴ making it the first city in South Carolina to set such an ambitious goal. The city's updated 2023 resolution highlights energy efficiency measures as a cornerstone of its sustainability efforts. Columbia also became the first city in the state to attain a LEED for Cities and



Communities certification,¹⁰⁵ unlocking additional grant opportunities for energy efficiency initiatives. The city's Priority Climate Action Plan¹⁰⁶ reaffirms the importance of energy efficiency measures in achieving its 100% clean energy target. Columbia has established itself as a leader in climate planning, as evidenced by its early endorsement of the U.S. Conference of Mayors Climate Protection Agreement nearly two decades ago and the formation of the city's Climate Protection Action Committee (CPAC).¹⁰⁷

Columbia, South Carolina Federal Climate Spending



City politics and plans
Mayor: Daniel Rickenmann (Nonpartisan)
Central Midlands Priority Climate Action Plan

State politics and plans
Governor: Henry McMaster (R)
South Carolina Priority Climate Action Plan



ANDREW WHITAKER



Program Spotlight: Building Resilient Infrastructure and Communities

The Federal Emergency Management Agency (FEMA)'s Building Resilient Infrastructure and Communities¹¹³ (BRIC) program provides crucial support to states and tribes, offering funding to mitigate the impacts of extreme weather events such as hurricanes, flooding, tornadoes, wildfires, and droughts. The program, bolstered by an additional \$1 billion¹¹⁴ from the BIL for 2022 through 2026, aims to scale support for mitigation projects, planning, project scoping, and the adoption and enforcement of hazard-resistant building codes. In the 2022 BRIC grant cycle, over \$2.8 billion¹¹⁵ was distributed for resilience projects; each state and territory received an additional \$2 million — double the funding¹¹⁶ from 2021. This substantial financial boost helps communities prepare for the most severe impacts of climate change. Prospective projects range from storm-proofing utility plants to elevating homes, updating building codes, and adding recreational amenities that double as flood protection.

Protecting Vulnerable Communities from Inland Flooding in Fayetteville, NC

Fayetteville, a rapidly growing city where 18% of the population lives below the federal poverty line, faces significant inland flooding risks from stormwater and heavy rainfall. BRIC funding is being utilized to develop comprehensive flood mitigation plans to divert drainage, improve downstream drainage systems, and create a new downstream stormwater storage area.¹¹⁷ Additionally, vegetation and green infrastructure projects will complement these investments and enhance the town's overall resilience to flooding.

Keeping the lights on in Chesterfield County, VA

After experiencing a series of power outages, Chesterfield received BRIC funding¹¹⁸ to support a pilot project providing mobile energy storage systems in seven disadvantaged and low-income communities. These rechargeable mobile battery systems will support the grid under normal conditions and, during extreme weather events and natural disasters, can detach and deliver modular power to critical emergency facilities. This innovative use of funds will help ensure essential services remain operational during emergencies, providing a vital safety net for vulnerable populations.



ADOBE STOCK/THOMAS

MOBILIZING FEDERAL FUNDING TO ACHIEVE CITY CLIMATE GOALS

Opening Doors to Energy Efficiency Solutions

To reduce energy burdens and achieve its 100% clean energy goal by 2036, Columbia participated in the DOE Local Energy Action Program (LEAP).¹⁰⁸ As one of 24 selected cities, Columbia focused on addressing the needs of energy-burdened low-income communities. LEAP funds supported a diverse coalition, including the National Renewable Energy Laboratory, CPAC, several community-based organizations, and the South Carolina Energy Office, to analyze residential energy efficiency and electrification upgrades for nearly 100,000 homes.

Columbia's efforts to secure federal funding for energy efficiency led to its membership in the Smart Surfaces Coalition. This membership supports the city in tackling high energy costs and mitigating rising temperatures through innovative built environment solutions. Philanthropic funding through the coalition provides support to deploy cost-effective integrated solutions¹⁰⁹ such as reflective or green roofs, solar panels, porous pavements, and rain gardens.

Electrifying School Buses and Improving Air Quality for Kids

In recent years, Columbia launched an ambitious initiative to promote clean transportation using federal funds for electric school buses. South Carolina

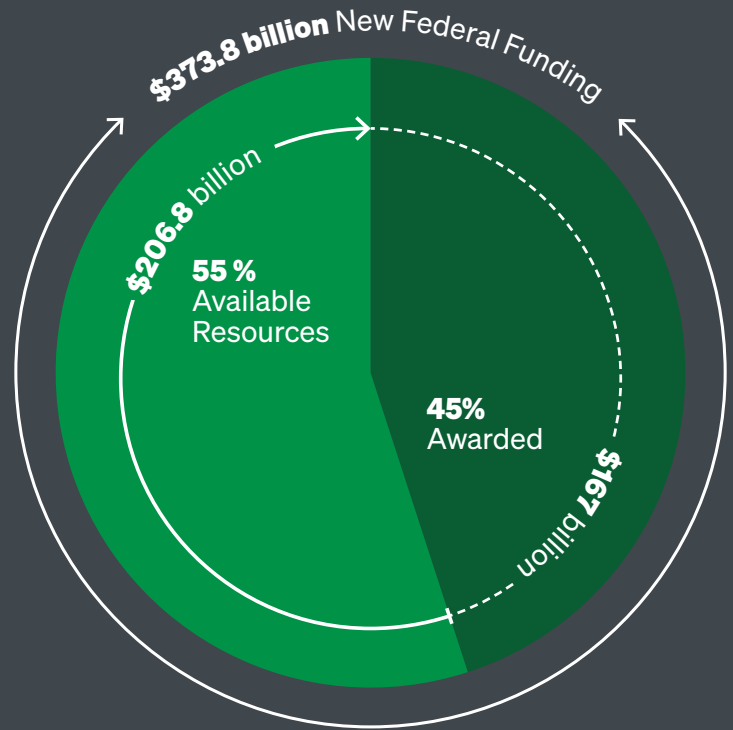
school districts received \$65.9 million in a round of electric school bus funding announced in January 2024,¹¹⁰ the third highest¹¹¹ allotment among states. In 2022, Columbia's Richland County School District One also received \$6.32 million¹¹² in rebates to purchase sixteen electric school buses.

Executing Climate Plans with Federal Support

Columbia further solidified its climate leadership when announced as a recipient of one of the most competitive federal climate grants in July 2024. The EPA awarded Implementation Grants through the second round of CPRG funding to plans poised to advance community-driven solutions and tackle the climate crisis. Collaborating with fellow cities in the Central Midlands Governments consortium, Columbia's robust Priority Climate Action Plan outlines strategies to reduce emissions while prioritizing economic, health, and environmental outcomes. With strong local support and active involvement from community-based organizations, the city plans to use the \$8.7 million grant to develop municipal solar and smart surface projects and establish a pool of matching funds to incentivize local investment. Columbia's proactive approach to sustainable urban development serves as a model for other cities. Additionally, a coalition of states including South Carolina, North Carolina, Maryland, and Virginia received a CPRG Implementation grant to deploy nature-based solutions that will complement municipal initiatives planned for Columbia.

Funds for the Future of the South

The more than \$373.8 billion in new federal investments authorized through the BIL and IRA are a down payment toward helping communities seek out affordable energy choices, provide more affordable transportation options, and stimulate local economic development. So far, only \$167 billion of this overall funding, roughly 45%, has been awarded,¹²⁶ leaving a substantial amount of resources yet to be allocated. There is an extraordinary opportunity for localities to step up as civic leaders and claim this funding. The time is now for Southern leaders to offer bold proposals to draw more federal funds to our region.



Seizing the Opportunity for Climate Leadership in the South

The Southeastern United States faces a distinct set of challenges¹¹⁹ in combating the increasingly severe impacts of climate change. A combination of dramatic coastal growth, vestiges of structural racism, and a polarized political landscape has historically led to underinvestment in the critical infrastructure necessary for effective climate response and adaptation. However, recent federal legislation — reinforced by the Justice40 Initiative¹²⁰ — is delivering unprecedented levels of new funding to communities across the South and opening doors to transformative change.

The leadership of the five cities profiled in this report — Memphis, Birmingham, Brunswick, Knoxville, and Columbia — demonstrates the potential for other Southern communities to take advantage of upcoming grant opportunities to address their own challenges and needs. These cities are successfully competing for and securing grants, ensuring that vital funding reaches the areas most in need. Key forthcoming opportunities for Southern communities include:

- **EPA's Thriving Communities Grantmaking Program¹²¹**

\$600 million on a rolling basis until 2026; application forthcoming Fall 2024 // Discretionary Program

These grants can be used for project assessment, planning, development, and land acquisition for projects that address environmental issues including fence-line air quality monitoring, water quality sampling and monitoring, stormwater issues and green infrastructure, healthy and energy-efficient homes, emergency preparedness and disaster resiliency.

- **Community Change Grants¹²²**

\$2 billion on a Rolling Basis until November 2024 // Discretionary Program

This program is designed to help underserved communities build capacity to respond to environmental and climate justice challenges, as well as implement resilience and pollution reduction projects.

- **Justice40 Initiative:¹²³**

This executive mandate has broad application across federally-funded projects — including highway spending, drinking water, wastewater, transit, and more — prioritizing historically underserved areas. It represents a major shift towards inclusive and accessible planning.

The cities profiled in this report — along with three program spotlights and three topical case studies — illuminate diverse ways that funding is driving impact. One consistent theme emerges: effective implementation requires purposeful coordination and engagement between local and state governments, community-based organizations, stakeholder groups, and federal agencies. Collectively, the four Southern states represented by the cities in this report have secured approximately \$9.3 billion, about 4.6%,¹²⁴ of total BIL and IRA climate funding awarded and allocated to date. Yet these states account for roughly 8.4% of the U.S. population,¹²⁵ indicating that the funding flowing to the region is incommensurate to the needs. More collaborative, compelling grant applications from Southern leaders and communities can fill that gap.

The months and years ahead offer immense potential for Southern states and cities to bring their fair share of federal investments to the region. The impact and durability of climate solutions will hinge on the success of uplifting community priorities, fostering public-private partnerships, and most importantly — recognizing the imperative for urgent action.

ENDNOTES

- 1 Lea, J. (2024, May 8). Federal Climate Funding Ramps Up. *Climate Program Portal*. <https://climateprogramportal.org/2024/05/08/federal-climate-funding-ramps-up/>
- 2 Calculated using data from the Climate Program Portal's Outcomes Dashboard (2024) from Atlas Public Policy. Only includes awarded funding. Does not include loans or tax credits.
- 3 Calculated using data from the [Climate Program Portal's Outcomes Dashboard](#) (2024) from Atlas Public Policy. Includes both awarded funding and allocated funding. Allocated funding is formula funding where allocations for state and local governments have been announced. Does not include loans or tax credits.
- 4 Sjoström, D. (n.d.). *Ground-truthing Energy Burden in Memphis and Shelby County, TN: Analyzing the energy impacts and health outcomes from a local government's homeowner rehabilitation program*. Urban Sustainability Directors Network - USDN: Urban Sustainability Directors Network.
- 5 *EJScreen*. (2024, July 24). <https://ejscreen.epa.gov/mapper/>
- 6 Low-Income Energy Affordability Data (LEAD) Tool and Community Energy Solutions. (n.d.). In Energy.gov. Retrieved July 25, 2024, from <https://www.energy.gov/scep/low-income-energy-affordability-data-lead-tool-and-community-energy-solutions>
- 7 Brown, M. A., Soni, A., Lapsa, M. V., Southworth, K., & Cox, M. (2020). High energy burden and low-income energy affordability: conclusions from a literature review. In *Progress in Energy* (Vol. 2, Issue 4, p. 042003). IOP Publishing. <https://doi.org/10.1088/2516-1083/abb954>
- 8 City of Memphis Weatherization Program: Division of Housing & Community Development. (n.d.). In *www.memphis-wap.org*. Retrieved July 25, 2024, from <https://www.memphis-wap.org/about.html>
- 9 Memphis Light, Gas and Water - EnergySmart Memphis. (n.d.). In *www.mlgw.com*. Retrieved July 25, 2024, from <https://www.mlgw.com/residential/energysmartmemphis>
- 10 Guzman, D. T. (2021, July 23). *The Byhalia Pipeline: What you need to know*. Tennessee Lookout. <https://tennesseelookout.com/2021/04/09/the-byhalia-pipeline-what-you-need-to-know/>
- 11 Victory for Southwest Memphis: Byhalia Pipeline is canceled. (2024). In *the Southern Environmental Law Center*. Southern Environmental Law Center. <https://www.southernenvironment.org/news/victory-for-southwest-memphis-byhalia-pipeline-is-done>
- 12 Memphis power company rejects TVA's long-term deal. (2022). In *AP News*. <https://apnews.com/article/business-memphis-fb4a788b22667f586d9cd8610dc37de0>
- 13 The Biggest Public Utility in the U.S. Is Also One of the Dirtiest. Fix It. (2023). In Evergreen Action. <https://www.evergreenaction.com/blog/the-biggest-public-utility-in-the-us-is-also-one-of-the-dirtiest>
- 14 Protect our Aquifer. (n.d.-b). In *www.protectouraquifer.org*. Retrieved July 25, 2024, from <https://www.protectouraquifer.org/issues/tva-power-supply-decision-poa-v-tva>
- 15 Protect our Aquifer. (n.d.-a). In *www.protectouraquifer.org*. Retrieved July 25, 2024, from <https://www.protectouraquifer.org>
- 16 Memphis Community Against Pollution (MCAP). (n.d.). In *Memphis Community Against Pollution (MCAP)*. Retrieved July 25, 2024, from <https://www.memphisacap.org>
- 17 Memphis 3.0: Memphis Area Climate Action Plan. (n.d.). City of Memphis and Shelby County. Retrieved July 24, 2024, from https://shelbycountyttn.gov/DocumentCenter/View/37431/Memphis-Area-Climate-Action-Plan-2019-FINAL_4_JANUARY-2020?bidId=
- 18 Memphis Area Climate Action Plan. (n.d.). In DEVELOP 901. Retrieved July 25, 2024, from <https://www.develop901.com/osr/memphisClimateActionPlan>
- 19 Bloomberg Philanthropies Announces \$200 Million Commitment to Support U.S. Mayors Taking on Climate Change. (n.d.). In Bloomberg Philanthropies. Retrieved July 25, 2024, from <https://www.bloomberg.org/press/bloomberg-philanthropies-announces-200-million-commitment-to-support-u-s-mayors-taking-on-climate-change>
- 20 Mid-South Priority Climate Action Plan (February 2024) in U.S. Environmental Protection Agency. Retrieved July 24, 2024 from <https://www.epa.gov/system/files/documents/2024-02/memphis-tn-pcap.pdf>
- 21 The Memphis and Shelby County Office of Sustainability & Resilience (OSR) led a three-phase stakeholder effort from September 2023 to February 2024. The first phase involved researching and analyzing existing emissions reduction plans, compiling the simplified 2019 GHG emissions inventory, and conducting a preliminary analysis of low-income and disadvantaged communities. This research informed the second phase, which focused on quantifying GHG reduction measures and analyzing the benefits and costs of proposed projects. During this phase, stakeholders participated in online workshops and surveys, and ultimately delivered recommendations for the PCAP in the final phase.
- 22 Mid-South Priority Climate Action Plan (February 2024) in U.S. Environmental Protection Agency. Retrieved July 24, 2024 from <https://www.epa.gov/system/files/documents/2024-02/memphis-tn-pcap.pdf>
- 23 RAISE 2024 Awards. (2024). <https://www.transportation.gov/policy-initiatives/raise/raise-2024-awards>
- 24 City of Memphis to receive \$21.8 million grant to finish Wolf River Greenway. (2024). In FOX13 Memphis. https://www.fox13memphis.com/news/city-of-memphis-to-receive-21-8-million-grant-to-finish-wolf-river-greenway/article_227565d0-3269-11ef-bc41-d38a725e9d6f.html
- 25 City of Memphis. (2024). Memphis Zoo Receives \$670,000 Grant from U.S. Department of Energy to Grow Sustainability Initiatives. In The City of Memphis. <https://www.memphistn.gov/memphis-zoo-receives-670000-grant-from-u-s-department-of-energy-to-grow-sustainability-initiatives>
- 26 Solar for All. (n.d.). In *www.tn.gov*. Retrieved July 25, 2024, from <https://www.tn.gov/environment/program-areas/energy/state-energy-office--seo-/programs-projects/programs-and-projects/solar-for-all.html>
- 27 Solar funding unlocks opportunities for the South. (2024). In *Southern Environmental Law Center*. Southern Environmental Law Center. <https://www.southernenvironment.org/news/solar-funding-unlocks-transformational-opportunities-for-the-south>
- 28 U.S. Environmental Protection Agency. (2023). Solar for All. In *www.epa.gov*. <https://www.epa.gov/greenhouse-gas-reduction-fund/solar-all>
- 29 Capital Good Fund. (2024, July 18). *WELCOME TO GEORGIA BRIGHT - Capital Good Fund*. <https://capitalgoodfund.org/bright/>
- 30 *SC Solar for All*. (n.d.). South Carolina Office of Resilience.
- 31 Emory's Rollins School of Public Health. (2024, Spring). The Burden of Brunswick. Emory University. <https://sph.emory.edu/features/2024/04/brunswick-community-engaged-research/>
- 32 Hasemyer, D. (2020, November 29). In Georgia, 16 Superfund Sites Are Threatened by Extreme Weather Linked to Climate Change. *Inside Climate News*. <https://insideclimatenews.org/news/29112020/superfund-georgia-senate-runoffs-climate-change-trump/>
- 33 Landers, M. (2024, March 21). *A closer look: Glynn's Superfund sites*. The Current. <http://thecurrentga.org/2024/03/21/a-closer-look-glynn-superfund-sites/>

- 34 Glynn Environmental Coalition. (n.d.). *Safe Seafood for Glynn County*. Glynn Environmental Coalition. Retrieved July 25, 2024, from <https://www.glynnenvironmental.org/safeseafood>
- 35 Schindler, A. (2023, September 20). *Blood of longtime Brunswick residents contains high levels of hazardous chemicals, study says*. First Coast News. <https://www.firstcoastnews.com/article/tech/science/environment/brunswick-residents-blood-contains-hazardous-chemicals-many-times-higher-than-average-american-study-shows/77-67400219-4688-48e5-91c0-4f19ba07ad1d>
- 36 Calculated using data from the [Climate Program Portal's Outcomes Dashboard](#) (2024) from Atlas Public Policy. Only includes awarded funding. Does not include loans or tax credits.
- 37 National Fish and Wildlife Foundation. (2022, November). *National Coastal Resilience Fund*. <https://www.nfwf.org/sites/default/files/2022-12/NFWF-NCRF-20221129-Nov-GS.pdf>
- 38 *Lanier Boulevard Flood Resiliency through Acquisition Project*. (n.d.). NOAA Office for Coastal Management. Retrieved July 25, 2024, from <https://coast.noaa.gov/states/stories/lanier-boulevard.html>
- 39 Cohen, L. (2023). Sea level rise: Scientists find unprecedented rates along some U.S. coasts that's 3 times higher than global average - CBS News. In www.cbsnews.com. <https://www.cbsnews.com/news/sea-level-rise-us-coasts-higher-global-average>
- 40 Conservation of Coastal Pine Savanna and Emergent Marsh Habitat on West Fowl River, Mississippi Sound in Mobile County, Alabama. (n.d.). In coast.noaa.gov. Retrieved July 25, 2024, from <https://coast.noaa.gov/states/stories/west-fowl-river.html>
- 41 National Coastal Resilience Fund. (2024). In *NFWF*. <https://www.nfwf.org/programs/national-coastal-resilience-fund>
- 42 Association of State Floodplain Managers (2022). *NFWF and NOAA Announce \$7.7 Million in Conservation Grants to Support Coastal Resilience Projects*. <https://www.floods.org/news-views/flood-mitigation/nfwf-and-noaa-announce-7-7-million-in-conservation-grants-to-support-coastal-resilience-projects>
- 43 Upper Mattaponi Indian Tribe's Return to the River. (n.d.). In coast.noaa.gov. Retrieved July 25, 2024, from <https://coast.noaa.gov/states/stories/ancestral-lands.html>
- 44 US EPA. (2024, July 8). *EJScreen: Environmental Justice Screening and Mapping Tool* [Collections and Lists]. <https://www.epa.gov/ejscreen>
- 45 Blau, M. (2022, September 1). *The Tragedy of North Birmingham*. ProPublica. <https://www.propublica.org/article/bluestone-jim-justice-north-birmingham>
- 46 US EPA. (n.d.). *35TH AVENUE* Site Profile [Overviews and Factsheets]. Retrieved July 25, 2024, from <https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.cleanup&id=0410750>
- 47 Blau, M. (2022, September 1).
- 48 The area includes a hazardous waste site formerly occupied by the 35th Avenue coke plant, which emitted significant pollution, including [carcinogenic chemicals](#). High levels of lead, arsenic, and benzo(a)pyrene have been found at the site, prompting [ongoing EPA efforts](#) to remove contaminated soil from nearby neighborhoods and schools.
- 49 Lavelle, M. (2023, July 19). Birmingham Public Transit Inches Forward With Federal Help, and No State Funding. *Inside Climate News*. <https://insideclimatenews.org/news/19072023/alabama-mass-transit-funding/>
- 50 US EPA. (2021, December). *2021 Environmental Justice Small Grants Program: Project Summaries by EPA Region*. https://www.epa.gov/system/files/documents/2021-12/2021-selected-ejsg-project-descriptions_0.pdf
- 51 Edgemon, E. (2018, March 6). *Birmingham to modernize, improve transportation network with complete streets*. AL.Com. https://www.al.com/news/birmingham/2018/03/birmingham_to_modernized_impro.html
- 52 Lavelle, M. (2023, July 19).
- 53 *BRT: Project Information*. (n.d.). Birmingham, AL. Retrieved July 25, 2024, from <https://www.birminghamal.gov/brt-project-information>
- 54 Calculated using data from the [Climate Program Portal's Outcomes Dashboard](#) (2024) from Atlas Public Policy.
- 55 City of Birmingham, Alabama. (2023). *FY2023 RAISE Grant Application: Birmingham Civil Rights Crossroads: Reconnecting Historic Neighborhoods Through Active Mobility*. <https://www.birminghamal.gov/wp-content/uploads/2023/03/BHM-RAISE-FY-2023-APPLICATION.pdf>
- 56 *Ibid.*
- 57 *Ibid.*
- 58 City of Birmingham, Alabama. (2024, March). *Birmingham-Hoover Metropolitan Statistical Area Priority Climate Action Plan*. <https://www.epa.gov/system/files/documents/2024-03/city-of-birmingham-pcap.pdf>
- 59 Justice40 Initiative. (n.d.). In *Environmental Justice*. Retrieved July 25, 2024, from <https://www.whitehouse.gov/environmentaljustice/justice40>
- 60 Uyeda, R. L. (2023, October 4). *In unincorporated communities, climate change worsens inequalities for BIPOC*. Prism. <http://prismreports.org/2023/10/04/unincorporated-communities-climate-inequity-bipoc/>
- 61 US EPA. (2023, October 25). *Biden-Harris Administration announces more than \$2.4 million for Environmental Justice Projects in Communities Across Tennessee as part of investing in America agenda* [News Release]. <https://www.epa.gov/newsreleases/biden-harris-administration-announces-more-24-million-environmental-justice-projects-0>
- 62 US EPA. (2023, October). *2023 Environmental Justice Collaborative Problem Solving (EJCPS) Program Project Summaries*. https://www.epa.gov/system/files/documents/2023-10/2023-the-environmental-justice-collaborative-problem-solving-ejcps-program-project-summaries_0.pdf
- 63 US EPA. (2023, October 25).
- 64 *Clafin University Receives More Than \$4 Million Grant from U.S. Department of Energy to Support STEM Programs*. (2022, November 14). Clafin University. [https://www.clafin.edu/news-events/news/2022/11/14/clafin-university-receives-more-than-\\$4-million-grant-from-u.s.-department-of-energy-to-support-stem-programs](https://www.clafin.edu/news-events/news/2022/11/14/clafin-university-receives-more-than-$4-million-grant-from-u.s.-department-of-energy-to-support-stem-programs)
- 65 Sharp, K. M., Thompson, J., & Smith-Lewis, E. (2024, April 1). *HBCUs as Key Actors in Climate Justice: Sustainability on Campus and in Communities*. Higher Education Today. <https://www.higheredtoday.org/2024/04/01/hbcus-as-key-actors-in-climate-justice/>
- 66 Cail, C., & Davis, J. (2022, November 9). *Bucksport Community Finding Solutions to Flooding*. American Rivers. <https://www.americanrivers.org/2022/11/bucksport-community-finding-solutions-to-flooding/>
- 67 *Ibid.*
- 68 *Inflation Reduction Act Community Change Grants Program* | US EPA. (2024, July 24). US EPA. <https://www.epa.gov/inflation-reduction-act/inflation-reduction-act-community-change-grants-program>
- 69 Greenhouse Gas Emissions. (n.d.). In www.knoxvilletn.gov. Retrieved July 25, 2024, from https://www.knoxvilletn.gov/government/city_departments_offices/sustainability/climate_change/greenhouse_gas_emissions

- 70 Sustainability. (n.d.). In *www.knoxvilletn.gov*. Retrieved July 25, 2024, from https://www.knoxvilletn.gov/government/city_departments_offices/sustainability
- 71 *Knoxville, TN Metropolitan Statistical Area: Priority Climate Action Plan*. (2024). U.S. Environmental Protection Agency. <https://www.epa.gov/system/files/documents/2024-03/knoxville-msa-pcap.pdf>
- 72 Capps, A. (2019). Knoxville air quality ranks among nation's worst as rest of Tennessee's air improves. In *Knoxville News Sentinel*. <https://www.knoxnews.com/story/news/local/2019/04/24/knoxville-air-quality-ranking-american-lung-association-state-of-the-air/3561444002>
- 73 Knoxville Environment Equity Report. (n.d.). In *Our America*. Retrieved July 25, 2024, from <https://ouramericaabc.com/equity-report/knoxville/environment>
- 74 Knoxville Community Development Corporation (n.d.). *Reconnecting Communities and Neighborhoods Grant Program: Reconnecting Knoxville*. https://www.kcdc.org/wp-content/uploads/2024/03/dt4subqnq725_narrative_capital_construction_grant.pdf
- 75 Whetstone, T. (2020a). Knoxville Vice Mayor Gwen McKenzie proposes \$100 million to make amends for urban removal. In *Knoxville News Sentinel*. <https://www.knoxnews.com/story/news/politics/2020/12/10/knoxville-vice-mayor-gwen-mckenzie-proposes-amends-urban-removal/6485951002>
- 76 <https://www.knoxnews.com/story/news/politics/2020/12/15/knoxville-urban-removal-resolution/3914003001>
- 77 Whetstone, T. (2021). Knoxville finalizes task force that will shape urban removal funding for Black residents. In *Knoxville News Sentinel*. <https://www.knoxnews.com/story/news/politics/2021/07/28/knoxville-finalizes-task-force-on-urban-removal-funding-black-residents/5394477001>
- 78 Feinberg, A. (2023). \$4 million in federal money will bolster Knoxville's tree cover. Here's where. In *Knoxville News Sentinel*. <https://www.knoxnews.com/story/news/environment/2023/11/02/knoxville-will-add-more-hundreds-more-trees-with-federal-grant-money/71410385007>
- 79 *Urban and Community Forestry Program*. (n.d.). U.S. Department of Agriculture Forest Service. Retrieved July 24, 2024, from <https://www.fs.usda.gov/managing-land/urban-forests/ucf>
- 80 U.S. Department of Agriculture Forest Service. (2023, September 14). *USDA invests \$1 billion for nearly 400 projects to expand access to trees and green spaces in communities and neighborhoods nationwide through Investing in America Agenda* [Press release]. Retrieved July 24, 2024, from <https://www.fs.usda.gov/about-agency/newsroom/releases/usda-invests-1-billion-nearly-400-projects-expand-access-trees-and>
- 81 Feinberg, A. (2023). \$4 million in federal money will bolster Knoxville's tree cover. Here's where. In *Knoxville News Sentinel*. <https://www.knoxnews.com/story/news/environment/2023/11/02/knoxville-will-add-more-hundreds-more-trees-with-federal-grant-money/71410385007>
- 82 UT Team Awarded Grant to Increase Tree Canopy, Reduce Stormwater Runoff. (n.d.). In *Department of Civil and Environmental Engineering*. Retrieved July 25, 2024, from <https://cee.utk.edu/ut-team-awarded-grant-to-increase-tree-canopy-reduce-stormwater-runoff>
- 83 Rodger, J. (2023). 'Safer roads for all' Knoxville receives \$8M to revitalize Magnolia Avenue area. In ABC News: *WATE 6*. <https://www.wate.com/news/knox-county-news/knoxville-receives-8m-to-help-accident-prone-areas>
- 84 *2023 SS4A Full Award List*. (n.d.). Retrieved July 25, 2024, from <https://www.transportation.gov/grants/ss4a/2023-full-award-list>
- 85 Vision Zero. (n.d.). In *www.knoxvilletn.gov*. Retrieved July 25, 2024, from https://www.knoxvilletn.gov/government/city_departments_offices/engineering/transportation_engineering_division/visionzero
- 86 How Knoxville is working to eliminate deaths on city roads by 2040. (2024). In *WATE 6 On Your Side*. <https://www.wate.com/news/knox-county-news/knoxville-vision-zero-no-traffic-fatalities-by-2040>
- 87 *2023 SS4A Full Award List*. (n.d.). Retrieved July 25, 2024, from <https://www.transportation.gov/grants/ss4a/2023-full-award-list>
- 88 *FY23 FTA Bus and Low- and No-Emission Grant Awards*. (2024). <https://www.transit.dot.gov/funding/grants/fy23-fta-bus-and-low-and-no-emission-grant-awards>
- 89 Romero, K. (2024, February 15). *History - VPR*. VPR. <https://vapassengerrailauthority.org/about/history/#:~:text=In%20line%20with%20this%2C%20Virginia,predicted%20to%20be%2030%2C000%20passengers.>
- 90 *VirginiaPublicRail_2023.pdf* (southernenvironment.org)
- 91 The White House. (2023). FACT SHEET: President Biden Announces Billions to Deliver World-Class High-Speed Rail and Launch New Passenger Rail Corridors Across the Country. In *The White House*. <https://www.whitehouse.gov/briefing-room/statements-releases/2023/12/08/fact-sheet-president-biden-announces-billions-to-deliver-world-class-high-speed-rail-and-launch-new-passenger-rail-corridors-across-the-country>
- 92 *FY22-23 Federal-State Partnership (National) Grant Program selections*. (2024). U.S. Department of Transportation Federal Railroad Administration. Retrieved July 24, 2024, from <https://railroads.dot.gov/elibrary/fy22-23-FSP-National-rail-program-project-fact-sheets>
- 93 Biden Administration Awards NC Historic \$1.09 Billion Grant for S-Line, Faster Raleigh-Richmond Passenger Rail. (2023). In *NC Gov. Cooper*. <https://governor.nc.gov/news/press-releases/2023/12/08/biden-administration-awards-nc-historic-109-billion-grant-s-line-faster-raleigh-richmond-passenger>
- 94 *FY22-23 Federal-State Partnership (National) Grant Program selections*. (2024). U.S. Department of Transportation Federal Railroad Administration. Retrieved July 24, 2024, from <https://railroads.dot.gov/elibrary/fy22-23-FSP-National-rail-program-project-fact-sheets>
- 95 Rail Division. (2024). *Rail Division Raleigh to Richmond (R2R) program: S-Line Project*. <https://www.ncdot.gov/divisions/rail/s-line-projects/raleigh-richmond/Documents/r2r-s-line-project-january-2024.pdf>
- 96 Rail Division. (2024). *Rail Division Raleigh to Richmond (R2R) program: S-Line Project*. <https://www.ncdot.gov/divisions/rail/s-line-projects/raleigh-richmond/Documents/r2r-s-line-project-january-2024.pdf>
- 97 *2017 Virginia State Rail Plan*. (2017). Virginia Department of Rail and Public Transportation. Retrieved July 24, 2024, from <https://tile.loc.gov/storage-services/master/gdc/gdcebookspublic/20/19/45/23/17/2019452317/2019452317.pdf>
- 98 *Biden-Harris Administration Announces \$1.4 Billion in Infrastructure Funding for 70 Projects That Will Improve Rail Safety, Strengthen Supply Chains, and Add Passenger Rail Service*. (n.d.). Retrieved July 25, 2024, from <https://www.transportation.gov/briefing-room/biden-harris-administration-announces-14-billion-infrastructure-funding-70-projects>
- 99 Anderson, K. (2023). Amtrak Awarded Nearly \$200M in Federal Grants. In *Amtrak Media*. <https://media.amtrak.com/2023/09/amtrak-awarded-nearly-200m-in-federal-grants>
- 100 *Application for Federal Assistance SF-424* (2022). Amtrak.. Retrieved July 25, 2024, from <https://www.amtrak.com/content/dam/projects/dotcom/english/public/documents/corporate/foia/Submitted-Core-Application-Gulf-Coast.pdf>
- 101 *Groups reach settlement in South Carolina Duke Energy rate increase case*. (2024, March 17). Southern Environmental Law Center. Retrieved July 26, 2024, from <https://www.southernenvironment.org/press-release/groups-reach-settlement-in-south-carolina-duke-energy-rate-increase-case/>
- 102 Swartz, K. E. (2021, December 8). *How electricity deepens the South's racial divide*. E&E News by POLITICO. <https://www.eenews.net/articles/how-electricity-deepens-the-souths-racial-divide/>

- 103 *Low-Income Household Energy Burden Varies Among States — Efficiency Can Help In All of Them.* (n.d.). U.S. Department of Energy Office of Energy Efficiency and Renewable Energy. Retrieved July 26, 2024, from <https://www.energy.gov/scep/slsc/articles/low-income-household-energy-burden-resource-summary>
- 104 *Columbia, South Carolina.* (n.d.). Energy.gov. <https://www.energy.gov/communitiesLEAP/columbia-south-carolina>
- 105 *Sustainability Ratings - CPAC Columbia.* (2024, May 17). CPAC Columbia. <https://cpac.columbiasc.gov/leed/>
- 106 Central Midlands Council of Governments, Fleming, J., Lagunes Arauz, J., & Sprouse, G. (2024). *Central Midlands Priority Climate Action Plan* (pp. 1–59). <https://www.epa.gov/system/files/documents/2024-03/columbia-sc-pcap.pdf>
- 107 About CPAC. (n.d.). In *CPAC Columbia*. Retrieved July 25, 2024, from https://cpac.columbiasc.gov/about-cpac_
- 108 LEAP Pilot Communities. (n.d.). In *Energy.gov*. Retrieved July 25, 2024, from <https://www.energy.gov/communitiesLEAP/leap-pilot-communities>
- 109 Cities for Smart Surfaces. (n.d.). In *Smart Surfaces Coalition*. Retrieved July 25, 2024, from <https://smartsurfacescoalition.org/cities-for-smart-surfaces>
- 110 U.S. Environmental Protection Agency. (2024). Biden-Harris Administration announces nearly \$1B in awards for clean school buses across the nation as part of Investing in America Agenda. In *www.epa.gov*. <https://www.epa.gov/newsreleases/biden-harris-administration-announces-nearly-1b-awards-clean-school-buses-across>
- 111 Green, M. (2024). SC receiving \$66M for electric school buses from the federal government. In <https://www.live5news.com/2024/02/13/sc-receiving-66m-electric-school-buses-federal-government>
- 112 U.S. Environmental Protection Agency. (2022). Clean School Bus Program Awards. In *www.epa.gov*. <https://www.epa.gov/cleanschoolbus/clean-school-bus-program-awards>
- 113 Building Resilient Infrastructure and Communities. (2024). In *FEMA.gov*. <https://www.fema.gov/grants/mitigation/building-resilient-infrastructure-communities>
- 114 *Bipartisan Infrastructure Law Provides Historic Levels of Funding for Resilience Projects Nationwide.* (n.d.). Federal Emergency Management Agency. Retrieved July 24, 2024, from <https://www.fema.gov/fact-sheet/bipartisan-infrastructure-law-provides-historic-levels-funding-resilience-projects>
- 115 Building Resilient Infrastructure and Communities Grant Program FY 2022 Sub Application and Selection Status. (2024). In *FEMA.gov*. <https://www.fema.gov/grants/mitigation/building-resilient-infrastructure-communities/after-apply/fy22-status>
- 116 Building Resilient Infrastructure and Communities Grant Program FY 2022 Subapplication and Selection Status. (2024). In *FEMA.gov*. <https://www.fema.gov/grants/mitigation/building-resilient-infrastructure-communities/after-apply/fy22-status>
- 117 *North Carolina: Flood Protection with Improved Drainage Infrastructure.* (2023, March 28). FEMA.gov. <https://www.fema.gov/case-study/fayetteville-north-carolina>
- 118 *Virginia: Virginia Department of Emergency Management - Green Power Mobile Energy Storage System.* (2023, August 28). FEMA.gov. <https://www.fema.gov/case-study/virginia-virginia-department-emergency-management-green-power-mobile-energy-storage>
- 119 McNulty, S. G., Hoffman, J. S., Brown, C., Dello, K. D., Knox, P. N., Lascurain, A., Mickalonis, C., Mitchum, G. T., Rivers, L., Iii, Schaefer, M., Smith, G. P., Camp, J. S., & Wood, K. M. (2023). Southeast. <https://nca2023.globalchange.gov/chapter/22>
- 120 Justice40 Initiative. (n.d.). In *Environmental Justice*. Retrieved July 25, 2024, from <https://www.whitehouse.gov/environmentaljustice/justice40>
- 121 U.S. Environmental Protection Agency (2024) <https://www.epa.gov/environmentaljustice/environmental-justice-thriving-communities-grantmaking-program>
- 122 U.S. Environmental Protection Agency (2023). Inflation Reduction Act Community Change Grants Program. <https://www.epa.gov/inflation-reduction-act/inflation-reduction-act-community-change-grants-program>
- 123 The White House. (2024, February 28). Justice40 Initiative | Environmental Justice | The White House. <https://www.whitehouse.gov/environmentaljustice/justice40/>
- 124 Calculated using data from the [Climate Program Portal's Outcomes Dashboard](#) (2024) from Atlas Public Policy. Includes both awarded funding and allocated funding. Allocated funding is formula funding where allocations for state and local governments have been announced. Does not include loans or tax credits.
- 125 U.S. Census Bureau. (2020). State Population Totals and Components of Change: 2020-2023. In *Census.gov*. Retrieved July 25, 2024, from <https://www.census.gov/data/tables/time-series/demo/popest/2020s-state-total.html>
- 126 Calculated using data from the [Climate Program Portal's Outcomes Dashboard](#) (2024) from Atlas Public Policy.



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