Raleigh Community Climate Action Plan Implementation Report

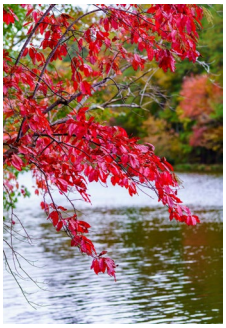
Office of Sustainability

September 2025

raleighnc.gov/climate-action

Raleigh


HANDMADE




DRIVE ON SUNSHINE
BEAM
Raleigh

Director's Message

When navigating a world of constant change, what continues to inspire me is the resilience of our community, and the power of collective action. **The heart of Raleigh is its people**. No matter what life throws at us, we have created strong foundations that we continue to build on.

People and collaboration have always been the center of our sustainability work, and in times of great change, there is no clearer demonstration of why that matters. If there's anything we learn in our work- focused on people, the environment, and building community resilience, it is that people in Raleigh show up for each other and the things they care about.

Both professionally and personally, this past year has been full of change for me. I became a mom, and a village of people- those I know well and even those I just met- have shown me the power of community in ways I will be eternally grateful for. I've also been reflecting on the amazing people I get to work with- both in the community and City. I'm humbled to know and witness so many people coming together and leading change. It takes a lot of hard work, grit, dedication, stubbornness, innovation, wisdom, and collaboration. There are countless partners throughout Raleigh that put countless (and often thankless) hours into doing things *above and beyond* because of their passion for creating a welcoming, thriving, and sustainable community.

The community helped us create Raleigh's award-winning and nationally leading Community Climate Action Plan (CCAP), which was born in a time of great hardship during the pandemic and social unrest, and the community continues to come together to implement high impact strategies. Our work together was built to be aspirational, innovative; and built to last and to inspire. Just a few examples of what we've done:

- **Employed over 60 individuals experiencing homelessness** on **95+ beautification projects** across Raleigh, removing **over 50,000 lbs. of litter** in collaboration with local non-profits and over 16 City departments.
- Trained **over 100 residents** and supported neighborhood action projects in climate resilience focused on heat and flooding, Raleigh's top climate impacts.
- Built close to **600 affordable homes in Raleigh to sustainability best practices** for energy efficiency and ADA access for aging in place since 2001. These homes guarantee residents low-cost energy bills for 2 years and provide hands-on education to residents and the contractors who build these homes.
- Raleigh leads the way in **increasing the community's access to clean energy**: in setting goals to electrify its almost 5,000 fleet of vehicles and equipment over the next 10 years with innovative approaches to shared charging; and installing solar on City facilities and providing free solar to community members. The Raleigh region has seen an **over 700% increase in solar** over the past 10 years, and an over **400% increase in electric vehicle charging stations** in the past 12 years.

When we come together, we can continue to set aspirational goals and make impactful and meaningful change happen in our community. **We must continue to be courageous and kind in the face of great challenges**. My favorite poet Maya Angelou said "*Without courage we cannot practice any other virtue with consistency. We can't be kind, true, merciful, generous, or honest.*" People across Raleigh love this community and continue to lead work that inspires us to have the courage we need to do challenging things. THANK YOU to all of you out there who are continuing to be part of the change we want to see in this world.

Megan Anderson

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Introduction

In May 2019, Raleigh's City Council set a goal to reduce community-wide greenhouse gas (GHG) emissions 80% by the year 2050. In 2021, City Council adopted Raleigh's Community Climate Action Plan (CCAP). CCAP was one of the first community-focused climate plans in the nation to focus not only on reducing community-wide GHG emissions, but also to address social impact and community health, and to build community resilience to the impacts of climate change. CCAP focuses on positive social impacts and resilience through the design and implementation of all strategies, which include addressing Raleigh's top climate impacts: heat and flooding, as high-impact priority areas.

Climate action work is taking place in many areas of the City of Raleigh government, as well as by many partners across the Raleigh community. The Implementation Report tracks the progress of Raleigh's Community Climate Action Plan (CCAP). This third annual edition of the report demonstrates Raleigh's continued commitment to advancing climate solutions through our growing portfolio of climate actions and innovations.

The City of Raleigh has addressed climate change for many years, even prior to the adoption of CCAP in 2021. Raleigh has a long history of adopting clean and energy-efficient technologies, building solar installations, promoting climate-resilient development, utilizing nature-based solutions in land-use planning and design, and expanding multi-modal transportation options. Investments of time, resources, and innovations by the City, in partnership with businesses, nonprofit partners, and community members will continue to pave the way for climate action. The City of Raleigh continues to demonstrate - both locally and nationally - the importance of sustainability in Raleigh's growth and development.

Raleigh continues to create opportunities for **residents, community groups, and businesses** to take climate action and build greater resilience:

Remove barriers.
The City enables community champions to take climate action by making it easier, faster and cheaper to obtain permits for projects that complete renewable energy installations, green stormwater infrastructure, and energy efficiency improvements.

Enable and facilitate action.
The City provides support and resources to community members by creating foundational projects that empower action; piloting innovative ideas and technologies; continuing to grow partnerships and collaboration; and by leveraging and providing grant funding, education, and outreach support that increases access and empowers local climate champions to make a difference within their communities.

Lead by example.
The City showcases climate action in public projects and outreach efforts to demonstrate leadership, effectiveness, and feasibility. The CCAP strategies are designed so that any person or organization in Raleigh can identify a path toward climate action and contribute in personally meaningful ways.

The City of Raleigh government operations produce fewer than 2% of community GHG emissions. Meeting our GHG reduction goals will require a whole community approach to take collective action that amounts to substantial impact. We're proud to take the necessary steps as a local government while supporting the meaningful contributions of our community. We will continue to track Raleigh's collective impact both through the services we offer, the partnerships we develop, and the publication of this annual report to track measurable progress.

Tracking our Progress into the Future

This report includes performance data achieved by the CCAP strategies in action. We continue to develop additional performance measures each year. Sustainability has established many partnerships with City departments, local governments, nonprofit organizations, and community-based organizations to collect data to track community-wide progress that celebrates our collective climate impact. As a member of the North Carolina Sustainable Energy Association (NCSEA), Raleigh's Office of Sustainability has partnered with NCSEA to provide data specific to clean energy and transportation so that we can showcase measurable impact. Climate action stories are highlighted throughout this report.

Greenhouse Gas Reduction Progress

Raleigh has something to celebrate! Each year, we're moving closer toward reaching our greenhouse gas (GHG) emissions reduction goal. GHG emissions inventories are performed on a five to seven-year cycle. GHG projections are a high-level measure to demonstrate progress toward reaching Raleigh's GHG goal. This measurement does not shift significantly from year to year. The results of Raleigh's latest GHG emissions inventory were released in 2024 (using most recent data from 2022). The results are highlighted below and throughout this report. The chart below shows the percentages of total emissions by category, with transportation making up slightly more than half of the total.

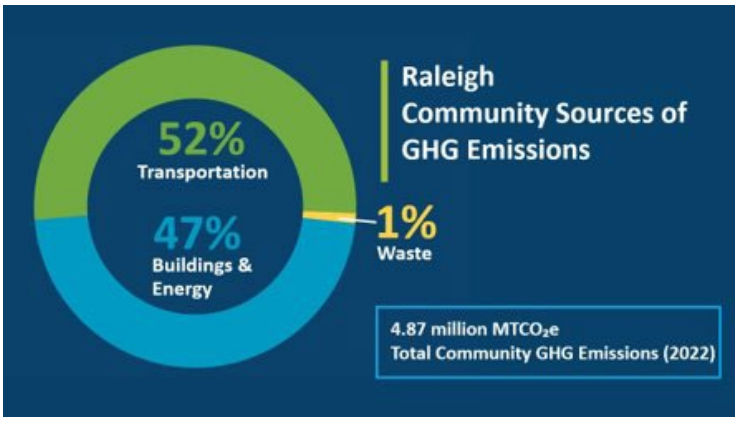


Figure 1. GHG Emissions by Sector

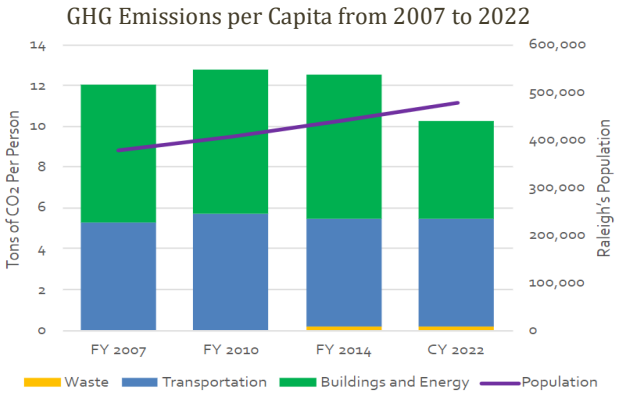


Figure 2. GHG Emissions Per Capita

Raleigh is proud to lead the way for municipalities contributing to collective impact. Overall per capita GHG emissions have dropped by 21% from the baseline year of 2007 and maintain a lower per capita emission result than many of our peer cities across the state and country.

Though Raleigh's population has increased significantly since we started tracking GHG emissions in 2007, emissions per person have decreased significantly. From 2014 to 2022, overall emissions dropped by 11% and per capita GHG emissions decreased by 18%. In the buildings and energy sector, per capita electricity use in buildings dropped by 7%, though total electricity use rose by 1%. Per capita, energy use in buildings GHGs dropped by 32%, due to a cleaner energy grid and more energy efficiency, primarily with lighting and HVAC improvements. Per capita GHG emissions stayed flat from 2014-2022 in the transportation sector, while total emissions increased by 8%. Vehicle miles traveled (VMT) continues to increase in Raleigh. Though the number of electric vehicles is also rising, the growing number of larger vehicles cancels out those gains.

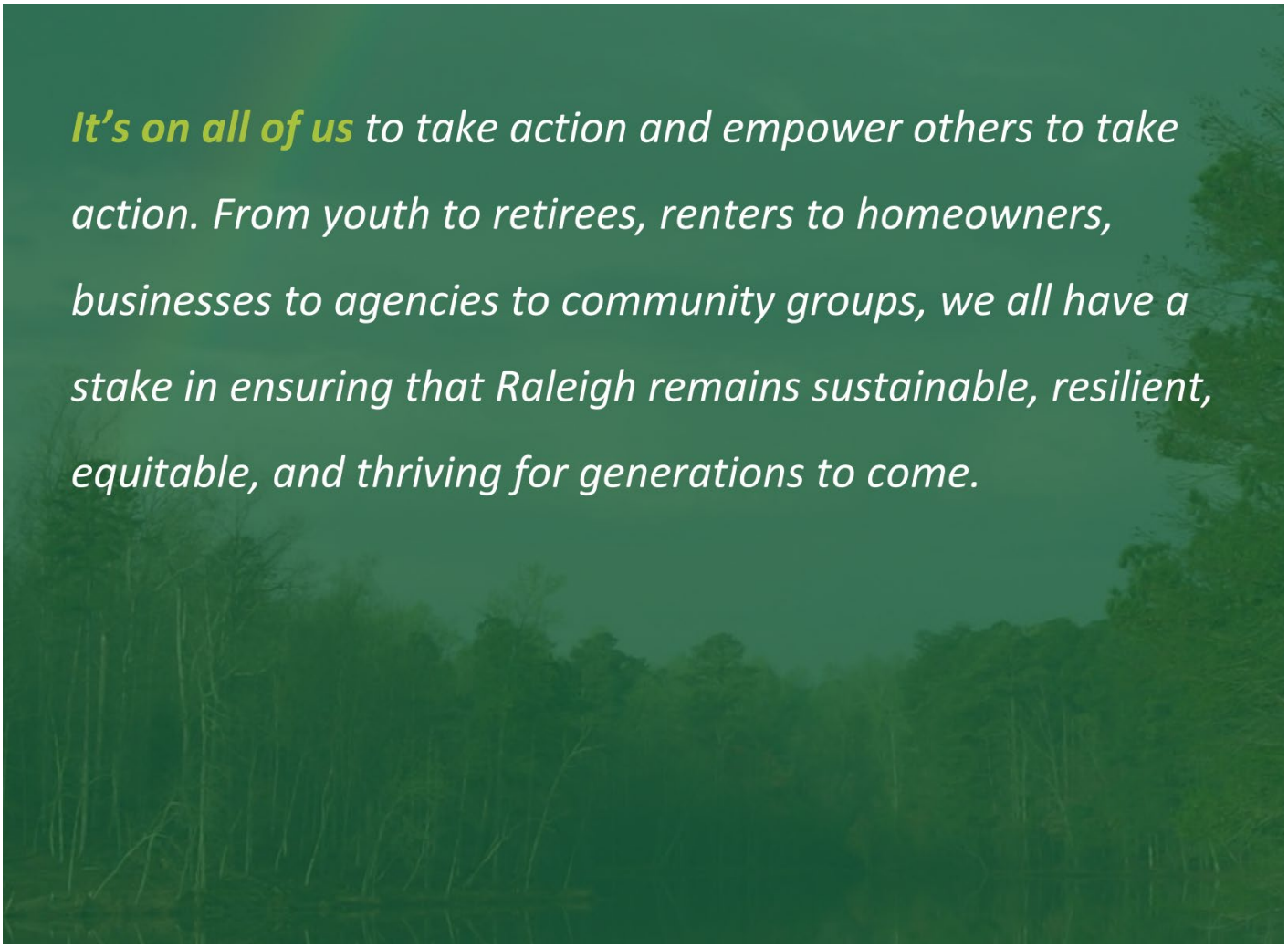
The substantial GHG improvements overall mean that our high-impact CCAP strategies are working. We must continue to identify new means of reducing greenhouse gas emissions while considering co-benefits and tradeoffs of

these decisions. Climate action does more than reduce GHG emissions. It has the potential to promote social advancement, environmental justice, and community health for residents across our city.

Climate Action into the Future

This report outlines our upcoming plans and projects, which will continue to advance Raleigh's GHG emission reduction goals while promoting positive social impact and building community resilience to the impacts of climate change. Climate initiatives may take many years to feel the positive effects. A long-standing commitment to climate action demonstrates the City's steadfast commitment to innovation, resilience, and promoting community health and safety.

As we develop future updates, we will continue to uplift our community partners joining Raleigh in stewarding climate action. Please continue to reach out to **Sustainable.Raleigh@raleighnc.gov** and share your climate action work with us for a chance to be featured.



Community Climate Action Plan Summary

This section will provide a summary of the Community Climate Action Plan (CCAP) to provide background on the CCAP strategies and their impacts.

The three main objectives of CCAP are:

- to **reduce greenhouse gas emissions** (GHGs) to meet Raleigh's community-wide goal of an 80% reduction in GHG emissions by the year 2050;
- to **build community resilience** to the impacts of climate change; and
- to **address environmental justice, community health, and economic and social advancement,** across the Raleigh community.

Effective climate action requires the contribution of the entire community, and CCAP identifies impactful strategies to meet the three objectives above.

CCAP actions are organized into three strategy areas:

1. **Buildings and Energy**: *how we generate and use energy to power buildings*
2. **Transportation and Land Use**: *how we design our city and traverse within it*
3. **Resilience and Cross-Cutting**: *how we prepare our community for climate change; how we deal with waste; and how we embed funding, outreach, innovation, and social advancement into all CCAP strategies*

The Resilience and Cross-Cutting strategy area of CCAP incorporates 'cross-cutting' approaches that should be embedded throughout the implementation of all CCAP strategies. These high-impact approaches incorporate *social and economic advancement, funding, education,* and *innovation* into resilience-building strategy areas. This important cross-cutting work is highlighted throughout the CCAP Implementation Report categories. Further examples are highlighted in the final Resilience & Cross-Cutting section of this report.

Reducing GHG Emissions

Raleigh's GHG Emissions Inventory is performed on a five-to-seven-year cycle.

Data reflected from the 2022 emissions inventory is the most up-to-date emission study and provides the baseline to measure our progress on CCAP strategies.

The primary sources of community GHG emissions in Raleigh are Transportation (52%), Buildings & Energy (47%), and Waste (1%).

For more specific information about these categories, review Raleigh's Community Climate Action Plan, Chapters 5-7.

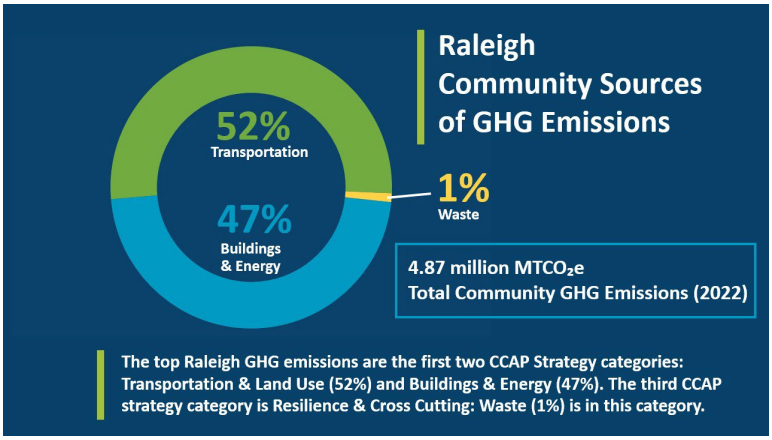


Figure 3. Raleigh's Total Community GHG Emissions (2022)

Buildings and Energy

This chapter features strategies to reduce energy usage and promote a transition to renewable energy generation:

- Energy efficiency strategies aim to ensure that buildings conserve energy with efficient systems and building envelopes.
- Energy supply strategies relate to the mix of fuels in the Duke Energy power grid. Strategies to transition to cleaner and more renewable sources of energy at the grid level largely relate to Duke Energy meeting its own climate goals.
- Renewable energy strategies encourage increasing access to solar, battery storage, and geothermal projects, as well as the uptake of other green energy technologies at the community level.

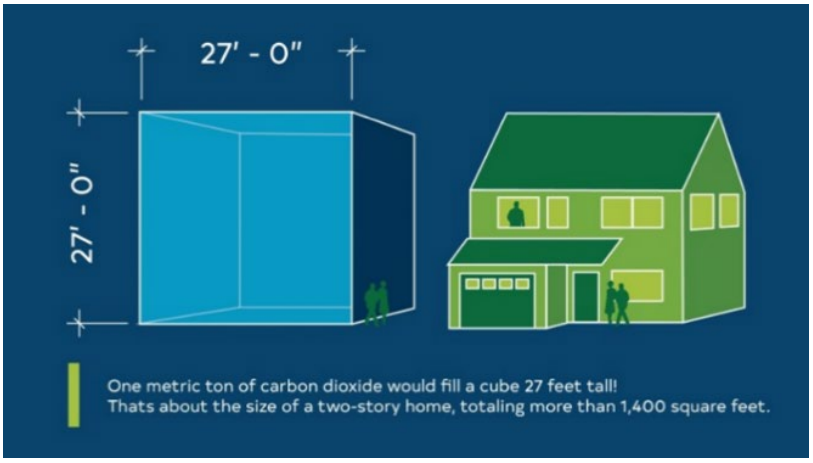


Figure 4. Visual display of one metric ton of carbon dioxide.

Transportation and Land Use

This chapter features strategies to address land use, to encourage alternative forms of transportation that get people out of their cars, and to promote electric vehicle and clean fuels adoption.

- Reduction of vehicle miles traveled (VMT) and alternative mobility strategies reduce congestion and traffic, encourage non-vehicle transportation, expand public transit, and improve freight efficiency.
- Efficient land-use strategies promote development that supports walking, biking, and transit, while improving access and reducing costs related to where people live.
- Increasing electric vehicle (EV) charging access, vehicle electrification, and clean alternative fuel strategies aim to transition vehicles to low- and zero-emission fuels and to improve fuel economy.

Resilience and Cross-Cutting Strategies

This chapter features GHG emissions reduction strategies that relate to waste and conserving green space to act as carbon sink. Cross-cutting approaches should be considered in all CCAP strategies, including addressing social impacts, access to climate action services, environmental justice, building community resilience, funding, innovation, education, and outreach:

- Preservation and green space strategies encourage natural spaces to absorb carbon emissions, mitigate climate change impacts like urban heat and flooding, address community health through access to healthy food and green space for physical and mental health, and preserve pollinator habitat.
- Waste reduction and efficiency strategies look to expand knowledge of waste management practices; encourage recycling, composting, and waste reduction; and improve waste collection.

Building Community Resilience for Those At Greater Risk

CCAP features many strategies to prepare residents, buildings, and infrastructure for the impacts of climate change. Urban heat zones and recurring flood events continue to disproportionately affect residents where there is a reduced occurrence of tree canopy cover, green space, or aging infrastructure. Recommendations are designed to benefit those communities that experienced historic disinvestment and are now impacted by climate hazards at a higher rate. For more specific information about resilience, review **Raleigh's Community Climate Action Plan**, Chapter 4.

Examples of building community resilience include:

- Energy-efficient buildings cool and heat homes more effectively, maintain comfortable temperatures longer during outages, and can reduce the energy burden for residents paying a high percentage of their income on utility bills.
- Renewable energy enables supply chain resilience to shocks and shortages; and can also allow buildings to function during power outages through the use of renewable energy and battery storage.
- Walkable and "complete streets" provide shaded sidewalks and increase overall green canopy cover to reduce the urban heat island effect and to protect residents from the top climate stressors of heat and flooding.
- Preserving and expanding green space and tree canopy reduces the impacts of extreme heat and absorbs flood waters. Urban agriculture and pollinator gardens also create resilience for people and habitats.
- Some electric vehicle structures enable vehicle batteries to provide power to the grid or buildings during outages.

Addressing Social Impact and Economic Advancement Through Cross-Cutting Approaches

The City of Raleigh, guided by the CCAP strategies, prioritizes delivering best-in-class services to our residents, visitors, and businesses who are most vulnerable to flooding, extreme heat events, and other impacts resulting from our changing climate. CCAP strategies are designed to advance social impact and economic advancement by designing solutions that include addressing the needs of our highest risk and most vulnerable populations. We are committed to ensuring every resident can access the benefits of Raleigh's growing community.

Urban heat zones and recurring flood events continue to disproportionately affect residents where there is a reduced occurrence of tree canopy cover, green space, or aging infrastructure. Staff utilize state-of-the-art technology and a data-driven approach to ensure we're making informed decisions for the benefit of our residents with the greatest needs.

Additionally, the City understands the value of partnerships to advance our shared goals. Staff continue to build new and maintain existing trusted partnerships with community stakeholders and nonprofit organizations to amplify climate solutions that promote healthy and thriving communities city-wide.

When implementing climate action strategies, it's essential to consider indicators of risk and resilience.

This approach involves using census data and community feedback to assess how potential solutions will meet the needs of residents:

- cost of living,
- quality of life,
- health,
- economic implications,
- access to resources,
- delivery of City services, and
- the experience of the impacts of climate change across lines of difference in Raleigh.

CCAP aims to prepare community members for the impacts of climate change, as well as to plan across all CCAP strategies to embed cross-cutting approaches. A significant aspect of the City's work on CCAP implementation efforts has involved community outreach to understand climate change impacts, explore opportunities to advance climate solutions, and identify ways the City can continue to integrate climate action into its various services.

Figure 5. The City of Raleigh is committed to fostering a prosperous community where every resident has the opportunity to thrive.

City of Raleigh's Commitment to Fairness and Opportunity for All:

The City of Raleigh values positive social impact for the benefit of all residents served. The CCAP aligns and builds upon the City of Raleigh Statement for a Commitment to Fairness and Opportunity for All:

"The City of Raleigh is committed to fostering a prosperous community where every resident has the opportunity to thrive. We believe that when all individuals have access to resources and support, it leads to greater participation, opportunities, safety, and well-being for everyone. The City of Raleigh prioritizes policies and systems that welcome all community members.

By engaging all residents in the decision-making process, Raleigh aims to create a city where opportunities are open to all, regardless of background, and where our policies and systems work to support the well-being of everyone. Raleigh aspires to be a model of governance where everyone has a voice and can contribute to the growth and success of our community."

Figure 6. Raleigh has a rich culture of residents from all backgrounds. Our green spaces create positive public gathering spaces. The City has a focus on providing free events and activities for all residents to enjoy.

Identifying new and complex projects can make climate action implementation challenging. Fortunately, we continue to develop innovative approaches, outreach and education efforts, and partnerships to address and overcome barriers to progress. Examples of barriers to implementation include: high up-front investment costs for construction and technology to build more efficient buildings and expand transportation electrification; new technologies that require a pilot phase to test their feasibility and readiness ahead of making a larger investment; a changing landscape of resource and funding support; and prioritizing and aligning climate work among a host of competing priorities, complexity, and timing. To address these barriers, we need a continued commitment to seeking innovative solutions and trusted community partnerships.

CCAP's innovative approach, which embeds GHG reduction targets, social and economic advancement, and resilience building as key objectives, has also enabled numerous funding and partnership opportunities. CCAP explicitly includes strategies to pursue these various cross-cutting needs.

This report provides updates and examples of where the City and its partners continue to pursue and build on these opportunities for ongoing success.

Climate Action Implementation Report

The Climate Action Implementation Report is designed to align with the CCAP strategy area chapters: Buildings & Energy, Transportation & Land Use, and Resilience & Cross-Cutting.

This report documents implementation of projects and policy changes in each strategy area, showing how the City and community's work has contributed to Raleigh's overall portfolio of positive climate impact.

Buildings & Energy

How energy is produced and used in Raleigh's buildings accounts for 47% of community-wide GHG emissions, nearly half of all emissions. This section includes progress on strategies to transition our energy supply away from fossil fuels, increase the energy efficiency of new construction and existing buildings, increase the share of residential, commercial, and municipal renewable energy, and identify data sources to demonstrate this progress. These strategies will help to reduce emissions from common energy uses like lighting, heating and cooling Raleigh's homes, offices, businesses and help residents save money on energy bills, too.

CCAP contains three strategy areas for Buildings and Energy. (For more information about buildings and energy, review **Raleigh's Community Climate Action Plan**, Chapter 5.)

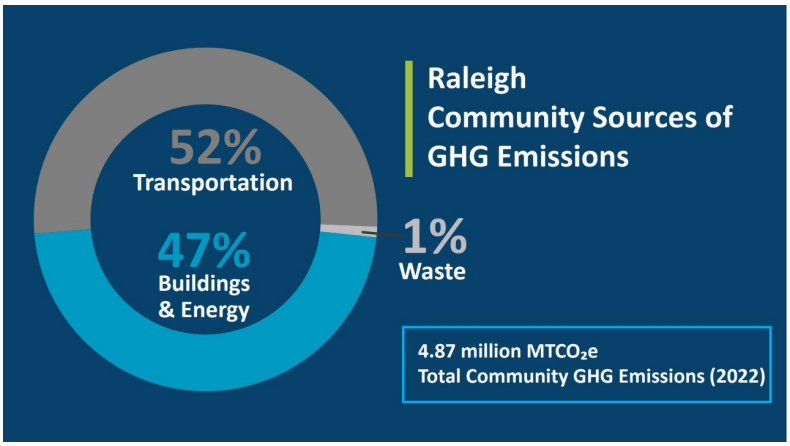


Figure 7. Raleigh's Community Sources of GHG Emissions (2022)

1. **Energy Efficiency Practices and Standards:** This strategy area covers energy efficiency in housing types and offers tools and resources to the community to encourage the tracking of energy use, benchmarking and reporting energy use, retro-commissioning of existing facilities, and preventive maintenance to ensure that buildings remain efficient throughout their lifecycles. It also seeks to encourage energy-efficient construction of residential and non-residential facilities.
2. **Energy Supply:** This strategy area involves continuing to engage with Duke Energy as it transitions its energy sources away from fossil fuels. Together, we can increase a sustainable energy supply for the community while generating sustainable energy at the City's own facilities. Success will require partnerships and pilot projects to continue to embed clean energy and renewables into affordable housing and programs that support low-income households most impacted by high energy bills.
3. **Renewable Energy:** This strategy area promotes and encourages the adoption of rooftop and household-level renewable energy and geothermal installations in the City and community.

Energy Efficiency Practices and Standards

The transition to sustainable energy is measured both by energy efficiency – the rate of energy saved or consumed - and clean and renewable energy opportunities. A building must first be assessed for energy efficiency standards before solar or renewable energy is installed. Buildings should be analyzed for energy use and potential technology and equipment improvements before renewable energy installations like solar roofs can be installed. Additionally, the type, configuration and size of a building or house may impact energy efficiency. These important steps will reduce our GHG emissions while saving money over time.

Creating "Missing Middle" Housing Options that Increase Energy Efficiency

Since the release of CCAP in 2021, Raleigh has taken major steps to create opportunities for a broader range of housing types in most of the city. This effort resulted in more than 2,500 "missing middle" units approved and over 420 "missing middle" units constructed between July 6, 2021, to March 31, 2025. More than 1,000 additional units are under review.

Figure 8. This duplex is an example of "missing middle" homes that are now legal in Raleigh. Homes that share walls are more efficient, and higher density areas are often more walkable to the places we want and need to go.

What is the "missing middle"? It refers to housing types between detached single-family homes and large apartment buildings, including duplexes, triplexes, townhouses, and small apartments. Prior to the summer of 2021, these housing types were prohibited in many of Raleigh's neighborhoods. These housing types are more energy-efficient than detached houses since they share walls and ceilings, reducing heat and cooling loss to the outside. Creating the option to live in these housing types can allow for more density, which reduces the number of miles people drive cars, lowers community transportation GHG emissions, and reduces the resources needed to build and maintain infrastructure throughout the city. City Council approved two development code changes to allow "missing middle" housing types in 2021 and 2022. We continue to see the benefits of these changes today.

"Missing middle" units are often less expensive than detached homes. Raleigh aspires to be an inclusive city with a wide variety of housing for people at different stages of life, different income levels, and with different neighborhood

preferences. Not only do increased housing options reduce emissions, but more places for people to live means more people can stay and thrive in Raleigh. Raleigh is a great city and by growing together, we can better meet the needs of all our residents.

Per capita carbon emissions in the United States are much higher than in most other countries with similar levels of development and population. Land-use regulation accounts for much of this difference. Exclusionary zoning, which bans apartments and townhouses and mandates large lots for single unit homes, was widely adopted in the previous century as a means to perpetuate racial and class separation after more direct means of segregation were outlawed. These policies made the most energy-efficient forms of housing (apartments and townhomes) illegal to build in much of the land area of American cities. The low-density pattern of development resulted in longer transit trips that challenge a city's ability to serve a community with bus or other public transit options that replace vehicles. Along with the increasingly large size of personal vehicles, this over-reliance on vehicle transit generates the country's higher than average transportation-related GHG emissions.

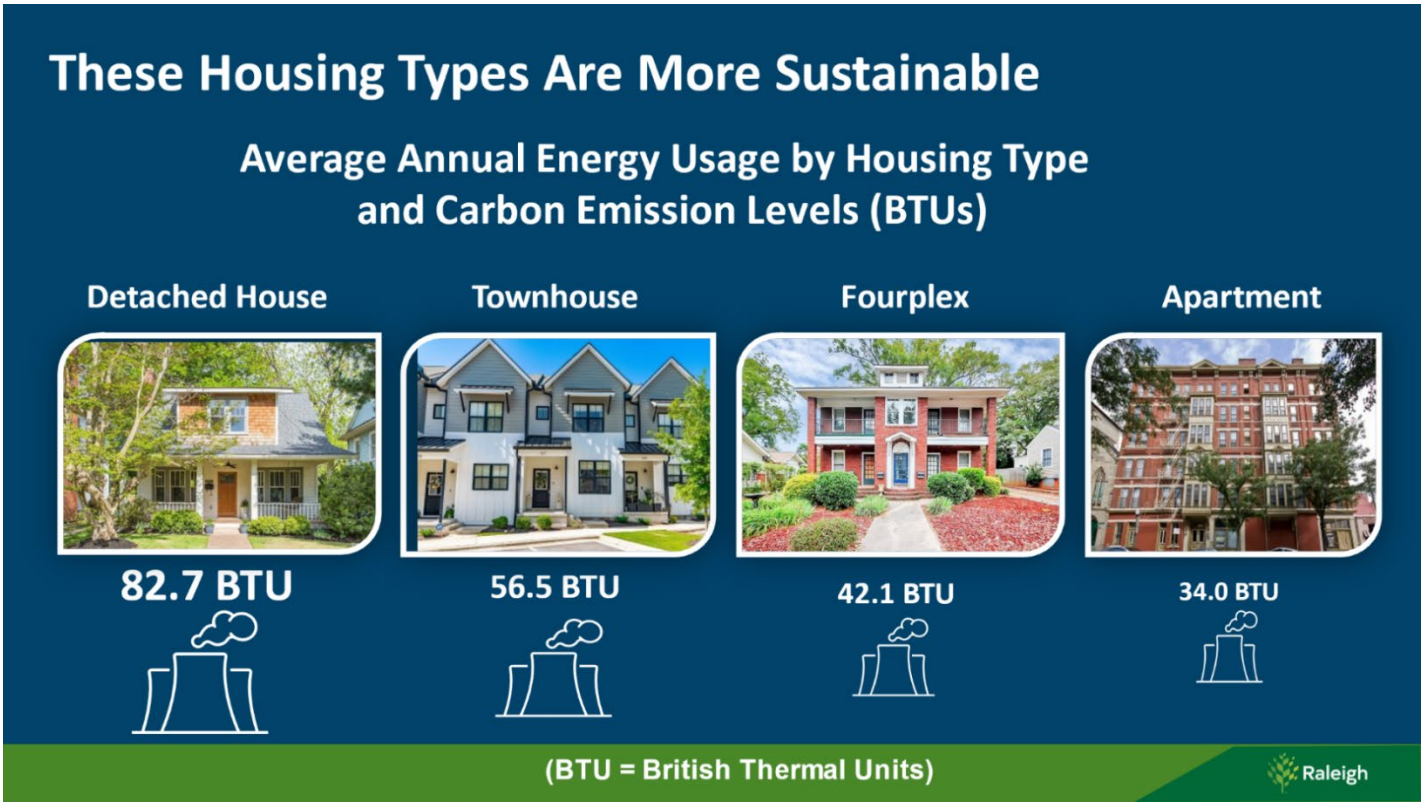
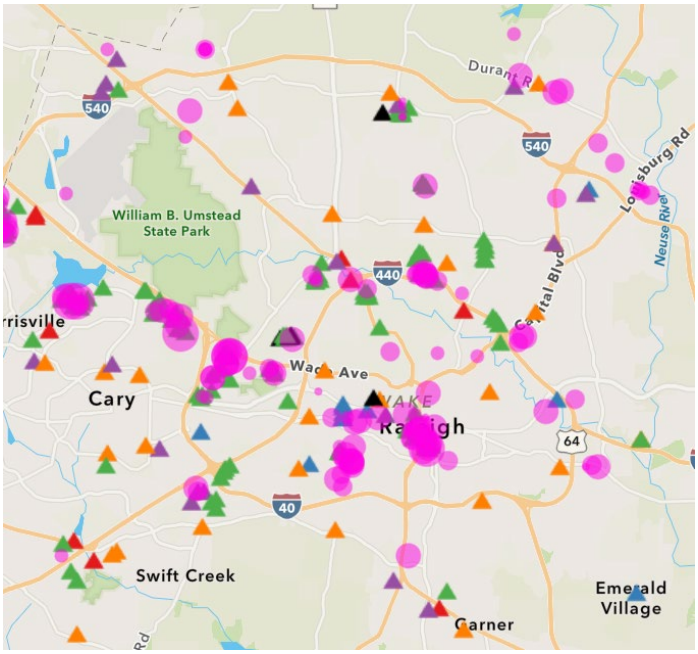


Figure 9. "Missing middle" housing helps Raleigh reduce energy use and greenhouse gas emissions by cutting down on the high BTUs associated with single-family homes—while also building a more connected, sustainable community. BTU stands for British Thermal Unit, which is a standard way to measure energy use. One BTU is the amount of energy needed to raise the temperature of one pound of water by one degree Fahrenheit. When we talk about BTUs in buildings, we're usually referring to how much energy a home uses to heat, cool, or power appliances. The more BTUs a home consumes, the more energy it uses—and the more greenhouse gases are typically released if that energy comes from fossil fuels.

Sustainable Buildings in Raleigh: There are 162 LEED-Certified Buildings totaling over 15.5 million square feet and 138 Energy Star Buildings totaling over 17.9 million square feet in Raleigh.

Energy Efficient and Sustainable Building Designs



Map 1: The distribution and category of EnergyStar buildings across Wake County. Data from N.C. Sustainable Energy Association, 2025. Raleigh has seen an increase of about 2 million square feet of EnergyStar and LEED-certified buildings from 2024 to 2025.

Energy STAR and LEED certifications can designate buildings with high levels of energy efficiency. As of June 2025, Raleigh has 138 Energy Star-certified buildings and 162 LEED-certified buildings. This has been an increase of about 2 million square feet since last year. Strategies to encourage energy efficiency in new buildings, including affordable housing and energy efficiency retrofits for existing buildings, are key aspects of energy efficiency. This includes building envelopes that maximize heating and cooling energy efficiency, installing efficient building systems like HVAC, and encouraging housing options for Raleigh residents that naturally utilize less energy, such as apartments, townhomes, and tiny homes.

Leadership in Energy and Environmental Design

LEED is a best practice building certification that demonstrates a commitment to sustainable construction and building management and addresses best practices in the areas of carbon, energy, water, waste, transportation, materials, health and indoor environmental air quality. LEED certification levels are: Certified, Silver, Gold and Platinum.

In 2007, the City of Raleigh adopted a LEED policy: new municipal buildings over 10,000 square feet must certify to LEED Silver levels or above. One of the most recent examples of a LEED Silver building is the new Fire Station 3, which is being relocated to Rock Quarry Road. In addition to supporting sustainability through solar panels, EV charging, and high-efficiency systems, the station will also enhance public safety by improving emergency response times in a growing area. Its resilient, energy-efficient design ensures that firefighters can continue to operate during power outages and extreme weather—helping protect the community when it matters most.

Energy STAR is a joint program through the U.S. Environmental Protection Agency (EPA) and U.S. Department of Energy (DOE) that offers similar standardization on sustainability metrics, scaling from appliances and lighting to entire homes and industrial facilities.

The new City Hall is another exciting City project being built to LEED Silver standards. Learn more about it below.

Continuing Construction on Raleigh's New City Hall

The new Raleigh City Hall will consolidate staff and services from five different buildings throughout Downtown Raleigh and is designed to meet LEED Silver standards. Sustainability features include building materials with low carbon emissions and low volatile organic compounds (VOC) content, energy efficiency design elements, green stormwater infrastructure, reduced nighttime lighting to support bird migration, wellness spaces for staff, acoustic performance for better indoor climate, water bottle fill stations, and a recycling and waste management plan. Although the City is building the 17-story building on a small plot of land that doesn't allow for rooftop solar or geothermal energy, the tower will exemplify the consolidation of services and people in a dense urban space, increasing efficiency and reducing resource usage, while freeing up other buildings for community use. The City is exploring opportunities to add renewable energy features to the new City Hall. The City began construction in 2024, and the project is expected to be completed by the end of 2026, with staff moving in by mid-2027.

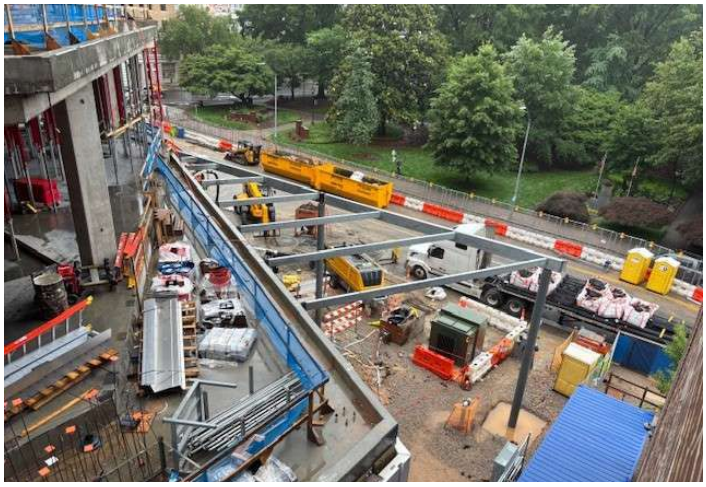


Figure 10. The construction contractor starts to install the Brise Soleil, a series of horizontal and/or vertical blades that help control the amount of sunlight and heat gain to a building. The Brise Soleil will shade the new City Hall terraces.

Figure 11. The rendering design for the new City Hall in downtown Raleigh. Raleigh City Hall (The East Civic Tower project) is currently under construction and is anticipated to be substantially complete by December 2026 with City staff moving in early 2027.

Energy Efficiency, Solar and Sustainable Features for Affordable Housing

Integrating sustainability into affordable housing initiatives helps more people participate in climate action and receive benefits like lower energy bills.

Climate Definition: Energy Burden

Energy burden is the percentage of household income spent on energy each year. This percentage is markedly higher for low-income households and can force some people to choose between keeping their homes at a healthy temperature and buying household necessities. Managing energy burden can help to increase climate equity and overall community resilience.

This year the City built upon a 2024 pilot program to incentivize sustainability elements at City affordable housing developments. In the 2025 Joint Venture Rental Development Program, the Office of Sustainability and Housing and Community Development Department partnered to give points for applications including sustainability elements. City Council voted to extend a conditional commitment of City gap financing funds to support the construction and preservation of 670 rental housing units, subject to the award of Low-Income Housing Tax Credits (LIHTCs) and sufficient project financing. Many of these units will include sustainability features such as new roofing; rooftop solar; new windows and doors; updates and efficiencies to kitchens and bathrooms; updated HVAC and electrical equipment, accessibility improvements; EnergySTAR fixtures; rehabilitation of existing buildings; being located within half a mile of a GoRaleigh bus stop; and green stormwater management features.

Moreover, the City is working on a solar installation at Studios at 2800, an extended-stay hotel serving income-qualified residents located on Brentwood Road. The vision for the hotel is mixed occupancy, combining the existing extended-stay model, with opportunities for permanent supportive housing and other types of affordable housing.

Figure 12. The Studios at 2800 plays a key part in the City's strategy to address affordable housing. The City purchased the hotel in 2021 to preserve naturally occurring affordable housing and has plans to install solar, which increases sustainable power generation and can lower energy costs.

Best Practice Affordable Housing Built to Provide Sustainable, Low Cost, Efficient and Accessible Housing

The City of Raleigh and Advanced Energy continue to partner to implement SystemVision program that establishes a best-practice energy efficiency standard for affordable housing projects. This initiative seeks to provide comfortable, accessible, and energy-efficient homes that don't burden the homeowner with high energy costs. Since 2001, the number of homes built to SystemVision best practice standards for Wake County residents totals 719 homes with 574 in Raleigh. The benefits of the program extend beyond Raleigh. Contractors receive training and guidance to build above code, highly energy-efficient and accessible homes. Residents learn how to maintain an energy-efficient home to save money and improve comfort.

The SystemVision program includes many best practices that go above and beyond minimum requirements:

- Building new affordable housing with the highest energy efficiency standards in mind
- Guaranteeing low-cost energy bills for two years for the residents
- Offering homeowners training and support on how to keep homes comfortable and maintain energy efficiency
- Providing workforce training on building high-efficiency homes
- Meeting best practice ADA and aging in place requirements

The majority of new construction homes that are built to SystemVision standards are 3- and 4-bedroom homes. The two-year guarantee for residents' energy bills covers heating/cooling and comfort. The typical guarantee for a resident's energy bill, expressed as annual kWh based on energy modeling, averages for heating and cooling between:

- $25 and $35 per month for the resident
- 3000- 4000 kWh annual usage

The City's local nonprofit partner Southeast Raleigh Promise (SERP) will incorporate SystemVision requirements into construction plans for its forthcoming affordable housing project. This project is supported by $3.2 million in funding from the City and $1.2 million funding from Wake County and incorporates feedback from the community to meet local needs. These sites are City-owned. The City of Raleigh is working with SERP to execute a long-term ground lease. Southeast Raleigh Promise created the first Purpose Built Community in Raleigh and is part of a national network focused on transforming neighborhoods into places where families can thrive. The model emphasizes strong community connections and access to resources as pathways to break the cycle of poverty and expand opportunity.

The City of Raleigh is also continuing its Solarize program pilot for low to middle income residents to increase access to solar and reduce energy burden for residents. Learn more below.

Promoting Raleigh Sustainable Business and Sustainable Neighborhood Toolkits with Climate Action Resources

The Office of Sustainability continues to expand outreach across the community to promote the Sustainable Business Toolkit and Sustainable Neighborhood Toolkit. The Sustainable Business Toolkit provides resources to businesses, nonprofits, and other organizations seeking sustainability programs, free resources and assistance, recognition for their efforts, opportunities for community engagement, and funding opportunities provided by various City departments, Wake County, and the NC Department of Environmental Quality. The City released a second publication - the Sustainable Neighborhood Toolkit - to provide resources for neighborhoods, communities, and individuals to take climate action and adopt sustainable practices in their homes and neighborhoods. The toolkit includes energy programs such as a residential solar permitting guide, sustainable transportation options, access to funding for neighborhood climate action projects, and federal tax credits. By offering these resources, the City seeks to help businesses, communities, families, and individuals become more sustainable, save money, be recognized for their efforts, get involved, and support their community by taking actions recommended by the CCAP.

Sustainability also partnered with Housing and Community Development to create a Neighborhood Climate Action Fund through the Neighborhood Enrichment Fund where neighborhoods can apply for funding to implement a climate action project in their community. Six climate action related projects have been awarded since the program launched in 2024.

In 2025, we added the Lights Out program to both toolkits. This program, which the City of Raleigh has long participated in, is a voluntary program encouraging buildings to turn unneeded lights out during prime bird migratory periods in the spring and fall to reduce bird deaths from striking buildings and provides a lot of educational materials for how to make your spaces more bird friendly.

Sustainable Business Toolkit Highlights: Sustainable Buildings Projects

The Building Up-Fit Grant is a tool in the Sustainable Business Toolkit. This grant helps pay for commercial interior improvements that create a new business use for vacant or neglected spaces. Grantees choose sustainable upgrades like energy efficiency/HVAC enhancements, LED lighting, kitchen upgrades, or renovating spaces with sustainable materials. In FY24, Raleigh's Small Business Development team provided $431,610 in grant funding to 20 small businesses.

Figure 13. This is Willow House before and after participation in the Façade Rehabilitation Program. This matching reimbursement program aims to enhance economic vibrancy and attract foot traffic by funding the rehabilitation of deteriorated building exterior.

The Facade Rehabilitation Grant is another tool in the Sustainable Business Toolkit. This matching reimbursement program aims to enhance economic vibrancy and attract foot traffic by funding the rehabilitation of deteriorated building exteriors. In FY24, the program allocated $30,000 to three small businesses, all of which are currently in the construction phase.

Willow House, a locally owned coffee shop on S. Saunders Street, recently completed a full storefront transformation through the Facade Rehabilitation Program. The project included several upgrades, such as removing the outdated facade and installing modern thermal window frames with 1-inch insulated glass. These improvements not only enhance curb appeal, drawing in community members and keeping the shop bustling since their grand opening early 2025, but also significantly improve energy efficiency by boosting insulation, minimizing heat loss, and helping to reduce utility costs.

Raleigh Water Facilities Boost Energy Efficiency and Clean Energy

Raleigh Water provides water and sanitary sewer services to over 650,000 people in the Triangle region. It is the City of Raleigh's largest power user and continually boosts its energy efficiency. Clean energy is actively produced through solar arrays at the E.M. Johnson Water Treatment Plant. At the Neuse River Resource Recovery Facility (NRRRF), strides are also being made in water and energy conservation. Approximately 2.5 million gallons per day (MGD) of reuse water is produced preventing the release of approximately 3,000 pounds of nitrogen into the Neuse River. Raleigh Water has also partnered with a Duke Energy Saver Program to implement energy efficiency upgrades at the Lake Woodard, Wendell, and Garner facilities. The project targets lighting, HVAC, and thermostat upgrades to reduce energy usage and operational costs. Raleigh Water's collaboration on these efficiency upgrades is a smart move for both the environment and the City's budget. Thanks to a significant incentive from the program, Raleigh Water's investment in these upgrades is minimal, and the project is expected to pay for itself in about one year. This makes it a win for sustainability and a fiscally responsible decision.

Raleigh Water Leads the Way with the First-in-the-Country Bioenergy Project

Project Turns Wastewater into Renewable Fuel for Raleigh Buses

Raleigh Water's Bioenergy Recovery Project recently completed commissioning of its Renewable Natural Gas (RNG) facility, which now supplies fuel for the GoRaleigh bus fleet. We are turning the community's wastewater into clean biofuel to power Raleigh's buses!

The project turns wastewater into fuel by using an advanced anaerobic digestion process to treat biosolids, reducing the overall biosolids amount by more than 50%. The process also reduces the transport for past land applications leading to lower carbon emissions and hauling costs.

The facility is expected to reach full operational capacity by fall 2025, at which point it anticipates generating enough renewable fuel to meet the needs of our bus fleet. Raleigh Water is partnering with partner departments, including Sustainability and Transportation, to host a ribbon-cutting and community celebration in October 2025 to educate the public about this innovative project. This project was first identified in Raleigh's first municipal Climate Energy Action Plan in 2012 as a "moonshot" project. It has taken many years of innovative thinking to make the dream a reality.

Figure 14. Construction at Raleigh Water's innovative Bioenergy Project: The Bioenergy Project is turning residents' wastewater into renewable natural gas that will then fuel Raleigh's buses. The facility is expected to reach full operational capacity by fall 2025, at which point it anticipates generating enough clean renewable fuel to meet the needs of the bus system.

Raleigh is Collaborating with State and Local Partners to Implement Clean Energy Financing: C-PACE

The City of Raleigh is collaborating with the State of North Carolina, Wake County Government, North Carolina Clean Energy Association (NCSEA), and other Wake County municipalities to establish Commercial Property Assessed Clean Energy (C-PACE) financing and plan for promoting the program once it is in place. C-PACE is an innovative tool that enables commercial, industrial, and multifamily property owners to access long-term, low-cost financing for energy efficiency, renewable energy, water conservation, and resiliency upgrades. With C-PACE, repayment is made through a voluntary assessment on the property tax bill, which stays with the property upon sale—making it especially attractive to building owners and investors.

North Carolina authorized C-PACE enabling legislation, and there is now the opportunity for local governments to opt in and establish programs in their local jurisdictions. Raleigh is partnering with NCSEA, local governments and Wake County to bring the program to our local communities and educate our local economic development and business communities on the opportunities. By supporting C-PACE, we aim to unlock private capital for clean energy improvements, reduce greenhouse gas emissions, lower energy costs for businesses, and stimulate local economic development.

City Launches a Raleigh Community Electric Tool Share

The City of Raleigh is now providing free rentals of small yard equipment for Raleigh residents.

Figure 15. The electric tool shed that gives Raleigh residents the opportunity to try out and learn all the benefits of electric lawn equipment.

The equipment is all electric and gives Raleigh residents the opportunity to try out and learn all the benefits of electric lawn equipment. Electric mowers, trimmers, and blower equipment are quieter than conventional gas-powered tools and do not release harmful emissions from the burning of gases. All the electric tools are battery powered and offer greater mobility and transportation. This makes trying the tools out easy for residents, removing the barrier of transporting fuel for equipment powering in cans and saving money over time. Raleigh Tool Share is available for non-commercial use for folks living within Raleigh city limits to access electric lawn mowers, trimmers, and blowers. This program is a collaboration between the City of Raleigh's Housing & Community Development and Community Engagement Departments.

Tracking Sustainability Features Across City Projects

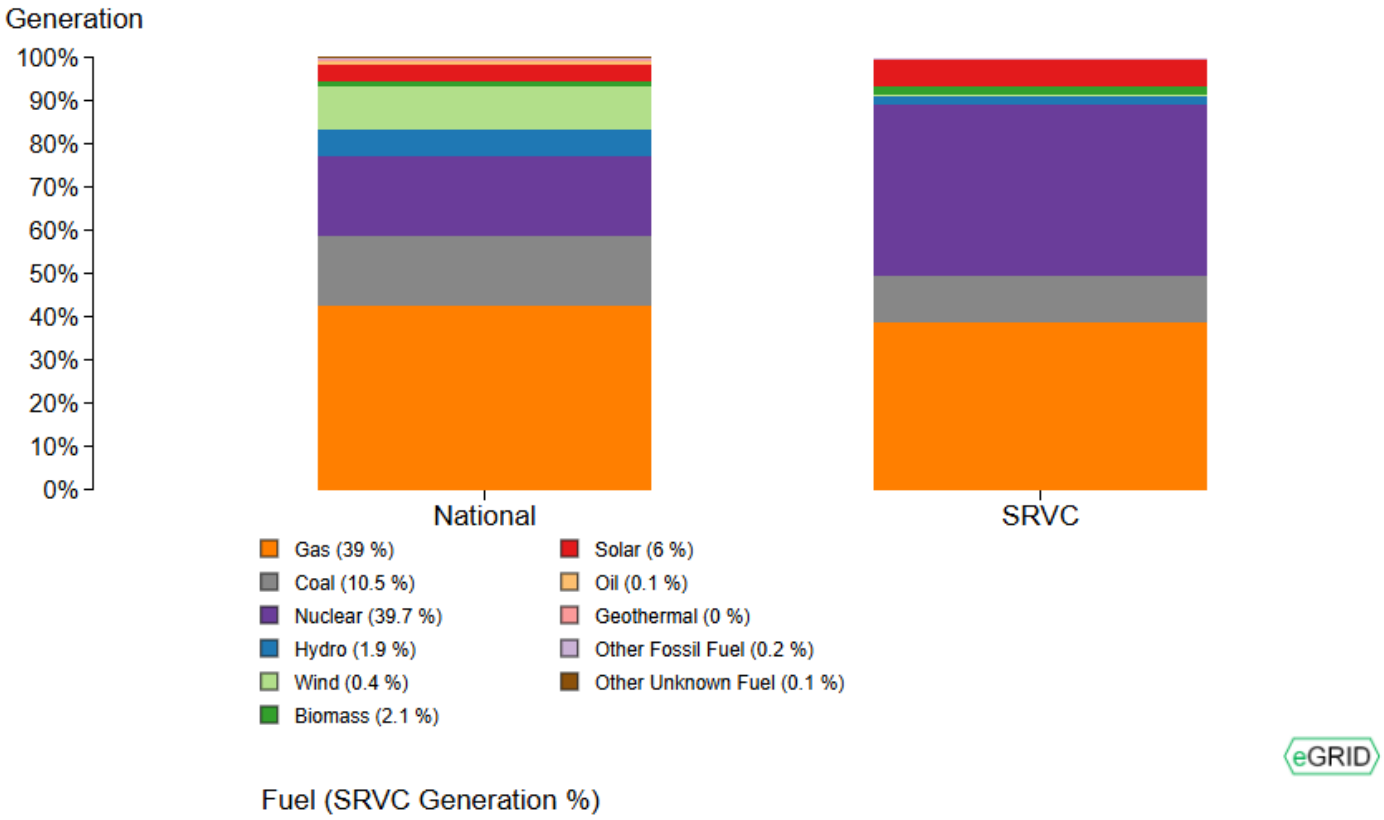
The Office of Sustainability, in partnership with our Engineering Services Department, implemented a system to track sustainability features across dozens of large and small City infrastructure projects and studies. Information throughout this report was sourced using this tracking system. Projects range from parks to transportation to green stormwater infrastructure projects and more. We ask project managers to answer questions about sustainability features in their monthly status reports in the City's construction management software. These sustainability features can be diverse, from renewable energy to community programming on sustainability to increasing access to places like parks and transit. We can use this data and information to tell stories, improve sustainability reporting, and identify opportunities for additional sustainability features or education. We have trained project managers so they can effectively answer sustainability questions for their projects.

Implementing and Applying Best Practice Energy Data Tracking

EnergyCAP is a best practice analysis software solution that tracks energy and non-energy utility usage, benchmarks buildings, captures utility bill data, monitors meter readings, and analyzes and spots trends that identify areas for potential energy savings. Engineering Services and the Office of Sustainability are piloting the use of EnergyCAP to identify locations for energy audits. These audits will inform recommendations for future energy improvements. This data helps us track energy demand and identify areas to pursue efficiency. Staff work to ensure energy monitoring and bills are accurate and have started training facility managers on energy tracking and efficiency opportunities in City facilities. The City's EnergyCAP software shows a slight decline in electricity use from 2023 to 2024.

Energy Supply

Virginia/Carolina Subregion (SRVC) Fuel Mix Compared to US National Fuel Mix for Energy Generation



Graph 1. Virginia/Carolina Subregion (SRVC) fuel mix (%) compared to national fuel mix. Source: Power Profiler | U.S. EPA. Data source: 2023 data from the Emissions & Generation Resource Integrated Database (eGRID) released January 15, 2025

A cleaner energy supply relies heavily on Duke Energy and other local energy providers switching to clean and renewable energy sources. The most recent data on the Virginia/Carolina Subregion shows that from 2020 to 2023, solar increased from 3.4% to 6% of the fuel mix for energy generation. In that same time frame, coal decreased from 12.6% to 10.5% of the fuel mix for energy generation. Transitioning to a cleaner energy grid mix is vital to achieving significant GHG reductions. Increasing renewable energy production must happen alongside other high-impact climate action strategies, such as energy efficiency measures for existing building stock to reduce overall energy consumption and transitioning to electric vehicles that run on clean alternative fuels. Transitioning the energy mix to cleaner technologies is a strategy that includes short- and long-term actions to meaningfully reduce GHG emissions that has various community benefits.

Climate Definition: Generation Mix or Energy Mix

The generation mix or energy mix is a statistic that shows which sources produce the power supplied by a provider (e.g. some companies predominantly own coal-burning plants and others own wind turbines). Many energy suppliers use multiple sources of energy to supply power to their customers. This mix changes according to provider and region.

For example, as the demand for electricity goes up as the community's adoption of more electric vehicles, the energy mix will need to continue to be sourced from cleaner sources. The following sections highlight the planning and preparation for the complexity of transitioning to our energy mix and the transportation sectors over time.

Raleigh and Local Governments Prepare to Give Feedback to the Duke Energy Integrated Resource Plan

Raleigh continues to work with local partners to help develop a more sustainable energy grid, which is critical to meeting the goals outlined by CCAP. The NC Utilities Commission requires utilities like Duke Energy to file a long-range energy plan, called an Integrated Resource Plan (IRP), every two years. Duke Energy's 2024 IRP maps out the mix of coal, gas, nuclear, renewable energy, energy storage and energy efficiency it will leverage to meet energy needs over the next 15 years. The City of Raleigh partnered with the Southeast Sustainability Directors Network and several other North Carolina local governments in the 2024 Duke Energy IRP review process to share the City's priorities in reducing GHG emissions in energy production. We plan to participate in the process again in 2026. As significant energy users, local governments play a key role in shaping the state's energy supply. The greening of the energy grid and the Duke Energy transition to a cleaner energy supply will both contribute to a reduction of community greenhouse gas emissions. While the regional energy supply transition is taking time, learn more below about how the City of Raleigh is working to generate its own renewable energy.

Moreover, as energy bills rise, we continue to partner with local groups on initiatives like Solarize the Triangle and affordable housing sustainability, as mentioned throughout this section. This helps us increase access to energy efficiency and renewable energy, benefiting those who spend a large proportion of their income on energy bills.

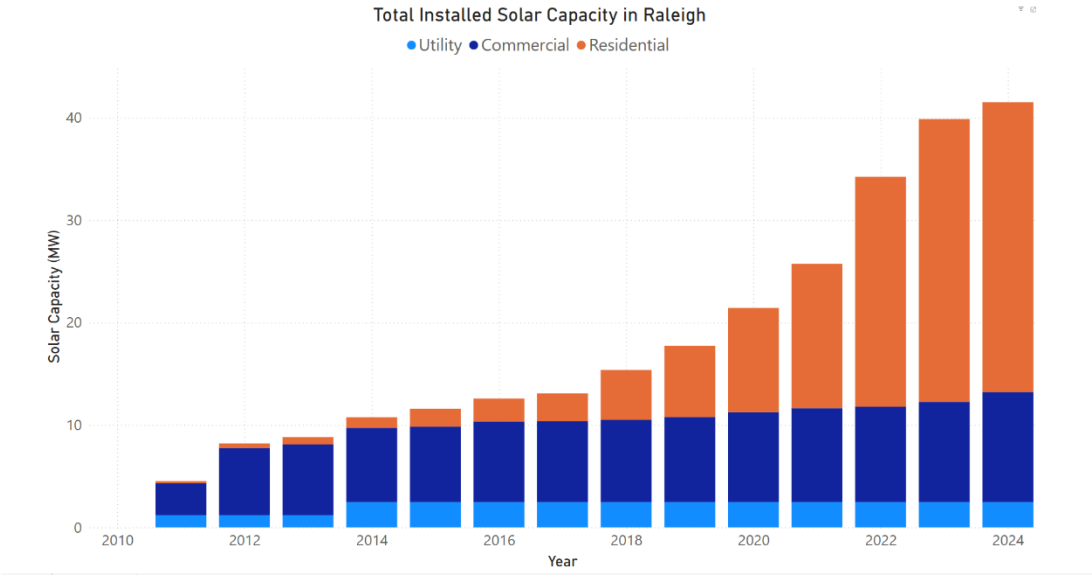
Renewable Energy

Renewable energy is energy derived from natural processes that replenish quickly or cannot be depleted. Solar and geothermal are the most viable renewable energy sources in Raleigh. Renewable energy can be used onsite where it is generated or sold back to the utility's electric grid for usage elsewhere. The renewable energy strategies in CCAP refer to building-level or community-level renewable energy installations, rather than grid-level installations covered in the previous Energy Supply section.

City of Raleigh Renewable Energy Achievements

The City of Raleigh has a long history of supporting renewable energy, installing solar energy and geothermal at several facilities, as these are the most viable types of renewable energy in Raleigh. One of the newest solar installations is located on Greg Poole, Jr. All Faiths Chapel at Dix Park. This 67.5 KW system is expected to offset approximately 45% of Dix Chapel's total annual electricity usage. As a historic building and community gathering space, this site brings visibility to clean energy and shows how new technologies can benefit historic spaces.

In 2022, Raleigh City Council approved $2 million in American Rescue Plan (ARPA) funds for the evaluation and installation of various solar projects across the City. Sustainability has partnered with several departments to evaluate solar installations on City facilities. These projects, including solar at City operations facilities and the Solarize LMI program described below, are now in the implementation phase. The projects at the Northeast Remote Operations Center, Central Operations Facility Building #1, and Central Operations Facility Building #2 are expected to have a combined 612kW generating capacity. They are expected to create a combined $30,000 in energy savings annually and about 1.2 million pounds of CO2 reduction annually.



Graph 2. Installed solar generation capacity has grown rapidly in Wake County over the last decade, with total capacity more than quadrupling over that span. Source: N.C. Sustainable Energy Association, April 2025

Further, the City continues to pilot solar technologies such as solar powered mobile EV stations that provide shade and a resilient power supply for vehicles. In addition, it is planning for installation of solar shades at new bus stops planned as part of the Bus Rapid Transit expansion across Raleigh. Solar shades will provide both shading and a power source at these bus stops. Plus, the City is installing a solar array to generate renewable energy at its clean energy refueling hub at Westinghouse Boulevard.

Beyond solar, the City has 291 geothermal wells at three locations. Geothermal energy can be used to cool and warm buildings by exchanging temperatures between just below the ground and inside buildings. It can have lower greenhouse gas emissions and pollution compared to some other types of energy.

Prioritizing Solar on City Buildings

In 2025, the Office of Sustainability further refined its solar strategy to help prioritize limited resources for meaningful impact. Sustainability established criteria for evaluating solar opportunities including measures to track GHG reductions, social advancement, visibility and education, investment efficiency, leveraging of private funds, complexity, and feasibility.

The City has a long history of supporting solar energy across the community and at City facilities. To move the needle on solar, the City has invested in diverse interventions both internally within City operations and facilities and externally with residents and private businesses and organizations. This work has included measuring and benchmarking, education and communication, installation, incentivization and promotion, and policy and guidelines.

Figure 16. The City is installing solar on operations center buildings, described in further detail above. The Integrated Facility Services Division in Engineering Services is leading this project using federal American Rescue Plan funding.

Refining our solar strategy helps us build upon our existing successes by:

- Translating lessons learned from past work into strategic action
- Creating a shared vision for what we want to achieve with solar and the specific goals and priorities we want to pursue
- Defining the role the Office of Sustainability is best positioned to play
- Determining how to move forward with our current solar projects and opportunities
- Ultimately, maximizing our impact and return on investment

Raleigh Working on SolSmart Gold Designation and the Growth of Solar

The **SolSmart** program certifies cities that address local community barriers to solar energy, develop innovative solutions to promote solar installation, and educate and engage community members on the benefits of solar energy. The City is currently working on the Gold Designation after achieving the SolSmart Silver designation in 2022. The Office of Sustainability and Planning and Development Department partnered to lead City departments and community stakeholders in a process to update the permitting procedures for residential and commercial solar energy installations, making it easier and faster to receive solar installation permits, in addition to updating other resources to promote solar growth in Raleigh. This includes guides and updates on the City website that provide information about the solar permitting process and related questions. The SolSmart program, along with Solarize the Triangle and similar efforts, is designed to accelerate the pace of solar installations across the community.

Raleigh Increases Solar Access and Reduces Energy Burden for Low-to-Moderate Income Households, Builds on Award-Winning Solarize the Triangle Program

The City of Raleigh created a first-of-its-kind pilot program to provide solar to low-to-moderate income (LMI) residents through the nationally recognized Solarize the Triangle program. This LMI program further expands access to clean energy for residents in Raleigh who can benefit the most from lower energy bills. As of June 2025, nine Raleigh households have received subsidized solar on their homes to reduce their energy bills as part of the Solarize LMI program and approximately ten more are planned with remaining funding.

Figure 17. The Solarize LMI program subsidizes and installs solar on low-to-moderate (LMI) Raleigh residents' homes who may not be able to afford the upfront costs to invest in solar and clean energy otherwise.

Oftentimes, low-to-moderate income households face an energy burden where a high proportion of their income goes to their energy bills. They are often unable to make the upfront investments required for solar installations; however, they could greatly benefit because solar can significantly reduce their energy bills and help them save money to be used for other quality of life needs. Energy burden is an increasingly concerning issue, and reducing the cost of utility bills can make all the difference in people being able to afford to stay in their homes.

This regional LMI program utilized funding from the American Rescue Plan Act (ARPA) to subsidize and install solar on low-to-moderate (LMI) Raleigh residents' homes who may not be able to afford the upfront costs to invest in solar and clean energy otherwise. This program reduces their energy burden and is a pilot program as part of the second

phase of the Solarize the Triangle program (see below for updates on this program). The pilot incorporates inclusive best practices, including community outreach, addressing energy burden, charitable projects to go back to the local community, alternative options for homes where rooftop solar isn't feasible, minority workforce participation, and workforce development.

The Office of Sustainability worked with the Communications Department to interview a resident who participated in the program. Raleigh resident Wanda Statum expressed her enthusiasm for her solar in a video that was played at a City Council meeting in October 2024. You can view the video by visiting raleighnc.gov and searching "Solarize the Triangle Program."

Figure 18. Raleigh resident Wanda Statum received a free rooftop solar system through Solarize the Triangle.

Solarize the Triangle is a community-based group-purchasing program for solar energy, battery storage, and other clean energy technologies. The City of Raleigh helped create the Triangle Sustainability Partnership (TSP) as one of 12 local governments and over 25 local community partners. Solarize the Triangle created the opportunity for residents to purchase solar in a group purchasing model to receive volume discounts on materials and installation services, resulting in more savings on solar energy costs with greater participation. The Solarize the Triangle program was the TSP's first flagship project. The program ended in September 2023, breaking national records as the largest in the country for community participation! The Solarize Program also won the "Cleantech Impact: Local Government" from the Research Triangle Cleantech Cluster in November 2023, and the "Climate Action Award for Energy" Raleigh Environmental Award in 2024.

Planning a Regional Program to Advance Residential Access to Clean Energy and Sustainability Features

The City of Raleigh is working with the Triangle Sustainability Partnership (TSP) and the NC Clean Energy Fund, among other collaborators, building on the popularity of Solarize the Triangle to develop another sustainability and clean energy incentive program. This program will help households in Raleigh and surrounding communities save money and live more sustainably by offering options for clean energy technologies for residents. The Office of Sustainability is working regionally with an array of stakeholders to create this program, allowing Raleigh residents to access these technologies at an even lower cost and with higher quality products and services that are pre-approved by experts in the field.

Tentatively called "Electrify the Triangle," the campaign goals are to: 1) create a desire to electrify one's home and to harness hometown pride in this effort, 2) connect homeowners with the array of incentives that will reduce the costs of home energy audits, home energy efficiency projects, home electric appliances, electric lawn equipment, home EV charging, and e-mobility, and 3) to assist homeowners in decisions, financing, and to meet strategic administrative needs they may have in taking advantage of incentives.

The City of Raleigh and the TSP are in the planning stage and looking forward to sharing more as we prepare to launch the program.

Increasing Community Benefits through Triangle Sustainability Partnership Programs

These solar and energy initiatives through the TSP described above integrate social advancement and resilience into climate action, aiming to cut greenhouse gas emissions. Many low-income households struggle to afford upfront costs for clean energy like solar panels, missing out on benefits such as lower bills and contributing to climate change mitigation. Energy-efficient homes with renewables reduce monthly energy burdens which occur when residents must spend a relatively high proportion of their incomes on energy bills. Solar panels also increase resilience by allowing households to generate energy when the power grid goes out. During extreme weather events, solar panels provide power for essentials such as cell phones and medical devices. Solar panels allow longer more comfortable sheltering in place.

The Office of Sustainability, in partnership with other departments, is continuing to plan and explore other opportunities to increase low-income communities' access to renewable energy and sustainability features like EV charging and green stormwater infrastructure. As mentioned above, the City is also in the planning phase of including solar on a hotel being refurbished to provide housing for people experiencing homelessness.

By integrating affordable housing and sustainability, Raleigh fosters a high quality of life for its residents. Focusing on environmental justice, community health, and resilience is central to this vision. We seek to ensure everyone in Raleigh, especially those most impacted by climate change and other disinvestments, benefit from the City and community's climate action, sustainability efforts, and best-in-class City services.

Transportation & Land Use

Transportation-related emissions account for the highest total GHG emissions in Raleigh. These emissions are largely determined by how frequently we need to use cars to get to work, school, shopping, and activities. In areas where necessities and amenities are closer to residential areas, and which have safe and reliable transportation alternatives, people use cars less and produce fewer emissions. Strategies to increase density in Raleigh will create more walkable or bikeable communities and reduce our community's reliance on vehicles. While working to reduce vehicle miles traveled overall, transitioning fleets to electric and clean fuels and supporting the adoption of electric vehicles is one of the highest impact areas to reduce emissions, as well as to ensure equity so that everyone has access to the benefits of clean fuel technologies.

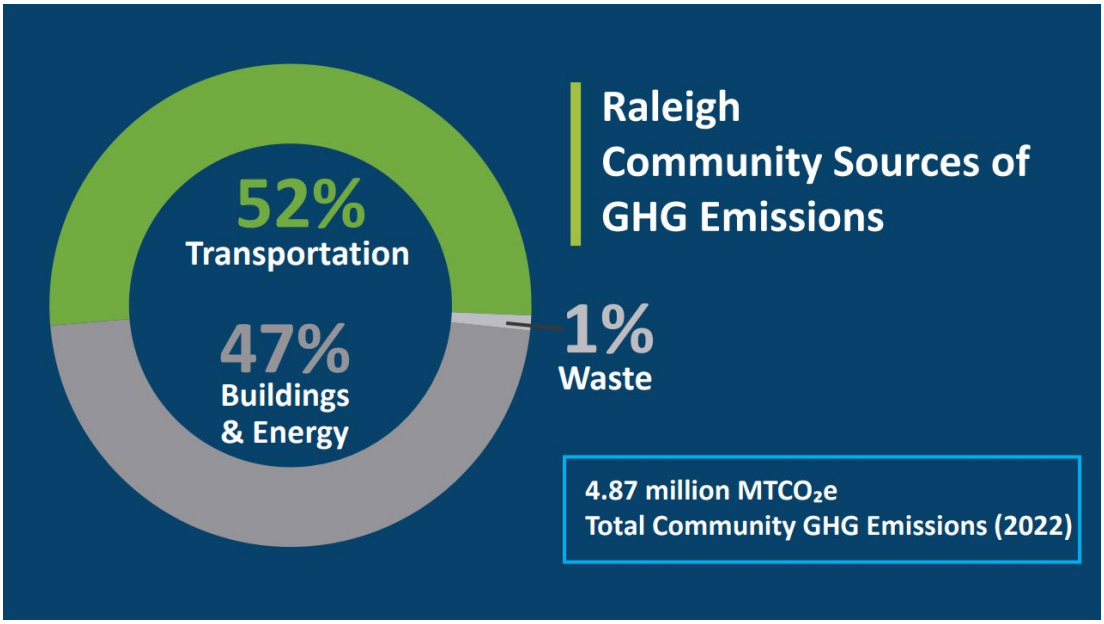


Figure 19. Raleigh's Community Sources of GHG Emissions (2022)

CCAP contains three categories of strategies for Transportation and Land Use. For more specific climate actions in these categories, review **Raleigh's Community Climate Action Plan**, Chapter 6.

1. **Efficient Land Use** (LU): Strategies to encourage efficient land use will create more compact development patterns and walkable spaces that contain commercial and retail space intermingled with residential units. Working and living in these spaces allows residents to spend fewer resources and less time on travel.
2. **VMT Reduction and Alternative Mobility** (VMT): Vehicle Miles Traveled (VMT) is a measure of vehicle travel made by a private vehicle, regardless of the number of occupants. Strategies to reduce VMT include encouraging alternative modes of transportation and promoting walkability and bikeability.
3. **Transportation Electrification and Alternative Fuels** (EV): These strategies encourage fuel efficiency standards and a transition to electric vehicles that run on alternatives to fossil fuels.

Efficient Land Use

The design of a city largely determines how residents and visitors navigate their surroundings. A shift toward denser urban areas makes it more possible to walk or bike to work, school, or shopping, rather than relying on a vehicle. In 2025, the following actions were taken to promote more compact development patterns:

Updating Raleigh's Growth and Development Framework to Include Climate Action Priorities: Raleigh's Comprehensive Plan

The City of Raleigh's Comprehensive Plan serves as a long-term policy framework to guide growth and development over the next 20 years. The Plan evaluates topics such as land use, housing, transportation, infrastructure, and the environment. It aims to promote sustainable and well-coordinated development that meets the evolving needs of the community while promoting social and economic advancement for all residents. The current updated process, underway through 2025, involves extensive community engagement to shape a vision for Raleigh's future beyond 2030. The Office of Sustainability has long worked with the Planning and Development Department to embed climate action and sustainability into their work, including the current 2030 Comprehensive Plan.

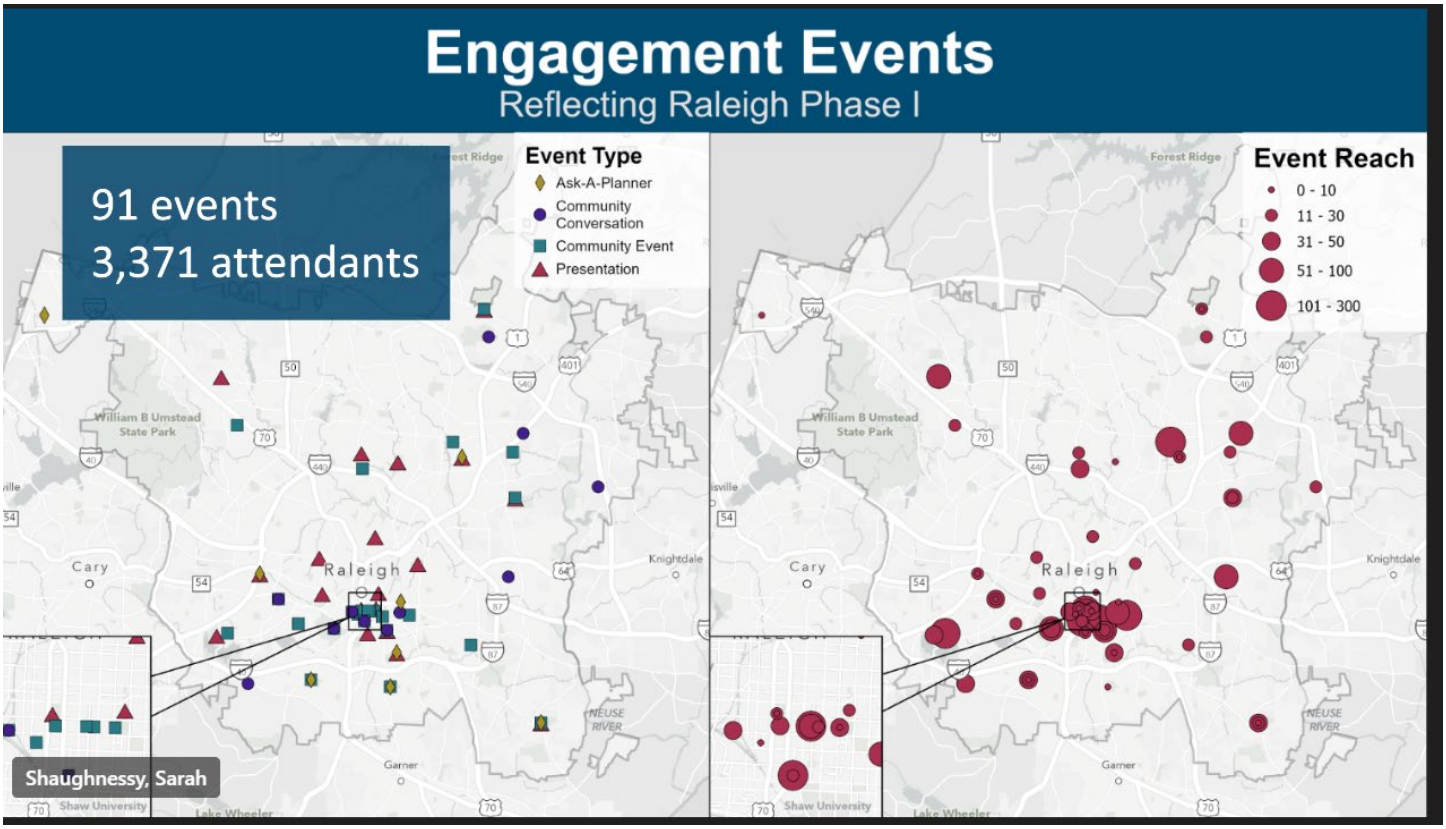


Figure 20. The City of Raleigh engaged the community in a series of community conversations about the above key topics to inform the 2050 Comprehensive Plan. Topics included affordable housing, mobility, stormwater, neighborhood change, trees, and sustainable infrastructure and services. Between the surveys and events, the total number of participants was over 12,260, with over 2,626 people interacting at other community events (including tabling, Ask-A-Planner, or small group presentations to boards, committees, and partner organizations).

Transit Oriented Development Zoning to Increase Sustainable Transportation Options

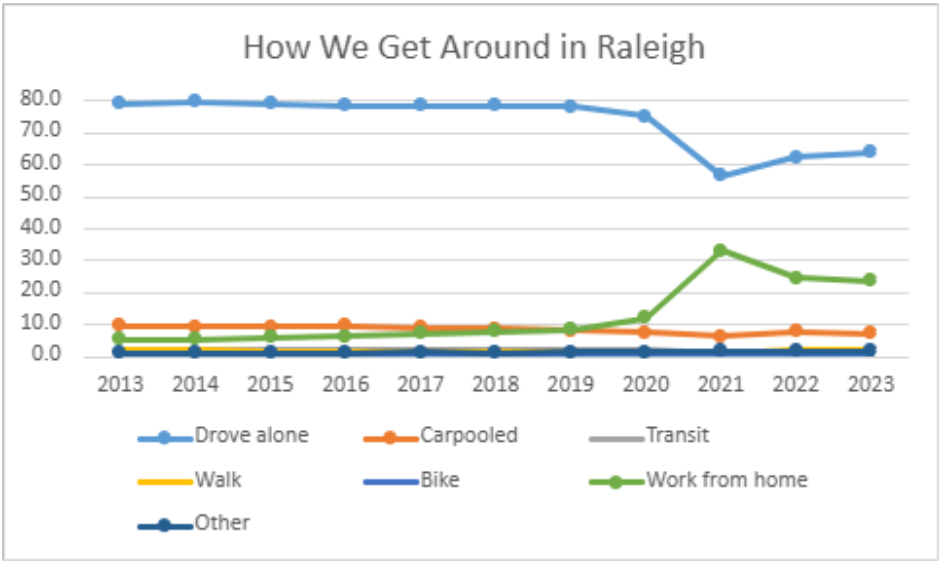
Allowing people to live and work near transit increases bus ridership and reduces car dependency, seeking to lower traffic congestion and emissions.

To support this effort, the City of Raleigh has taken key steps to remove zoning barriers and encourage more housing and jobs near major transit routes. In 2022, the City approved a zoning change allowing taller buildings and higher residential density near frequent bus routes (with service every 15 minutes or less). Since then, Raleigh has applied a Transit Overlay District (TOD) along the Southern and Western Bus Rapid Transit (BRT) corridors, and as of 2024, the TOD has also been approved for the New Bern BRT corridor. This rezoning includes incentives for developers to include below-market-rate housing and requires more walkable, urban design. It also creates safer and walkable pedestrian access by limiting car-oriented uses such as new drive-thrus and gas stations. These changes aim to create vibrant, connected neighborhoods where more residents can live affordably, access reliable transit, and enjoy a safer, more comfortable walking environment.

Figure 21. The City continues to make it more comfortable, convenient, and reliable to ride the bus. Transportation is our biggest source of community greenhouse gas emissions, and increasing transit access is an important CCAP strategy.

Vehicle Miles Traveled (VMT) Reduction and Alternative Mobility

Raleigh is investing in alternative transportation methods to reduce the reliance on passenger vehicle use. Vehicle transportation accounts for nearly half of Raleigh's total GHG emissions. Vehicle Miles Traveled, (VMT) is the measurement of total miles driven each year by vehicles on the roads in a specific area. VMT is a direct contributor to Raleigh's total GHG emissions. Expanding access to alternative transportation and rethinking how streets are designed and used will help lower VMT and emissions across the community.



Graph 3. The growing number of vehicles on the road highlights the need for expanded multimodal transportation and infrastructure. Without meaningful changes to how people move through the city, VMT is projected to rise, as reflected in the chart above.

Raleigh E-Bike Incentive Program Increases Safety and Accessibility

In 2024, the City of Raleigh launched the e-bike incentive program to encourage the purchase and use of electric bicycles. In 2025, Sustainability partnered with Transportation to secure more funding to expand the pilot with more vouchers which are currently being distributed. The incentive program offered a one-time $500 purchase voucher to Raleigh residents who applied. Applicants with incomes at, or below, 80 percent Area Media Income (AMI) were eligible for a

Figure 22. Through the Raleigh e-bike program, residents get vouchers for high quality e-bikes and equipment, and this also boosts the local economy as local shops serve as the vendors.

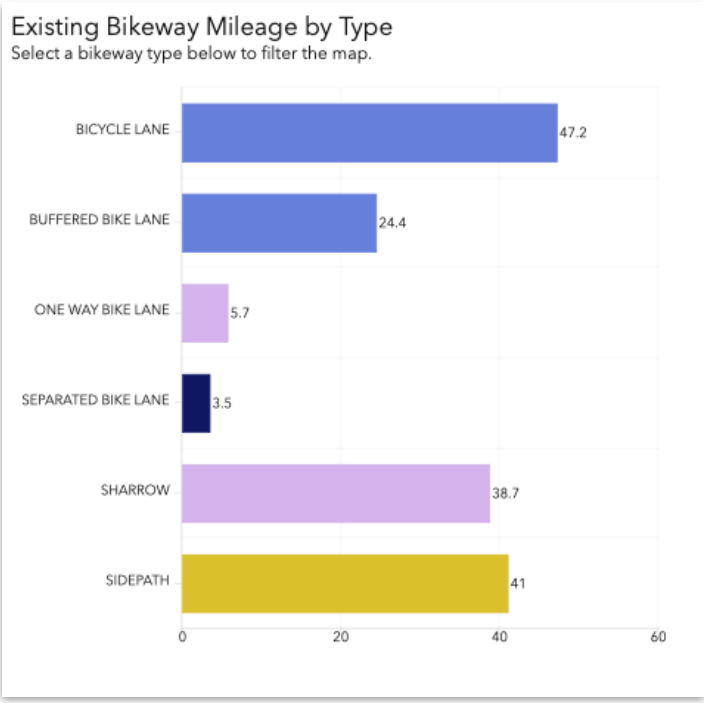
$1,500 voucher. For the initial pilot, over 200 vouchers were distributed in total. 86 percent of Raleigh residents redeemed the $1,500 voucher, which demonstrates the need for access to income-qualified transportation options like e-bikes. E-bikes make biking safer by increasing the riders' potential speed in traffic, which also lessens congestion from cars slowing down to accommodate the slower speeds of traditional bikes. With e-bikes, more residents can make longer trips and feel safer while doing so. E-bikes utilize battery technology to sustain energy as you pedal and use stored energy to accelerate the bike as needed. This assistance makes ascending hills and inclines less physically demanding. The adoption of e-bikes can decrease our dependence on cars and lower our total VMT, while also making biking safer and more accessible.

Continued Expansion of Bicycle, Micromobility, and Pedestrian Programs

City staff are developing the Active Mobility Plan with input from residents and stakeholders to update the 2016 Bike Plan and 2013 Comprehensive Pedestrian Plan. The Active Mobility Plan is expected to be completed in late 2025.

Staff are working to increase bikeway mileage throughout the community. Increasing our dedicated bike lanes will make riders feel safer and more comfortable while sharing the road with vehicles. These improvements will encourage longer distance bike travel.

Raleigh's Bike Plan is continuously improving the sidewalk and bike lane system throughout the City. Its expansion of Raleigh's bikeway mileage and dedicated bicycle lanes offer more accessibility to users of various micromobility options. Pedestrian safety is the top priority as more residents use the roadways to bike, scooter, and walk. Improvements will encourage residents to use alternative transportation instead of cars and reduce emissions. The City of Raleigh runs its own public bikeshare program, Cardinal Bikeshare. Since 2019, over 185,000 trips have been made throughout the city.



Graph 4. Existing bikeway lanes by mileage in Raleigh. Staff are working to increase bikeway mileage throughout the City. Increasing our dedicated bike lanes will make riders feel safer and more comfortable while sharing the road with vehicles. These improvements will encourage longer distance bike travel.

Here are 2024's statistics:

- In 2024, there were more than 14,000 Cardinal Bikeshare trips.
- Total distance of 45,000 miles traveled.
- The median distance traveled per trip was 2 miles.

Figure 23. Raleigh's Cardinal Bikeshare Docking Station. There are over 31 docking stations throughout Downtown Raleigh and Hillsborough Street. Residents and visitors alike have multiple service options when locating a bike to speed up their travel.

There are over 31 docking stations throughout Downtown Raleigh and Hillsborough Street. Residents and visitors alike have multiple service options when locating a bike to speed up their travel.

Scootering is also a quick and fun way to get around the city if you need to go a short distance rapidly. Raleigh partners with two E-scooter private operators that provide access to dockless scooters. Since 2021, community members have taken over 1.2 million trips on scooters. See the 2024 statistics:

- Over 400,000 combined miles traveled in 2024.
- Average 1,000 daily trips in 2024.
- Average length of trip, 1.1 mile.

The City continues increasing its network of biking and scooter stations and infrastructure. There are currently 31 bike stations spread throughout downtown and Hillsborough Street. Continued access expansion offers cost-effective transportation options, while reducing the number of vehicles on the roads, our collective VMT, and GHG emissions. As we depend less on vehicle travel, our streets become safer, the air becomes cleaner, and residents can improve their mental and physical health.

Figure 24. An example of a Raleigh street including medians featuring green space. Slowing traffic speeds by reducing posted limits and introducing medians in roadways make communities safer for pedestrians.

Traffic Calming Policy Improves Safety and Lowers Emissions

The City of Raleigh continues to implement updates under the Neighborhood Traffic Management Policy to improve safety and encourage low-emission transportation options. These efforts focus on traffic calming strategies that slow vehicle speeds on neighborhood streets, making it safer and more appealing for residents to walk or bike. Safer streets can shift travel behavior, such as enabling students to walk to school instead of being driven in vehicles, which reduces both emissions and congestion. Examples of traffic calming features include new streetlights, traffic conversions, and speed cushions that greatly reduce the speed of incoming vehicles. Staff will continue to develop and expand project delivery of improvements and locate locations where future development could benefit the public.

Figure 25. Public scooter parking installed on Glenwood Ave in 2024.

In 2024, notable developments included:

- Construction is in progress on 15 traffic calming projects with work being completed on all streets by June 2025.
- 138 streets measuring approximately 34.81 miles had their speed limits reduced in 2024.
- 16 all-way stop conversions were completed in 2024.
- 2 signal conversions to all-way stop were completed in 2024.

Vision Zero Makes It Safer to Walk, Bike and Ride the Bus

The Vision Zero Project has resulted in key safety upgrades across Raleigh. Work was completed on school zone traffic infrastructure and safety signage across the community. In addition, the City installed two raised crosswalks near Broughton High School and upgraded street lighting at 10 key locations. Improvements are prioritized in key pedestrian areas with high volumes of traffic. The plan continues to map out areas of improvement that will make our streets and crosswalks safer. As more people choose to walk, bike, and access our public transit networks instead of traveling by car, safety is the utmost priority.

Figure 26. Speed reduction and accessible pedestrian signals make walking and biking to school safer for students. As population continues to increase, progress must continue to make pedestrians feel safer to transition out of cars for short distance trips, thereby reducing GHGs and VMT.

The City of Raleigh began transitioning the Transportation Safety Program to a Vision Zero Program in 2019. Since then, much work has been underway and in 2023, Raleigh secured a federal grant from the Safe Streets and Roads for All program (SS4A). The funding is being used to develop the Vision Zero Comprehensive Safety Action Plan, with the goal to reduce and eliminate serious injuries and fatalities along our transportation network. The Comprehensive Safety Action Plan is slated to be completed in late fall 2025. Intersection improvements are currently underway at five locations across the city. Enhancements include Accessible Pedestrian Signals (APS), Leading Pedestrian Intervals (LPI), and upgraded signal heads, tailored to each site.

The five locations are:

- Gorman Street & Marcom Street
- Creedmoor Road, Edward Mills Road, Mill Village Road & Parklake Road
- Colonnade Center Drive, Forum Drive & Six Forks Road
- The Pedestrian Hybrid Beacon, South of Lead Mine Road & Shadyside Drive
- Navaho Drive & Wake Forest Road

Continued Expansion of Raleigh's Complete Streets

In 2025, a total of nine Complete Street projects are in progress. Oberlin Road, the newest Complete Street, will be finished by the end of summer. Soon, residents and pedestrians will be able to walk and bike more comfortably with improved access to Cameron Village and surrounding amenities from Oberlin Road.

Figure 27. Oberlin Road featuring a Streetscape project. This is a dedicated space where residents of the historic community highlight their roots with creative public art.

Key improvements include:

- Installation of improved sidewalks and pedestrian crossings
- Extended sidewalks up Stafford Avenue, Everett Avenue and Bedford Avenue
- New bike lanes
- Expanded street tree canopy
- New street lighting
- Street benches and bike racks
- Improved water and sewer mains to combat water pooling near bus pads and bike lanes.

The Complete Streets Implementation Program constructs projects that improve safety, access, mobility, and connectivity of existing streets for all users. These streets are designed through community engagement to accommodate all modes of transportation, allowing bicyclists, pedestrians, transit users, vehicles, as well as commercial and emergency vehicles. The more community members feel safe navigating streets on bikes, scooters, and walking, the more likely they are to get out of their vehicles, thus reducing the emissions associated with their travel.

Smart Intersections Project

Launched as the Raleigh Traffic goSmart project in 2023, the pilot was recognized in IDC Government Insights' sixth annual Smart Cities North America Awards. Now, known as the Smart Intersections Project, this collaboration between the Transportation and Information Technology Departments utilizes traffic cameras to analyze vehicle movements and transportation patterns. This information is used for a range of transportation projects like signal timing and street designs that contribute to safer streets for pedestrians. This makes walking and biking trips more likely and decreases transportation-related GHG emissions. In addition, as more data becomes available to staff to make traffic safety improvement decisions, this continues to increase efficiency and reduce the costs of City operations.

Figure 28. Hillsborough Street round-about featuring pedestrian crossways and dedicated greenspace.

Clean Transportation Ordinance

In 2024, the Office of Sustainability and Planning and Development Department partnered to develop an ordinance that will both reduce VMT and support the transition to electric vehicles. Recent developments at the State level have limited its current scope and impact upon future development. The ordinance was the first of a set of potential changes to the Raleigh's Unified Development Ordinance (UDO) that will help implement CCAP recommendations. Staff are currently working to reinstate the ordinance.

Notable provisions included:

- Requiring pedestrian connections between new developments, greenways, and other destinations. Increasing pedestrian connections improve residents' ability to walk and bike to their destinations safely.
- Prohibiting new drive-thrus in walkable and emerging walkable areas such as downtown, Hillsborough Street, and parts of Midtown. Although drive thrus are still allowed throughout Raleigh and preexisting areas, prohibiting them in high pedestrian corridors, where walking is more likely, will make those areas safer for the community due to less vehicle traffic.
- Requiring EV infrastructure in new apartments, hotels, standalone parking lots, and gas stations. Requiring new EV chargers in new property and commercial development encourages EV adoption throughout the community. More charging access for residents will reduce travel and search time for adequate charging. It will also save residents money and reduce their vehicle miles traveled.

Evaluating Transportation Impacts of Land Use Changes to Reduce Vehicle Miles Traveled

The City of Raleigh's Transportation department worked with Sustainability to develop a methodology for using VMT in rezoning analysis. When evaluating the impact of a zoning change or development, cities have traditionally primarily considered how changes will impact the "level of service" of the area, or how convenient it is to get around in a car. The highest scores are given to places where travel by car is the most convenient. This approach leads to ever-wider streets, making walking or other means of non-car travel more dangerous and less likely. It also leads to overall longer trips and more driving.

An alternative way to evaluate the impact of a zoning change or project, which cities are increasingly using, is to assess how this will impact vehicle miles traveled (VMT). This reflects the fact that the transportation impact of a project varies by context. For example, a large number of new homes in a rural area would lead to a significant increase in vehicle miles traveled, as all trips must be made by car and will be long. The same number of homes in an urban area will have a smaller VMT impact, because many trips can be made without a car and those made with a car will be shorter.

Recent updates to zoning strategies will allow denser housing types near BRT stations. This will encourage residents to live near areas with immediate access to public transit and walkable areas. More residents will benefit from the access during their daily commutes to work or during activities like shopping and enjoying a night out. This collectively will reduce our VMT and have GHG reduction benefits as traffic congestion decreases. Residents will also save more money by opting out of vehicle ownership and maintenance costs all together.

Greenway Projects Focus on Trails as Transportation

Raleigh currently has over 135 miles of greenways for the community to explore. The Big Branch Greenway Connector is one of its new additions to the greenway transportation route. The Greenway Committee is currently reviewing feedback from the community on this Connector. Upon process completion, staff will consider the route in the fall and review the consideration for construction. The project will give North Raleigh neighborhoods biking and walking access to the North Hills area and provide a safe crossing of the 440 Beltline.

In 2022, the Raleigh City Council unanimously adopted the Capital Area Greenway Master Plan. The greenways plan emphasizes the greenway system's role as an important zero-emissions transportation network, not just as a recreational amenity. Accordingly, it focuses on better connecting the existing network with neighborhoods and destinations.

Figure 29. Imagine being able to commute or go shopping at your favorite store without having to travel on a congested road. Increasing greenway access and using our trails as transportation networks to walk and bike make this a reality. Residents will be able to take in scenery, breath fresh air, and get exercise – all while being connected to local services and businesses.

Expanding Bus Rapid Transit Continues to Provide Numerous Benefits to the Raleigh Community and Beyond

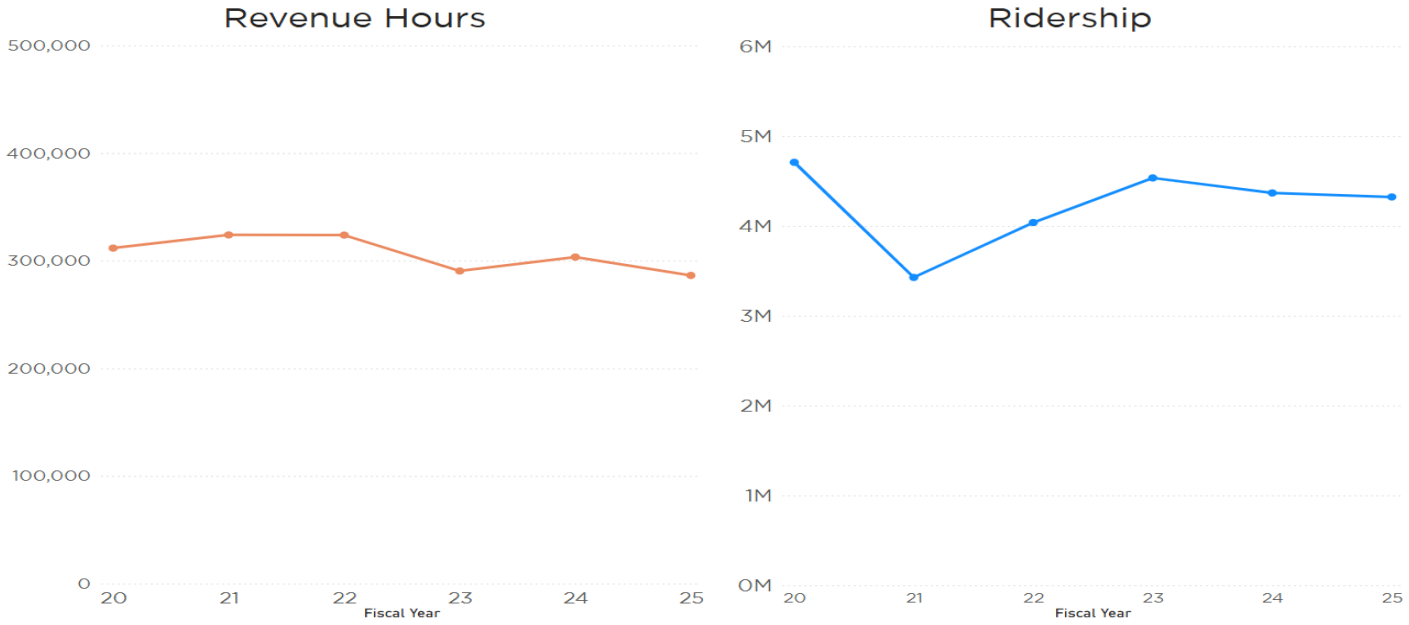
Raleigh is a key partner in the implementation of the **Wake Transit Plan**, adopted in 2016. The plan provides for increased transit service in frequency, span, and geographic availability. The City of Raleigh works with many partners on the Wake Transit Plan implementation, including GoTriangle, the operator of regional public transit bus services in the Research Triangle region. GoTriangle provides bus services in Wake, Durham, and Orange Counties; and is a member of the region-wide GoTransit system and Raleigh's GoRaleigh system.

Figure 30. The City broke ground on its first Bus Rapid Transit line in November 2023.

Much of these efforts relate to the implementation of Bus Rapid Transit (BRT) throughout Raleigh and the region. BRT is a high-capacity, bus-based transit system designed to deliver fast, reliable, and efficient service across Raleigh. By operating in dedicated lanes and utilizing traffic signal priority, BRT will transform how people move throughout the city, offering an efficient

alternative to car travel. Among many other benefits, increased transit service reduces vehicle miles traveled, which reduces GHG emissions.

Below are several initiatives that the City and its partners are implementing to enhance and expand the BRT rollout and increase ridership. The many benefits to Raleigh residents and visitors are highlighted.



Graph 5. Annual revenue hours and ridership of the GoRaleigh Transit System. The City and partners have been working on improving the rider's experience and improving access to reliable and efficient transit. With these efforts, since 2022, GoRaleigh has maintained an annual average of nearly 4.4 million riders. This number is expected to grow alongside Raleigh's rising population and increasing demand for more frequent transit service as Raleigh continues to expand our Bus Rapid Transit services.

Expanding Transit through Rider Experience

The City and partners have been working on improving the rider's experience and improving access to reliable and efficient transit. GoRaleigh supports these efforts by ensuring all residents have equitable access to transportation services that efficiently connects them to jobs, schools, and essential services. GoRaleigh continues to innovate by working alongside City staff and engaging community stakeholders with continuous investment in bus network infrastructure with new routes, service improvements, and connections.

GoRaleigh bus stops are receiving substantial lighting upgrades with solar power lights being installed on bus stops and shelters. Visibility at nighttime is important for residents while walking, and new solar upgrades ensure that all GoRaleigh stops remain illuminated and safe for riders and residents.

In July 2025, GoTriangle held a ribbon cutting for Raleigh Union Station's Bus Facility. This new bus facility is an important connector that will transport residents throughout Raleigh, the greater Triangle, and make accessing Raleigh Union Train Station easier, allowing for long distance trips to be taken by rail. GoRaleigh's Route 9 and R-Line will stop on West Street, directly in front of Raleigh Union Station Bus Plaza. Accommodations on West Street are in progress for future GoRaleigh BRT station development.

In 2024, GoRaleigh launched service enhancements to improve route location and tracking for riders. Their app, TRANSIT, allows users to locate routes and track buses in real time and shows active routes on Google Maps. Increased accessibility makes it easier for residents to find routes and connected lines that travel greater distances.

These upgrades expand transit services and lessen Raleigh's reliance on passenger vehicles, reduce VMT, and lower greenhouse gas emissions. As growth and population density increases, the demand for fast, efficient, and interconnected public transit across the city remains a focal point for City staff, GoRaleigh, and its partners.

Expanding Transit to Increase Access Where Residents Need It Most

Figure 31. Bus leaving the GoRaleigh station on S Blount Street. In 2024, GoRaleigh launched service enhancements to improve route location and tracking for riders. Their app, TRANSIT, allows users to locate routes and track buses in real time and shows active routes on Google Maps.

Raleigh is currently advancing the development of four BRT corridors: New Bern, Southern, Western, and Northern. The New Bern Avenue corridor transit line construction is anticipated to begin in 2025. Station area planning is also underway and will deliver new community amenities and infrastructure improvements within a short walking distance of each BRT station. BRT corridors will feature enhanced stations with elevated platforms, off-board fare collection, and upgraded amenities to improve comfort and reduce boarding times. BRT will significantly expand access to low-cost mobility options, particularly for historically underrepresented communities. It will also increase access to walkable commercial centers and housing development around transit corridors. This will reduce the need for personal vehicle ownership, save residents money, and support the development of vibrant and resilient communities. This shift will significantly lower vehicle miles traveled, GHG emissions, and ease roadway congestion, while providing economic benefits to households and local businesses.

Equitable Development Around Transit

Development around the transit corridors is also important for supporting the provision of frequent service in BRT corridors and for maximizing the environmental benefit of the investment. The **Equitable Development Around Transit** plan, completed in 2021, created a policy framework for growth that centers more around transit rather than driving infrastructure for single occupancy vehicles. This provided a foundation for the zoning changes outlined above, and additional planning along the BRT corridors is setting the stage for subsequent zoning changes. This work

helps to address social and economic challenges for residents by providing options for all Raleigh residents that promote affordability, including housing options that are accessible to services and transportation modes. As investment continues, the City's Bioenergy Recovery project, featured in more detail in the next section, will power our BRT fleet and GoRaleigh buses with compressed natural gas. This is a large milestone for the City of Raleigh as BRT lines will run longer service hours than normal GoRaleigh lines. This renewable natural gas is sourced from Raleigh's wastewater and these clean fuel buses are a vital step in reducing our community GHG levels. GoRaleigh is also installing solar on bus stops to power new lights to ensure nighttime transit users are safe and comfortable while waiting for pickup.

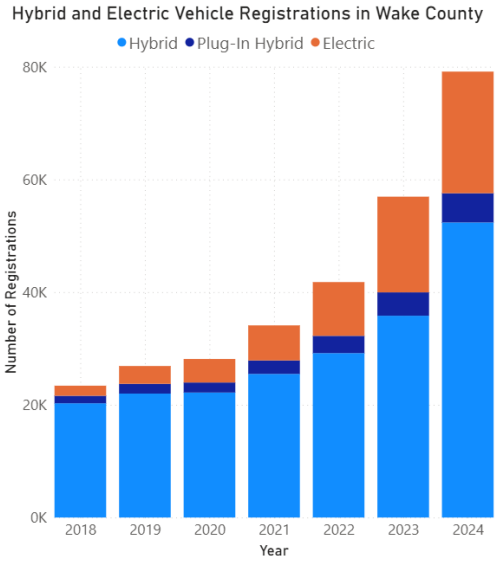
Raleigh to Richmond Train will Increase Commuter and Travel Options

In 2023, the North Carolina Department of Transportation's Rail Division received a $1 billion federal grant to design and build the first segment of a future Raleigh, NC to Richmond, VA passenger rail service. This segment will extend from Raleigh Union Station to Wake Forest, enabling local commuter passenger service before longer-distance trips begin. This will allow for more commuting trips from North Raleigh and northern Wake County to be on transit rather than driving. In the longer term, the planned Raleigh-Richmond rail connection will save an hour of travel time by rail compared to lines currently available. Additionally, residents would benefit from faster rail trips to Washington, D.C. and beyond.

The Raleigh to Richmond Rail project is on hold while being evaluated by the federal Department of Transportation. City of Raleigh Department of Transportation staff are actively meeting with NCDOT to coordinate S-Line vertical and horizontal design elements with local existing and planned infrastructure.

Transportation Electrification and Alternative Fuels

Trends continue to show a shift to electric vehicles (EV) and alternative modes of transportation. Most charging of personal EVs happens at home, and public charging availability is also important to support travelers, commuters, fleets, multi-family residential EV owners. Public chargers have the economic benefit of supporting small businesses by increasing customer foot traffic in vicinity to charging station access.



Graph 6. Hybrid and Electric Vehicle Registrations in Wake County. Source: NC Sustainable Energy Association, 2025

Raleigh and Wake County have among the highest levels of EV uptake in North Carolina, with only Orange and Chatham counties with more EVs per capita. As of July 2025, there are several hundred publicly available charging station ports in Raleigh and the surrounding area.

To reduce transportation-related emissions, the City of Raleigh is shifting our own vehicles, equipment and bus fleet to electric and alternative fuels, while also supporting opportunities for the private adoption of electric vehicle infrastructure and clean fuels. Raleigh is also supporting the growth of community EV charging stations. The City developed a multifamily EV ordinance that supports EV infrastructure installations at new apartment buildings to enable access to residents who rent since most charging happens at home. Staff is also working on funding models that can support a strategic approach to both community and fleet charging. While the number of charging locations will naturally rise as electric vehicles become commonplace, the City and community partners can take action to address gaps in charging access, such as in older

apartments or on-street parking, and for small and minority-owned businesses that can increase customer foot traffic and time spent with nearby vehicle charging infrastructure.

Go Raleigh Continues to Innovate with a Clean Electric and Renewable Bus Fleet

GoRaleigh is actively transitioning its bus fleet to cleaner, low-emission technologies, including electric buses and renewable natural gas. In partnership with GoTriangle, GoRaleigh connects key destinations across the region, including universities, medical centers, residential areas, and Raleigh-Durham International Airport. As of 2024, the fleet includes five electric buses with infrastructure in place to support 14, and four additional electric chargers planned in the coming year. To prepare for an innovative project that the City has been working on for many years, GoRaleigh has been investing in buses that run on compressed natural gas (CNG), which also produce dramatically fewer GHG emissions than diesel models. GoRaleigh also operates 76 buses on CNG, with 17 more expected soon, bringing the fleet to approximately 70% zero or low-emission vehicles. Read more below about the City's innovative project, the first in the country, that will allow Raleigh to fuel our buses with renewable natural gas that we create from the community's wastewater.

Figure 32. GoRaleigh has goals to convert their bus fleet to electric, renewable natural gas and other new technologies as they become available. Conversion efforts to date have significantly reduced greenhouse gas emissions.

The City of Raleigh has set a goal to convert 75% of its fleet to renewable natural gas, which will be supplied through the City's innovative Bioenergy Recovery Project, with the remaining fleet transitioning to electric and other advanced technologies. Additionally, GoRaleigh has installed 12 EV charging stations at its new Poole Road park-and-ride, with similar infrastructure planned for the New Bern BRT corridor. These efforts support Raleigh's broader climate goals by reducing emissions, improving air quality, and offering more sustainable public transit options to the community.

Renewable Natural Gas from the Raleigh Community's Wastewater Will Fuel Transit Buses

Raleigh Water currently serves over 600,000 people throughout the region.

As Raleigh's population expands, so does the volume of wastewater treated by the department. At the same time, Raleigh's bus system is rapidly expanding to serve our growing population. Through the **Bioenergy Recovery Project**, the City's Raleigh Water Department will convert wastewater from the community into Renewable Natural Gas to power Raleigh's growing bus fleet!

The Bioenergy Recovery Project turns wastewater into fuel by using an advanced anaerobic digestion process to treat biosolids, reducing the overall biosolids amount by more than 50% which also reduces the transport for past land applications leading to lower carbon emissions and hauling cost.

Additionally, the process for capturing the methane emissions and converting it to renewable biofuel greatly reduces methane emissions, a potent greenhouse gas; and by converting our wastewater to renewable biofuel, this also eliminates the need for external natural gas sources to power buses.

This project, the first of its kind in the US, marks a significant step forward in sustainable wastewater management and transportation fuel innovation. As the first municipal wastewater digester in North Carolina to generate pipeline-

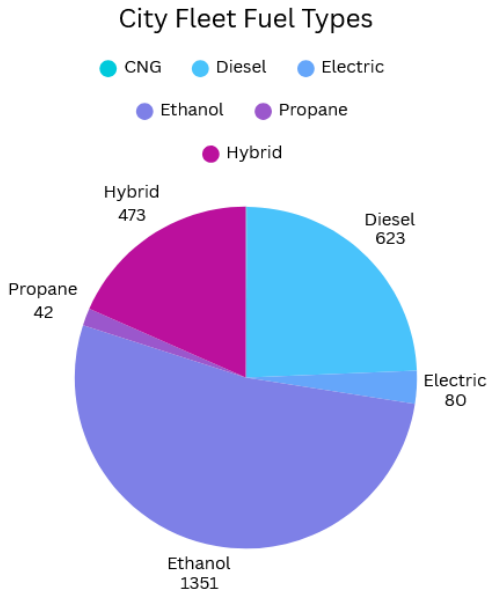
grade RNG, and one of the few in the U.S. to use it for its fleet, this project significantly advances Raleigh's sustainability and climate action goals while reducing greenhouse gas emissions and operational costs.

Transforming the City of Raleigh's Vehicle Fleet to Clean Energy and Electric

The City of Raleigh Fleet Management Operations was recently ranked as the #1 **government vehicle fleet** in the US by Government Fleet magazine. This award recognizes the top fleets for efficiency, modernity, metrics, community leadership, future visioning, and overcoming challenges. Raleigh has long been leading the way by transitioning a large portion of the fleet to clean alternative fuel vehicles as technology became available. Raleigh's FMO manages a fleet of over 5,000 vehicles with over 2,500 on the road vehicles.

The Office of Sustainability and Vehicle Fleet spearheaded the creation of Raleigh's **Electric Vehicle Implementation Rollout Strategy** to advance electric vehicle technology. This plan, building on the City's **Transportation Electrification Study**, details the City's **10-year transition to an electric fleet.** It assesses EV adoption opportunities, costs, charging infrastructure needs, and software requirements, prioritizing public charging accessibility that promotes economic and social advancement. Additionally, it explores alternative fuel options for heavy-duty vehicles and quantifies associated GHG emission reductions from vehicle replacements.

Further efforts to cut GHG emissions include implementing a new fuel management system for improved monitoring and ongoing enhancements to vehicle tracking technology. The City received an award in 2024 for its effective use of the Geotab fleet tracking system. Another major milestone in the transition to cleaner vehicles involved the creation of the renewable propane facility, located across from the Central Operations Facility on Westinghouse Boulevard. The facility opened in Fall 2023, with a ribbon cutting ceremony including the unveiling of a clean energy-themed mural. Renewable propane has a significantly lower Carbon Intensity rating than gasoline and diesel fuels. In comparison, traditional gas has a CI score of 86, whereas renewable propane has a CI score of 14-28. When used as a transportation fuel, renewable propane can produce a negative Carbon Intensity value, emitting less C02 and reducing GHG's. As of 2024, Raleigh Parks have rolled out their new renewable propane garbage trucks. These medium duty trucks feature two separate bays that collect garbage and recycling waste from our



Graph 7. Pictured in the graph are the fuel types that the City uses to power its fleet as of 2025. The City has long been converting our fleet to cleaner fuels as better technology becomes available and aims to convert the entire fleet to electric or alternative fuel vehicles over the next ten years. Raleigh's fleet numbers are growing rapidly for electric, hybrid and other clean fuels and we continue to pilot and convert heavy duty vehicles to renewable propane and renewable CNG (compressed natural gas).

Figure 33. The City of Raleigh's first electric vehicle motor pool system was recently installed for use by City staff.

City parks. Staff are continuing to create new opportunities to modernize its fleet with renewable energy heavy duty vehicles and reduce our fleets dependence on natural gases.

City of Raleigh New Electric Vehicle Shared Motor Pool

Over the past year, the City of Raleigh has continued expanding its electric vehicle (EV) motor pool program, both to increase access to low-emission vehicles and to test how EVs perform across different departmental needs. In 2024, new EV motor pool locations were added, including a key installation at Raleigh Water's Lake Woodard Drive facility. This location includes a transformer capable of powering six chargers and provides 12 dedicated parking spaces for future EV fleet expansion. Additional shared motor pool sites are currently located at three other City facilities, offering a mix of EVs, hybrids, and traditional vehicles. While the Westinghouse site is not currently a designated motor pool location, the City's new keyless motor pool system enables flexible access from nearly any site. Westinghouse is primarily being developed as a clean energy refueling hub, with new EV chargers and alternative fuel options that could support future fleet activity. The site will include two solar-powered EV chargers that will be tied to the grid.

The motor pool program not only provides City staff with convenient access to shared vehicles but also serves as a hands-on opportunity to experience electric vehicles firsthand. This is an important tool as Sustainability and Fleet Management Operations work with departments on their short and long-term vehicle replacement plans. The electric motor pool can serve as a "test bed" to pilot with departmental staff on how their operations and other considerations will be impacted ahead of the vehicle replacement cycle so that staff are informed, ready, and looking forward to their new vehicles.

Figure 34 (left). The Police Department displays their electric vehicles, including the Ford F150 Lighting, Zero FX Enduro Motorcycle, Recon E-Bicycle, and Chevy Blazer EV. Pictured left to right – Deputy Chief Derek Ford, Chief of Police Rico Boyce, and Deputy Chief Zachary Lechette.

Figure 35 (right). Pictured left to right – Senior Officer Steven Samarriba, Sgt. Jeffrey Burgess, Sgt. Edwin Garcia, Senior Officer Andrew Clark.

Raleigh's EV Ready Playbook Setting Standards for North Carolina

The City of Raleigh is leading North Carolina in Electric Vehicle rollout strategies, including by partnering with Advanced Energy on the creation of the EV Ready Playbook. The Playbook, launched in 2023, continues to provide guidance across the state and beyond. It was designed to help local governments and organizations adapt recommendations for their own communities, further supporting the growth of EV infrastructure and the EV market.

This playbook provides information for all stakeholders (residents, developers, businesses) on best practices for EV infrastructure including offering guidance on codes and permitting, signage, ADA accessibility, installation, hardware and software considerations.

City Invests in Innovative EV Charging to Support Fleet Electrification Expansion

With limited resources, the City of Raleigh continues to innovate with strategic investments in electric vehicle (EV) charging infrastructure to support the expansion of the EV fleet. A new DC fast charger is under construction at the Westinghouse facility, which houses many City and fleet operations. Raleigh, in coordination with Duke Energy, anticipate interconnection work to be completed in 2025. Additionally, a dedicated charger for the City's electric trolley is in development and expected to be operational by fall. These investments represent key steps in building the infrastructure needed to support fleet electrification across departments.

Movable Solar-Powered EV Charging Stations

The City has set up three portable solar-powered EV charging stations. These units can charge two vehicles simultaneously and have a battery that retains a charge even on cloudy days. Currently placed at Anderson Point Park, Carolina Pines Park and Brier Creek Park, these chargers have the ability to be relocated occasionally to test out access in different locations. The chargers are currently available to be used at no cost for public use.

The solar chargers support resilience as they can double as emergency power sources during severe weather. They can also be positioned in areas lacking EV charging infrastructure, saving costs on electrical site work and guiding future charging priorities.

Figure 36. Raleigh has rolled out BEAM chargers! These chargers use energy from the sun to power the city's electric motor fleet.

Fleet technical advancements to support City fleet transition

The City is increasingly taking steps to modernize its fleet with clean energy adoption and increasing City drivers' access to private electric charging networks. Current technical advancements are improving staff workflows while decreasing our fleets GHG emissions.

Notble advancements are listed below:

- City staff can now access public charging networks with WEX cards. Drivers are benefiting from the expanded charging network. They no longer solely rely on charging at City facilities. More City vehicles are transitioning to renewable natural gases. Renewable propane, R99, compressed natural gas, and E85 are powering vehicles of all sizes and reducing our dependence on gas and diesel fuels as a fleet.
- City Fleet technicians are receiving hands-on training from Ford and General Motors to stay up to date on evolving EV and hybrid safety technology.
- The City is adding driver ID systems and cameras to its fleet to improve on-the-road safety and driver accountability during daily operations.

Electrifying Raleigh Park's Lawn Equipment and Community Vehicles

Figure 37. We're Plugged in! Raleigh Parks showcases their electric maintenance equipment at the Raleigh Earth Day celebration.

Parks, Recreation, and Cultural Resources (PRCR), Sustainability, and Fleet Management Operations have partnered to work on transitioning lawn equipment and vehicles that serve the community to electric. PRCR has piloted and transitioned various maintenance equipment to electric power, which has many benefits, including reducing fuel consumption, maintenance costs, noise pollution, the risk of fuel spills, as well as enhanced ground level air quality. It also enhances the experience of residents enjoying the park system.

Parks aims to convert 80% of small maintenance equipment to electric. They've completed 30% of the transition as of 2023, and continue to make progress each year. The department operates two EVs and multiple hybrid vehicles.

Clean Energy Equipment Replacement Committee

In an exciting step toward a cleaner, more sustainable future, the City established the Clean Energy Equipment Replacement Committee in 2024. This collaborative group is made up of representatives from Parks, Police, Raleigh Water, Transportation, Budget, Sustainability, and Fleet Management Operations. Together they are working to identify opportunities for transitioning away from fossil fuel-powered equipment and replacing them with electric-powered vehicles or equipment. With strong support from Budget and Management Services, the committee successfully launched a pilot project and is gearing up to expand its efforts in the months ahead. The group will reconvene this fall to chart a forward-looking plan for FY27, helping to drive progress toward the City's clean energy and climate goals.

City Anti-Idling Program

The City of Raleigh is developing an anti-idling program aimed at reducing unnecessary engine idling in City fleet vehicles. While some idling is necessary for certain operations (such as when the vehicles also power other high-power equipment), many situations allow for the engine to be turned off without disrupting work. Modern engines consume minimal fuel when restarting, making it more efficient and environmentally responsible to shut off the engine during brief stops. The program will include targeted training for high-usage fleet drivers, including a video tool, to educate internal partners on the benefits of idle reduction, such as lowering greenhouse gas emissions, reducing fuel costs, and minimizing wear on vehicles. In parallel, the City of Raleigh continues to pursue complementary strategies, including expanding the hybrid and electric vehicle fleet and exploring technology upgrades like auxiliary power units (APUs) and remote starters for medium-duty trucks. These upgrades support driver comfort and operational needs while avoiding engine idling, further aligning with the City's climate and sustainability goals.

Climate Resilience & Cross-cutting Strategies

Resilience is the ability of a community to withstand or to recover quickly from stressors caused by weather related disasters, climate change impacts, social and economic disparities, environmental and health related challenges, and the growing pressures of development and growth. Due to our rapidly changing landscape and growing population, Raleigh is learning to live with the impacts of climate change. Unfortunately, those that contribute the least to greenhouse gas emissions are often those that are most affected by more frequent and stronger hurricanes, increased rainfall and flooding, more frequent heat waves and more extreme temperatures.

The strategies in this section aim to help prepare Raleigh's community for climate related impacts while offering solutions to reduce GHG emissions and build community resilience to withstand the effects of future change. The cross-cutting strategies of social impact, innovation, education and outreach and funding for climate action are applied to all areas of our work and can be found throughout this report (ranging from Buildings and Energy; Transportation and Land Use; and Resilience and Cross Cutting sections). Further examples of these cross-cutting areas are reported in this section.

We have organized our Resilience Building strategies into four project areas and four cross-cutting areas. For more specific actions in these categories, review **Raleigh's Community Climate Action Plan**, Chapter 7.

1. **Waste Reduction and Diversion**: includes creative strategies to address one percent of Raleigh's community GHG emissions that are generated from the breakdown of wastes in the landfill.
2. **Community Resilience**: includes measures to increase community preparedness to withstand and recover from climate and non-climate stressors, weather-related hazards, and other natural disasters. Non-climate stressors include social, economic, health and other factors that impact quality of life.
3. **Green Infrastructure**: includes strategies to limit development in flood-prone areas of Raleigh and expand the development of nature-based stormwater absorbing technologies like green stormwater infrastructure.
4. **Preservation and Green Space**: includes measures to preserve natural landscape features, which absorb flood waters and carbon emissions, provide protection from extreme heat, support pollinator habitat and food systems.
5. **Cross-cutting strategies**:
    a. Social Impact and Economic Advancement: promotes equitable implementation of all climate strategies
    b. Funding: encourages seeking diverse funding sources for climate action
    c. Innovation: encourages the adoption of new technologies for climate action.
    d. Education and Outreach: encourages engagement with Raleigh's communities on climate awareness, climate action, and City climate initiatives.

Waste Reduction and Efficiency

A sustainable approach to waste and waste management practices provide an opportunity to reduce strain on our landfill, to conserve resources and to reduce greenhouse gas emissions. CCAP includes waste reduction strategies such as increasing recycling rates, reducing waste production, and composting yard and food waste. The Solid Waste Services Department collaborates with teams across the community to proactively reduce waste, recycle material into a beneficial use for residents, and to promote healthy recycling habits in Raleigh, all while demonstrating a commitment to sustainability through operations activities. Stay tuned for seasonal waste reduction opportunities offered by the City to reduce your own waste production (ie: recycling pumpkins and Christmas trees, leaving your leaves for pollinators, reducing waste in holiday gift wrapping, and more). For more information on the various waste reduction strategy programs the City offers, visit the **Solid Waste Services** (SWS) on the City of Raleigh website.

Yard Waste Center Diverts Waste from the Landfill for More Sustainable Uses

Solid Waste Services converts residents' yard waste into high-quality mulch and compost products, including organic compost, mulch, leaf mulch, and wood chips, making these products available to the community. Using recycled yard waste products improves soil conditions, improves plant establishment, increases water capture and reduces erosion. The City has enhanced its efficiency, processing, and operations in recent years to offer affordable, high-quality products that are available to the community, local businesses as well in City parks and sites.

Figure 38. The City's Yard Waste Center has enhanced its operations in recent years and will be the site of a 2026 pilot for food waste processing.

In July 2022, the City transitioned to Green Yard Waste Carts as the sole receptacle for curbside yard waste pickup. This has resulted in yard waste collection increasing by 39%, diverting nearly 18,000 tons of waste from the land fill in a single year. Due to the program's success, the City has expanded curbside yard waste collection by allowing residents to request a second cart, doubling pickup capacity to 190 gallons every 2 weeks. These carts support staff health and safety, plastics reduction, idling reduction, and yard waste collection efficiency and vehicle routing.

Yard waste carts are just one of the many ways the Solid Waste Services department is committed to supporting climate action and reducing or reusing waste generated by Raleigh residents and businesses. See the **Raleigh Yard Waste Center Resources** webpage for more details and information on how to use these products; and what is acceptable to drop off at the Yard Waste Center.

Solid Waste Services Explores a Food Waste Processing Program

The Solid Waste Services department (SWS) began a study in February 2024 to explore the possibility of establishing a food waste composting program to divert additional waste streams from the landfill. The study, completed by an environmental engineering firm, noted ways to divert up to 12% of food waste annually through potential food waste processing strategies. They evaluated suitable models for a food waste compost program including necessary infrastructure investments, methods to collect and process waste, and how to reduce vehicle miles traveled to transport waste to a processing facility. Solid Waste Services is working on the necessary site enhancements to pilot a food waste processing program in 2026, which will pilot accepting and processing food waste from existing vendors

in a controlled space at Raleigh's Yard Waste Center. By exploring sustainable waste management options, Raleigh is taking a proactive approach to reduce the environmental footprint, promote a circular economy, extend the life of our landfill, and contribute to a more resilient and eco-friendly community.

City of Raleigh Internal Waste Reduction Strategies

The City of Raleigh has undertaken several initiatives to reduce, eliminate or manage waste internally by making shifts in procurement and processes. Departments across the City are looking for creative ways to create less waste and send less to the landfill.

City of Raleigh freeFILL program: Raleigh's water is "nationally recognized" in quality and taste. Using a reusable water bottle can save a person hundreds of dollars every year, while replacing dozens of single-use bottles. Raleigh Water leads the freeFILL program within the City's community centers and publicly accessible facilities encouraging people to fill their water bottle for free. The Raleigh freeFILL program aims to reduce plastic water bottle use by highlighting 10 locations around downtown Raleigh that make it easy and refreshing to fill your water bottle and take sustainable action for your community.

Figure 39. Raleigh residents can visit participating freeFILL sites to fill their water bottle up for free!

E-Waste Reduction in IT Department: The Information Technology (IT) team has shifted their procurement process for electronics used in City of Raleigh operations to no longer lease keyboards, mice, laptop cases, or adapters. Instead, departments will procure these items as needed, recognizing that existing devices often remain functional and do not require frequent replacement. By only replacing electronics when necessary, this will reduce e-waste at the source and contribute positively to the circular economy by fostering resource efficiency and minimizing the consumption of raw materials in manufacturing. Once e-waste materials are determined to be obsolete or non-functional, and unable to be repurposed, they are routed to the City's recycle center for proper waste disposal.

Damaged Sidewalk Concrete Being Diverted from Landfill: As a part of the Sidewalk Hazard Mitigation Program, trip hazards are just cut out, rather than replacing a whole sidewalk panel. Through this sidewalk repair strategy, the Transportation Maintenance division diverted about 4,200 tons of concrete from the landfill in 2024.

The Workforce Program: Creating Opportunities for People Experiencing Homelessness and Beautifying the City

The City is collaborating with The Great Raleigh Cleanup (TGRC) and A Place at the Table on "The Workforce" program to pay people experiencing homelessness to work on beautification projects across Raleigh. In the first year of the program, participants completed over 95 cleanups and cleaned more than 50,000 pounds of trash. In June 2025, the City implemented a communications campaign highlighting the hard work of the Workforce members and our community partners.

Workforce participants beautify City locations such as parks, waterways, and roadsides. Through the program, the City connects residents to resources that can help them access other daily needs. The program helps make Raleigh a more beautiful place to live, work, and play. It also supports social impact and resilience by creating education and engagement with the community.

Participants earn a living-wage rate of $18/hour, and they receive a meal at A Place at the Table, Raleigh's first pay-what-you-can café. The Great Raleigh Cleanup has now paid more than $50,000 in wages to its Workforce members and employed more than 60 individuals. Workforce members have shared success stories like finding more stable jobs with the help of the work experience gained in this program.

People experiencing homelessness are particularly vulnerable to threats like heat and flooding. By helping them access critical resources, the City of Raleigh builds a healthier, safer community. This makes our community more resilient to climate impacts.

Figure 40. The Workforce members with bags of litter after a successful cleanup near Perry Creek Road.

Figure 41. A Workforce member participating at a local cleanup at Bailey Drive.

Figure 42. Before (top) and after (bottom) of a successful cleanup at New Bern Avenue.

Figure 43. Before (top) and after (bottom) of a successful cleanup at Garner Road.

"It gives you a good feeling when you see something that's all trashed and littered up, and when the Workforce is done, you look at it and it looks like nature again; it just makes you feel good." **– A Workforce program participant**

Community Resilience

Community resilience is defined by one's ability to anticipate, prepare, respond, and ultimately recover from significant hazards or threats with minimum damage to social well-being, the economy, and the environment.

Raleigh was ranked as the second most climate resilient city in 2023 by **Architectural Digest**. In February 2024, the Milken Institute also ranked Raleigh as the #2 Sustainable Growth and Resilient Large City. These awards highlight how climate, community, and economic resilience are interconnected and how residents are being empowered to take action in Raleigh.

As a local government, city staff have established a mission to develop and deliver services that champion resilient and sustainable growth for our residents, businesses, and visitors. Building community resilience involves ensuring that infrastructure, housing and other buildings are not exposed to or built to withstand environmental hazards; connecting residents to preparedness tools that increase safety during storm events; and that the City is investing in infrastructure to reduce the harmful effects of heat and flooding events that put vulnerable residents at highest risk. City staff have been developing trusted community partnerships, gathering data, sharing educational resources, and empowering collaborative and innovative approaches to strengthen resilience among our community.

Raleigh Continues Multi-Year Partnership to Increase Environmental Literacy, Preparedness and Community Empowerment Among Southeast Raleigh Residents

Studies highlight that educated communities are less vulnerable to environmental hazards, as they are more likely to be prepared for and recover from disasters. Community Climate Education for a Resilient Raleigh (Resilient Raleigh), an initiative funded through the National Oceanic and Atmospheric Administration (NOAA) seeks to improve the climate resilience of Raleigh's vulnerable communities by focusing on building residents' climate resilience through education, engagement and building meaningful connections to City resources and planning initiatives. The multi-year resilience-building effort seeks to build sustainable programming through public-private partnerships designed to help people make informed decisions that reduce their vulnerability to environmental hazards.

Figure 44. These photos show the Raleigh Watershed Learning Network and Heat Island Learning Team in session as part of the City's Community Climate Education for a Resilient Raleigh Program.

Activity 1: Walnut Creek Watershed Learning Network Empowers Community Champions

The City of Raleigh continues its collaboration with Partners for Environmental Justice (PEJ) to host community learning networks. Through the Watershed Learning Network and the Heat Island Learning Team, PEJ has engaged over 100 community champions to date. Participants gain knowledge and skills to develop sustainable solutions and take action in their communities. In these six-to-eight-week courses, community members enhance their knowledge of flood and heat risk, watershed management, environmental justice, sustainable solutions, civic engagement, and local government action. These programs focus on delivering education and empowerment for local residents and allow

opportunities for relationship building and information sharing between the City and key stakeholders. Each participant receives a stipend for meeting a participation threshold, and cohorts are also offered in Spanish.

Activity 2: Ready Raleigh Emergency Preparedness Guide Builds Resilience and Prepares Residents

The City of Raleigh created the **Ready Raleigh Emergency Preparedness Guide** as a tool for communities to *Be Connected, Be Prepared and Be Informed* about potential emergencies and disasters that may impact the Raleigh area. The Ready Raleigh Guide has been printed and distributed to hundreds of residents throughout the community. Available in English and Spanish, the guide provides household-level resources with a strong emphasis on establishing a preparedness plan informed by the reality that climate change will cause increasingly severe heat and flood events for the Raleigh area. This Guide also serves as an important tool to build social connectedness, where residents can work together and learn about each other- in your family, school, work, or neighborhood – you can organize together and talk about your daily needs as well as what your plans and needs might be during an emergency. We know that communities that are already connected do much better in times of an emergency because they know how to support each other's unique needs.

Activity 3: A Comprehensive Approach to Resilience Planning

Raleigh is beginning the process of creating our next comprehensive plan to guide how the city grows beyond the year 2050. Led by the Planning & Development Department and collaborating with Raleigh residents, neighborhoods, organizations, and boards and commissions, the Comprehensive Plan will produce long-range planning and policy guidance intended to shape how the city grows and develops through the year 2030. Sustainability and our partners are supporting the development of the plan in ways that shape the city's vision while ensuring climate action and resilience are incorporated into Raleigh's long-range planning.

Figure 45. Raleigh residents engaged in community conversations around topics like affordable housing and mobility, among others, to influence the 2050 Comprehensive Plan.

Radios Can Help Vulnerable Neighborhoods Prepare for Severe Weather

In preparation for the 2025 Atlantic Hurricane Season, which began on June 1 and ends on November 30, the City of Raleigh provided 850 National Oceanic and Atmospheric Administration (NOAA) weather radios to community members. Throughout the summer of 2025, the Community Engagement Department, in collaboration with the Raleigh Fire Department's Division of Emergency Management, organized outreach events focused on distributing radios to neighborhoods most vulnerable to extreme weather hazards. The City's proactive approach to distributing weather radios enhances safety and preparedness measures within Wake County.

The Raleigh Fire Department's Division of Emergency Management received a $25,000 grant from the Duke Energy Foundation to purchase weather radios from NOAA.

Equipped with NOAA Weather Radio's Specific Area Message Encoding (S.A.M.E.) technology, the radios purchased by the City were programmed to share alerts specific to Wake County. The weather radios provide residents with important information, including weather warnings from the National Weather Service and emergency alerts from Wake County Emergency Management. These radios silently monitor for alert messages without requiring continuous broadcasting.

The weather radios distributed by the City include backup batteries, making them invaluable during power outages. The radios provide forecast updates and alerts during severe weather events. When there are no serious weather threats, the radios continue to broadcast local weather updates and climate information that residents can access 24 hours a day, 7 days a week.

Figure 46. The City helps residents prepare for severe weather through steps like distributing weather radios and sharing the Ready Raleigh Emergency Preparedness Guide (available online, too).

Raleigh Leads Urban Heat Mitigation + Community Education and Empowerment

The urban heat island effect is a phenomenon whereby cities experience higher air temperatures than the surrounding rural landscapes. People living in urban heat islands are especially vulnerable to the effects of climate change. Due to historical divestment in certain communities over the past 100 years, some of Raleigh's residents are more vulnerable and at even greater risk of negative health outcomes from heat. More extreme heat events result in longer, hotter periods that present a risk to physical and mental health, increase the demand for energy and rising utility costs, and result in dangerous droughts.

In 2024, Raleigh, N.C. recorded 10 days over 100 degrees and has continued to break 100-year heat records in 2025. With Raleigh's continued population and infrastructure growth, addressing the effects of extreme urban heat will be an increasingly critical strategy for the Raleigh community to tackle together.

The City's Office of Sustainability works closely with our partners to implement solutions that reduce the harmful effects of extreme heat, educate our residents to heat hazards so they feel empowered to be prepared to adapt to more high heat days, and promote investment in resilient city infrastructure and services designed to build long-term resilience to extreme heat and other risks posed by climate change.

Cool Roadway Technology is Addressing Urban Heat

In 2020 the City of Raleigh piloted a pavement technology to mitigate urban heat islands, reduce GHG emissions and address water pollutant issues. Since 2020, the City has included this technology in its street re-pavement plans. With more than 70 lane miles of the cool pavement technology applied, these projects eliminated about 437,000 metric tons of carbon dioxide in just a few years.

This innovative technology applies a coating of titanium dioxide to the asphalt rejuvenation process to create "Cool Pavement," so that when the pavement is exposed to sunlight, a chemical reaction that eliminates harmful pollutants is triggered. Treated roads show a 37% reduction in nitrogen oxides (a type of roadway pollutant) and an average

400% improvement in Solar Reflective Index (minimizes the heat absorbed by the road) as compared to untreated roads.

Cool roadways are being deployed strategically, particularly along planned Bus Rapid Transit (BRT) corridors with high traffic. The City uses a GIS mapping tool to prioritize areas most impacted by urban heat islands and other social equity impacts, significantly mitigating urban heat islands compared to untreated pavement.

Parks, Recreation and Cultural Resources are Committed to Growing Raleigh's Urban Tree Canopy

Raleigh's Parks, Recreation and Cultural Resources Department is designing strategies that utilize City-owned property and rights-of-way to deliver innovative and equitable solutions to reduce heat. Sustainability worked with the Urban Forestry Division to utilize GIS and urban heat data to identify areas of the City where there was a deficit of tree canopy and an occurrence of high heat effects. The parks team set and achieved a goal to install 1,000 street trees in three years – focusing in high-heat areas lacking existing tree canopy. The team prioritized equitable distribution of resources by mapping street tree density, overlayed with social and economic vulnerability data to create a data-driven approach to focusing plantings in historically disinvested neighborhoods.

Green Stormwater Infrastructure offers many benefits including heat and flooding reduction

Sustainability partnered with Stormwater and IT to embed social equity and heat data into their existing flood maps. Flooding and heat are Raleigh's top climate impacts, and green stormwater infrastructure is a highly effective tool for mitigating both heat and flooding. This partnership enables staff to make more informed decisions and plan for investments in the communities of most need. Through this partnership, the Stormwater Division's Green Stormwater Infrastructure Team redeveloped the Raleigh Rainwater Rewards Program (R3) to better serve community groups most impacted by climate change and other social and economic barriers. R3 is an initiative by the City of Raleigh aimed at improving water quality through the installation of green stormwater infrastructure. Through the Stormwater fund, homeowners may receive up to 90% reimbursement for installing and maintaining a GSI project on their property. To increase accessibility for socially and economically disadvantaged residents, Sustainability helped develop a pilot to provide 100% cost coverage for low-moderate income homeowners through Sustainability's Climate Action Fund.

The City of Raleigh continues to lead the way in heat mitigation and adaptation

In November 2024, we were a finalist for an award from the Research Triangle Cleantech Cluster for our data-based urban heat mitigation work combined with our community empowerment heat programs, like the Heat Island Learning Team described in an above section. The City of Raleigh continues to lead the way in heat mitigation and adaptation, presenting on our work to regional sustainability and health groups like the Southeast Sustainability Directors Network and a statewide heat-related illness group led by the NC Department of Health and Human Services.

Resilience Hubs to Build Social Belonging and Preparedness

Sustainability has partnered with the Office of Strategy and Innovation to design a city-wide approach to establish a network of resilience hubs throughout Raleigh. A resilience hub is defined as a designated central location that community members already know and trust and that has multiple benefits to residents: serving as a multi-use community center, an entrepreneurial training hub, and a gathering space to build resilience in our everyday lives. Resilience hubs create daily resilience, while also preparing residents to take care of themselves and their neighbors in the case of emergencies and disasters.

Figure 47. Walnut Creek Wetland Center is one spot residents gather to build resilience through the Watershed Learning Network hosted by Partners for Environmental Justice and the City of Raleigh.

Local governments have a unique opportunity to utilize our community influence and our physical assets to empower residents to build a legacy of community-driven resilience and social belonging and cohesion. Resilience hubs will be prioritized in areas that are accessible to neighborhoods most impacted by flooding, heat islands, and high energy costs, ensuring that interventions target areas with the greatest need. This work will also uplift programs and opportunities to support community members building a higher quality of life and economic outcomes, while also building closer relationships with our neighbors so we can all better care for each other.

The City of Raleigh is already doing this work in many ways by providing a wide variety of important community services that mitigate climate risks, create high-quality jobs, and provide health and wellness through smart programming. Now, through a hub-spoke model, a central hub (park, community center, other trusted location) serves as the main point of connection. The hub is supported by its spokes – the programs and product offerings that make this space a resilient, trusted gathering space for the surrounding community.

The first phase of development will commence in 2025 with a city-wide collaborative approach to identifying Resilience Hub pilot sites. Among Raleigh's 200+ parks and community centers, cross-departmental teams will identify 10+ locations throughout the City to offer programs that cultivate social advancement and economic mobility, offer renewable energy and micro-mobility opportunities, provide education and outreach on resilience topics, foster mental and physical well-being, and address flood and heat island risks to the surrounding community. In later years, we hope to expand this model to more locations that offer value to the communities we serve.

Green Stormwater Infrastructure and Floodplain Management

A floodplain is the area next to a creek or river that floods. Floodplains reduce flood risks by managing stormwater runoff and providing economic, environmental, and cultural benefits to surrounding communities. Innovative stormwater solutions can manage and clean stormwater runoff before it becomes a risk to people, place, and the environment.

Raleigh's stormwater system includes traditional stormwater infrastructure, like pipes and drains, that divert water out to the Neuse River and a growing portfolio of green stormwater infrastructure to absorb, retain, and filter stormwater naturally. Raleigh Stormwater is committed to expanding green stormwater infrastructure (GSI)

throughout Raleigh to reduce the community's exposure to flood hazards, lower energy consumption, create wildlife habitat, and reduce extreme heat in areas that most intensely experience these impacts.

GSI examples include bioretention ponds, constructed wetlands, permeable pavers and other surfaces designed to absorb or slow the flow of water, and cisterns to collect water for reuse. Have you wondered where green stormwater infrastructure is throughout the city? Explore the **GSI Virtual Tour** to see how Raleigh uses GSI to improve local water quality!

Raleigh Stormwater has several projects and programs that address stormwater management, heat, and other climate hazards for the benefit of our residents.

Green Stormwater Infrastructure

Raleigh Rainwater Rewards Makes GSI Accessible to Residents and Community Groups

As Raleigh continues to grow, city staff, nonprofits, faith groups, schools, and members of the public have established collaborative and innovative partnerships to address the growing challenge and demand of stormwater management. The **Raleigh Rainwater Rewards (R3)** program is a unique incentive program that reduces or removes the financial barrier to installing and maintaining green stormwater infrastructure. Raleigh Stormwater utilizes approximately 1% of its stormwater utility fee annual revenue to facilitate the voluntary installation of water quality improvement projects on public and private properties throughout the city by offsetting a portion or entire cost of the project.

Raleigh Rainwater Rewards program offers reimbursement of up to 90% of the cost for homeowners, businesses, non-profits, and communities organizations to install green stormwater infrastructure (GSI), remove impervious surface or install rain cisterns and other GSI technologies. These projects have many environmental and aesthetic benefits. In FY25, 267 consults were completed via phone, email, and onsite visits, 35 projects totaling $567,961 were approved, and 28 projects were installed and began maintenance terms.

The **Raleigh Rainwater Rewards Subsidy Program**, funded by Raleigh's Office of Sustainability Climate Action Fund, offers a 100% funding opportunity for projects in disproportionately impacted communities, non-profits, and places of worship. This investment by the City is making GSI more accessible to more communities. Through this program, areas and residents most vulnerable to the impacts of climate change can improve their resiliency to flooding and water quality by installing and maintaining GSI that reduces and cleans stormwater runoff.

Collaboration with a range of stakeholders helped the City develop eligibility criteria to maximize limited funding to target communities that demonstrate the greatest need.

"The 100% funding program is instrumental in advancing critical sustainability projects that would have otherwise faced significant funding barriers." **- Charlie Hale, COO Food Bank of Central & Eastern North Carolina**

Figure 48. Joyner Elementary School Rain Garden. Rain gardens can help manage stormwater runoff and improve water quality.

GSI Maintenance Becomes an Employment Pathway Opportunity for Youth

In 2025, Raleigh Stormwater established a partnership with **Urban Sustainability Solutions** (USS) to lead a **technical training and education program** in partnership with Wake County Public Schools.

USS is a nonprofit that specializes in training teachers in stormwater curriculum and helps them receive certifications; they partner with teachers to bring STEM education to their students in a six-week after-school program; and involve local teachers and youth in sustainability projects that improve air and water quality for low-income households and neighborhoods. GSI maintenance is an emerging workforce opportunity, and this partnership will train students to enter the workforce with necessary skills to meet the growing need.

In its inaugural year, the program will engage Millbrook High, Southeast Raleigh High, and Sanderson High to learn and host workshops about GSI across the Raleigh area.

GSI Infrastructure Plan paves way for more sustainable stormwater management

The City's Green Stormwater Infrastructure (GSI) Policy became effective in November 2023. The policy requires City-led projects be evaluated for GSI opportunities and promotes its installation to reduce stormwater runoff, improve water quality, and provide ecological benefits. Through collaboration between many departments across the City, the policy allows City projects to go above and beyond regulatory stormwater and development requirements to improve water quality. This policy also helps pave the way for more climate action policies to be implemented throughout Raleigh's city operations.

Figure 49. This constructed wetland is a type of green stormwater infrastructure. Raleigh Stormwater is committed to expanding green stormwater infrastructure (GSI) throughout Raleigh to reduce the community's exposure to flood hazards, lower energy consumption, create wildlife habitat, and reduce extreme heat in areas that most intensely experience these impacts.

Because of this commitment to climate action and sustainability stormwater management, Raleigh has implemented GSI construction as part of these recent projects:

East Civic Tower – City Hall Will Feature GIS Installation

Raleigh's new City Hall is currently under construction and, in partnership and with funding from Raleigh Stormwater, will include green roof features and suspended pavement with trees to manage and clean stormwater runoff beyond what is required by regulation. Construction is anticipated through 2026.

Smoky Hollow Park Expands Raleigh's Green Space Amenities

The Smoky Hollow Park project, located on a 14-acre site at Capital Boulevard and Peace Street in Raleigh, focuses on transforming a city maintenance facility into a new downtown park. Funded by the 2014 and 2022 City of Raleigh Parks Bond Referendums, along with walking paths and landscape areas, the project includes environmental remediation, stream restoration and a constructed wetland. Advanced design was completed in April 2025 with construction starting in 2026 and project completion by 2028.

Floodplain Management

City of Raleigh Joins the Community Rating System (CRS) as a Class 5 Community

Effective October 1, 2025, the City of Raleigh has officially joined **FEMA's Community Rating System (CRS)** as a Class 5 community. As a result, all new or renewing flood insurance policies issued on or after this date will receive a 25% discount on annual premiums. The CRS is a voluntary incentive program under the National Flood Insurance Program (NFIP) that encourages communities to adopt floodplain management practices that exceed minimum NFIP standards. In return, property owners benefit from lower flood insurance premiums and improved community resilience.

Raleigh Stormwater Launches New Public Portal to Educate Residents on Flood Risk

Flooding happens naturally and cannot be completely prevented. It's important to know your flood risk before a storm comes. Raleigh Stormwater collaborated with Forerunner Industries, a leading provider of elevation certificate management solutions, to streamline floodplain management processes, improve compliance with federal regulations, and provide residents with greater access to flood risk information. They debuted a new **flood information public portal** allowing residents to view property-specific flood risk data, including elevation information and compliance status, empowering them to take proactive measures to reduce flood risk. Residents can now access and share elevation certificates (if on file with the city) related to their properties, facilitating informed decisions regarding flood insurance and property improvements.

Early Detection and Streamlined Communication Reduce Safety Risk During a Flood

When the city experiences intense rainfall in short durations, there are rapid rises in creek levels and streambank flooding. In the event of heavy rain fall that may result in flooding, Raleigh's **Flood Early Warning System** helps protect the public from dangerous flooding by identifying and predicting locations of flooding as early as possible – and streamlining communication to alert residents and emergency response teams. Utilizing a network of stream elevation gauges, street sensors, flood cameras, and rainfall prediction networks, the system alerts Stormwater staff and emergency responders to potential flood risks across the city. With this information, Stormwater staff can notify first responders and other emergency personnel where flood risks are occurring or are about to occur so they can mobilize to help protect Raleigh residents.

Figure 50. Raleigh's Flood Early Warning System helps protect the public from dangerous flooding by identifying and predicting locations of flooding as early as possible – and streamlining communication to alert residents and emergency response teams.

Raleigh Stormwater also has the Active Flood Control Program, in which the water level at Lake Johnson can be remotely lowered prior to storm events to allow capture of more upstream flow. It helps protect residents from the impacts of flooding.

Flood Mitigation Buyout Program Helps Reduce Residents' Risk

The City of Raleigh's flood mitigation program focuses on reducing long-term flood risk through voluntary property buyouts and other targeted strategies. All buyouts are completely voluntary, and no property owner is ever required to participate. Projects are prioritized using detailed, location-specific flood risk data to ensure that resources are directed where they will have the greatest impact.

To support this process, the City uses the Flood Mitigation Assessment and Planning Tool (FLO-MAP), which provides a data-driven method for evaluating and prioritizing mitigation efforts. FLO-MAP helps the City identify high-risk properties and guide investments in mitigation projects such as buyouts, home elevations, and structural improvements.

Mitigation Projects:

- **Hardimont Road:** A property acquisition project approved by FEMA under the Hazard Mitigation Grant Program (HMGP). The State of North Carolina is managing project setup and will serve as project manager. The City's Legal Department is currently reviewing the memorandum of agreement.
- **Lake Woodard Drive:** A City-funded voluntary buyout. The homeowner has accepted the appraisal, and City Real Estate and Engineering Services will meet with the homeowner later this week to finalize paperwork and set timelines.
- **Rothgeb Drive:** An elevation project currently under FEMA review, with no major updates.

USGS streambank erosion study provides recommendations for strategic intervention

The City of Raleigh is partnering with the US Geological Survey (USGS), in coordination with a companion study conducted by NC State University, to complete the Comprehensive Assessment of Streambank Erosion Hotspots in Raleigh, NC project. This project aims to predict streambank erosion potential using remotely detected datasets. Results will provide the City of Raleigh with a city-wide dataset of streambank erosion hotspots that can be used to identify areas with severe erosion problems, as well as areas with stable streambanks. This information will allow the City to efficiently deploy staff for field investigations and prioritize need and opportunities for stream restoration and stabilization projects. This study will also inform future watershed assessment strategies and help support the creation of a framework for the City's developing Stream and Riparian Program.

Recent Progress:

- Findings from a Lidar data analysis and field data collection have been synthesized and the information will be provided to the City which will help inform stream restoration, stabilization, and enhancement project selection and watershed management decisions. The final products of the project that are in progress include a peer-reviewed Journal Article and associated Data Release. The journal article will cover: (1) city-wide streambank erosion results for channel segments and subbasins, (2) positive openness (channel incision) and change in positive openness 2015 to 2022, (3) comparison of field data and remote data, (4) detection of "patches" of erosion along streambanks, and (5) the proximity of patches of erosion to sewer and residential parcels.

- An additional assessment to identify areas where critical infrastructure (residential parcels and sewer lines) is in close proximity to streambank erosion hotspots is currently in progress. USGS's assessment will include a shapefile of streambank "patches" of erosion. "Patches" are where we found several adjacent raster cells with ~0.5 meters of erosion or more. USGS is looking at patch proximity to residential parcels and sewer lines. Further assessments will be possible with the "patches" shapefile that will be available as part of the associated data release.

The final peer-reviewed journal articles and associated data are expected to be completed by March 2026.

Preservation and Green Space

Figure 51. Petals in the Parks is a celebration of the vibrant blooms that bring Raleigh's parks to life each spring.

The CCAP calls for open and natural space plans that include planting trees, establishing pollinator habitats, and utilizing land for parks and recreation spaces. Each of these nature-based strategies reduce urban heat islands, provide local food access, and increase physical and psychological resilience in our community.

This effort is supported by many planning initiatives, projects, and City services including the City of Raleigh Open Space Plan, developed in 2020. The plan informs the City's strategies seeking to build the community's access to parks. With this plan, staff can make informed decisions that prioritize park development and land acquisition opportunities to reach residents and communities that will benefit most from improved park access. Effective land use and park planning promotes social and economic advancement, accessibility and enhanced quality of life, habitat connectivity and greenspace, and provides natural solutions to reduce extreme heat, flooding, and other impacts of climate change.

Raleigh Parks is also implementing many projects funded by the **2022 Parks Bond** to enhance equitable access to resilient parks and greenways citywide. These projects involve redeveloping community centers and parks, creating new walkable and bikeable connections, and enhancing park accessibility.

Learn more about a few of the projects underway to advance the preservation of green and open space as Raleigh continues to grow.

Our Trees, Raleigh's Future

Figure 52. The primary goals of the Leaf Out program include protecting mature trees and sensitive habitats, expanding the urban tree canopy to reduce urban heat islands, and promoting environmental stewardship.

As the City of Oaks, trees are an important part of Raleigh's identity and charm. Beyond their beauty, trees provide essential benefits like shade in urban areas, cleaner air, and an improved quality of life. As the city grows, decisions around preserving our tree canopy will ensure Raleigh remains a healthy, vibrant, and sustainable community.

Led by the Parks, Recreation, and Cultural Resources Department, the City launched *Leaf Out: Goals and Guidance for Trees on City Property,* which is a strategic initiative focused on the protection, expansion, and care of Raleigh's public tree canopy. The project began in 2024 and will conclude in 2026 to develop guidance to safeguard existing trees, expand tree coverage in underserved areas, and engage the community in stewardship and environmental education efforts. By focusing on city-owned properties, Leaf Out aims to create a more resilient, sustainable, and vibrant urban forest.

The initiative's primary goals include protecting mature trees and sensitive habitats, expanding the urban tree canopy to reduce urban heat islands, and promoting environmental stewardship.

The Parks, Recreation and Greenway Advisory Board approved the Leaf Out Situation Assessment on October 17, 2024. This assessment helps Raleigh Parks staff define the project's scope and goals, draft an engagement plan, identify key stakeholders, and determine effective methods for community engagement.

Moreover, trees have been a key topic during the public engagement phase of the City's 2050 Comprehensive Plan Development. The City received 335 responses to its survey and had 120 attendees at the two Community Conversation events for "Branching Out: Trees & Urban Ecosystems." The top three issues of greatest concern to residents included loss of mature trees in already developed areas, loss of tree canopy in undeveloped areas, and loss of shade leading to increased heat.

Street Tree Project Expansion: Growing Raleigh's Tree Canopy Brings Cooler Temperatures to Urban Spaces

Trees create and define spaces; connect people to others and nature; and benefit the environment by consuming carbon, cooling the air, and collecting rainwater.

The results of the **City of Raleigh and Wake County joint study** to assess tree canopy cover for the Raleigh area were released in 2023. The study revealed that Raleigh's trees annually remove 2,171 tons of pollutants, sequester 81,693 tons of carbon, and capture 1.6 billion gallons of stormwater, equivalent to 2,418 Olympic-sized swimming pools! The tree canopy's overall value, estimated at $630.6 million, encompasses benefits such as carbon sequestration, shade, energy conservation, pollution removal, and stormwater mitigation. The study also provided insights into tree canopy health, distribution, changes between 2012 and 2020, and planting priorities based on community vulnerability. City staff are reviewing the data to inform future decisions and policies related to canopy management.

Raleigh Parks Department created the Street Tree Program to address urban heat and social impact issues throughout Raleigh. **Urban Forestry**, within the Parks and Natural Resources Division of Raleigh Parks partnered with Sustainability and the Raleigh Parks GIS team to map opportunities for expanding Raleigh's urban tree canopy in areas of highest need. The three-year collaborative effort utilized geographic information systems (GIS) data layers and community engagement strategies to inform their approach. After surveying the distribution of street trees in Raleigh, the City's Urban Forestry team found that street trees were not equally or equitably distributed, with a particular lack of trees in Southeast Raleigh. The survey identified opportunities to increase tree canopy with street tree installations to reduce extreme heat to areas of greatest need. Now, trees are being strategically planted in areas that would benefit most from the advantages of trees: cleaner air, reduced flooding, carbon dioxide absorption, shade, and lowered air conditioning costs. To date, the team has successfully planted 1,048 trees. They'll close out the final stage of the project in late 2025.

Gipson Play Plaza at Dorothea Dix Park: a Nationally Iconic Destination for Wellness, Play, and Community Connection

The Gipson Play Plaza is designed with everyone in mind. The 18.5-acre play plaza is the newest addition to Raleigh's Dorothea Dix Park and the largest adventure playground in the Southeastern United States. It opened to the public in June 2025 with over 42,000 visitors in the first week and over 200,000 visitors in the first month. This iconic destination was also designed with many innovative sustainability features, shared below.

Figure 53. Gipson Play Plaza had a grand opening celebration in June 2025, with over 200,000 people visiting the park that month. The event had family activities, an open splash pad, food trucks, public art, and more.

Whether you are a kid ready to climb, a grandparent out for a stroll, or someone looking for a new spot to picnic, there's something for everyone. It was custom designed with play features inspired by North Carolina's natural landscapes, including climbing towers, boulders, and water play areas. It's made for all ages, with places to climb, swing, and splash. There are lawns for picnics, oodles of picnic tables surrounding charcoal grills, a civic plaza, and a new grab-and-go market.

A one-of-a-kind park experience, **Gipson Play Plaza at Dix Park** features art, fountains, gardens, a civic plaza, and a picnic grove. The design includes a sensory maze, water play mountain, swing terrace, adventure playground, three-story climbing towers, and innovative sustainability features to reduce the impacts of climate change. Raleigh is leading by example in using nature-based stormwater measures – also known as green stormwater infrastructure designed to help reduce stormwater flooding, improve water quality and support wildlife.

Areas of Gipson Play Plaza act as a "sponge" to hold stormwater runoff on site until it can slowly be sent downstream. A small stream runs along the plaza through a garden, under a pedestrian bridge, and to a stormwater wetland pond before slowly releasing excess water downstream to Rocky Branch, which flows into Walnut Creek. This collaboration between Raleigh Stormwater and Raleigh Parks is the first of many innovative stormwater management features Dix Park will use to be a good steward of the environment and be a good neighbor to

downstream communities as the park grows. Another unique feature is the "Watermill Mountain" water play feature that captures potable water at the end of the system, stores it in an underground tank, and uses it for irrigation Other sustainability features include: electric vehicle charging, an electric fleet of vehicles to maintain the facilities, electric lawn equipment, permeable paving, bike share station, and access to a bus stop. Being in Dix Park, Gipson Play Plaza is also close to the new solar installation at the Greg Poole, Jr. All Faiths Chapel as well as the sunflower field.

The plaza was funded through the 2022 Parks Bond, City Council capital reserves, and private donations raised by our partners at the Dix Park Conservancy.

City of Raleigh Continues to Bring Sunshine, Education and Accessibility through Sunflowers

The Dorothea Dix Park Sunflower Planting has become an annual tradition for Raleigh residents and park visitors. Each summer, the City plants five acres of sunflowers in a public space. Community members have access to the field and there is intense interest in the flowers and the unique fauna they attract. The site draws over 100,000 visitors each year and #dixparksunflowers on Instagram has thousands of photos captured in the field. The City includes educational signage throughout the space to educate visitors on the types of pollinator species and partners with various organization to host educational events and programming.

Figure 54. The iconic sunflower field at Dix Park draws over 100,000 visitors ever year and helps wildlife like birds and pollinators.

The creation of the 5-acre sunflower field at Dix Park began as a City of Raleigh partnership between Raleigh Water, Sustainability and Raleigh Parks. Raleigh Water preps the field in spring and plants the sunflower seeds in May. The flowers bloom in mid-to-late July. After the bloom is over, the sunflowers are left for birds and other wildlife to eat the seeds throughout the fall. In the fall, Raleigh Water clears the field and plants a winter cover crop so we can begin to prepare the ground for the next year's event. The sunflower field serves as a massive pollinator habitat for bees, butterflies and other wildlife as well as a fun, photo-filled tradition for people to experience Raleigh parks!

Pollinator Habitat Protection and Expansion

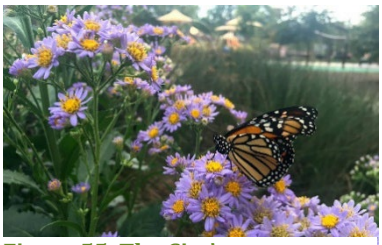


Figure 55. The City's Sustainability Office partners with multiple departments including the Parks, Recreation, and Cultural Resources, as well as local community groups, to organize education, events, and conservation projects to support pollinator habitat.

The City of Raleigh has long been committed to conserving pollinator habitat for the benefit of birds, bees, butterflies, and people. Given that long history, the City became a Bee City USA in 2017.

Pollinators are keystone species in essentially every ecosystem on earth and touch our lives in numerous ways each day, including being responsible for approximately one third of all food and drink. Declines in native pollinator populations globally pose a threat, with up to 40% of species at risk of extinction due to habitat loss, pesticide use, and climate change.

The City's Sustainability Office partners with multiple departments including the Parks, Recreation, and Cultural Resources, as well as local community groups, to organize education, events, and conservation projects to support pollinator habitat. These efforts are highlighted during Raleigh's annual Earth Day Celebration and Pollinator Week, through a social media campaign aiming to share best practices

and educate the community, volunteer events at parks to plant pollinator gardens, informational kiosks at parks and nature preserves, and participating in Moore Square's Farmer's Market to give away pollinator plants like milkweed.

The Parks, Recreation and Cultural Resources Department (PRCR) has ongoing programming to support pollinators throughout the parks and greenway trail system and has more than 30 sites participating in the **Monarch Waystation program** and 88 pollinator sites across the parks, nature preserves, and greenway trails in Raleigh. The Parks Maintenance staff also now plants over 4 acres of wildflowers as pollinator habitats along Raleigh's over 100 miles of greenway trails each year. The department follows strict integrated pest management policies and promotes pollinator health through landscape management practices including leaving the leaves, cut back timing, planting wildflower pots, and conducting pollinator best management for pesticide use.

Raleigh's Stormwater division, Raleigh Water, and the Raleigh Convention Center are all incorporating pollinator habitats and education into their practices and initiatives as well.

Figure 56. The City's Sustainability Office partners with multiple departments including the Parks, Recreation, and Cultural Resources, as well as local community groups, to organize education, events, and conservation projects to support pollinator habitat, like this "Butterfly Highway" at Forest Ridge Park.

Food Security, Community Gardens and Urban Farms

Strategic Plan Alignment & Partnerships

The City's food security efforts remain aligned with *Moving Beyond Hunger: Creating a Resilient & Equitable Food System*, the 2023 update to Wake County's original 2017 Food Security Plan. This updated plan outlines eight mutually reinforcing investment strategies totaling $7.2 million, focusing on racial equity, local economic development, climate resilience, and community leadership. While the City's 2021–2025 internal update concluded in December 2024, staff continue to review and align with the County's most recent framework.

The City is also an active member of the Capital Area Food Network, collaborating with regional partners to strengthen food access and equity.

Summer Feeding and Nutrition Services:

- In summer 2023, the City partnered with Wake County Public School System's Child Nutrition Services to deliver over 26,000 meals and hosted six pop-up produce markets with the Food Bank of Central & Eastern NC, serving more than 6,100 individuals and distributing nearly 64,000 pounds of produce.
- In 2024, the City continued its partnership with Wake County Child Nutrition Services, delivering 25,595 meals to 13 summer camp locations during a six-week camp season.

- In 2025, the partnership expanded to cover all nine weeks of camp, with Wake County and Inter-Faith Food Shuttle supporting meal provision across all qualifying sites.

Community Gardens on Public Land

Through the City's Strategic Plan initiative, two internal teams continue to advance community gardening work:

- The Private Land Team developed and published online resources to guide residents through establishing gardens or small farms on private property.
- The Public Land Team evaluated City-owned properties in 2023 and identified five suitable locations for community gardens, prioritizing accessibility, community need, interest, and engagement using the Wake County Vulnerability Index.

By 2024, two of these gardens were completed:

- Barwell Road Park (February 2024)
- Eastgate Park (August 2024)

Both gardens are located in areas with high social, economic, or climate vulnerability and were prioritized to ensure that residents in communities most impacted by food insecurity would benefit from accessible gardening and food access opportunities.

Each site is managed in partnership with Inter-Faith Food Shuttle and a local community group, providing programming, volunteer opportunities, and site maintenance support. To facilitate this work, the City hired a permanent part-time staff member with a horticulture background to coordinate operations, support garden maintenance, and engage with community partners and residents.

Additional Garden Projects & Youth Engagement

In 2024, City staff collaborated with Inter-Faith Food Shuttle and Wake County Master Gardeners to install raised-bed gardens at Peach Road Cultural Center and Sanderford Road Neighborhood Center. These sites support after-school youth programs and provide gardening opportunities for cultural groups engaged with the centers.

Interdepartmental Collaboration

This work is supported by cross-departmental collaboration, including the Office of Sustainability, PRCR Marketing Communications, PRCR Volunteer Services, Park Maintenance, City Planning Department, and the City Green House team.

Looking Ahead

City staff are developing a dedicated webpage to highlight community gardening programs, volunteer opportunities, and educational resources.

Staff are also exploring opportunities to expand to the three remaining public land garden sites identified in 2023 and to pilot seasonal community garden workshops in partnership with local gardening experts and community leaders.

Ongoing community feedback is informing this work, helping staff refine programming and ensure that the gardens reflect the evolving needs and interests of residents.

Raleigh is a Biophilic City

Raleigh has been a Biophilic City since 2022, underscoring its dedication to the environment and climate change. Biophilic Cities around the world collaborate to recognize and conserve nature's value in urban settings, enhancing the lives of urban residents. Partner cities work together to conserve and celebrate nature in all its forms and the many important ways in which cities and their inhabitants benefit from biodiversity and wild urban spaces. Biophilic Cities acknowledges the importance of daily contact with nature as an element of a meaningful urban life, as well as the ethical responsibility that cities must conserve global nature as shared habitat for non-human life and people.

Raleigh's historic commitment to preserving and providing green spaces for its residents has resulted in a **parks system** consisting of 6,209 acres of parkland and 118 miles of trails interconnected through 3,832 acres of greenways, and lands conserved for flood control and ecological purposes. The City of Raleigh remains committed to encouraging a diverse, vibrant built environment that preserves and protects the community's natural resources, strives for environmental equity and justice, and encourages sustainable growth that complements existing development. **See Raleigh's Biophilic City webpage to learn more about how this designation supports continued climate action implementation by connecting urban spaces, nature and people with innovative design and ideas**.

Parks, Recreation, and Cultural Resources Department Strives for Excellence

The National Recreation and Park Association's Commission for Accreditation of Park and Recreation Agencies (CAPRA) delivers quality assurance and improvement to accredited park and recreation departments throughout the United States. CAPRA is the only national accreditation of park and recreation departments and is a valuable measure of a department's overall quality of operation, management, and service to the community. Achieving CAPRA accreditation is the best way to demonstrate that a City's park department and staff provide their community with the highest level of service. The City of Raleigh completed their application for accreditation in 2025 to showcase its department's commitment to quality and excellence. A decision will be shared in fall of this year.

Funding

Climate Action Implementation Funding and Resources

The City of Raleigh Office of Sustainability works with City of Raleigh departments to identify opportunities to increase climate action with funding opportunities. In addition, the City also seeks funding through private foundations, professional associations, and other sources to perform or supplement climate work. We leverage varied funding sources, resources, and partnerships to implement cost-effective pilots, projects, and programs. For instance, Raleigh is part of the Triangle Sustainability Partnership, including 12 local governments and over 25 local community partners, that created the Solarize the Triangle Program. The program uses a group purchasing model to make solar more affordable for Raleigh residents and nearby communities.

Climate action is embedded in the ways City departments operate. Just a few examples are how Fleet Management Operations is transitioning its fleet to electric, Transportation is creating infrastructure to support safer pedestrian and bicycle access, and Stormwater continues to implement green stormwater infrastructure projects that address both flooding and heat as well as social impact and resilience. See the above sections to learn more about these specific examples.

The following are just a few examples of funding the City has used for climate action projects. Funding opportunities are continually evaluated for relevance and feasibility.

- American Rescue Plan Act: City Council approved over $6.5 million in ARPA funds in 2022 that City staff continue to utilize on a portfolio of climate action projects. These projects include solar on City facilities, Solarize the Triangle Low-to-Middle Income projects, electric vehicles, electric vehicle charging, and green stormwater infrastructure.
- National Oceanic and Atmospheric Administration (NOAA) Environmental Literacy Program Grant ($441,760): Community Climate Education for a Resilient Raleigh (CCERR) focuses on building Raleigh residents' climate resilience through education, engagement, and resources. The CCERR project will benefit all Raleigh residents with increased resilience resources and educational opportunities
- Department of Energy (DOE) Energy Efficiency and Conservation Block Grant ($450,390): The funding is advancing sustainable transportation through three activities: an income-qualified electric bicycle incentive program, a mobile public solar-powered EV charging station, and EV chargers for the municipal fleet
- In 2025, the City received just under $100,000 in federal direct pay tax credits for eligible purchases including electric vehicles.

The value of funding: Raleigh's e-bike pilot provided the largest income-qualified voucher in the country, allowing residents to access needed transportation. Below, e-bike program participants share their experience. Funding, like the federal grant for this program, helps us create programs that benefit our residents.

"I can get where I'm going quicker...[e-bikes] are rather expensive, and the voucher gave me the ability to have a bike."

"Obviously, a lot of trips I would take the car for, now I take the e-bike."

"The motivation is by biking...I can exercise, which is what is medically recommended for a person of my health issue...I credit the bike with keeping me engaged, keeping me active, and helping me with [my] health."

Innovation

Raleigh's Climate Action Fund is Funding Innovative Projects

The Climate Action Fund is a tool to help catalyze innovative pilot project ideas aimed at addressing the objectives in CCAP. It provides small catalytic funding and guidance from City staff leaders on how to implement City projects with the CCAP objectives of social impact, resilience and GHG mitigation as priorities. Over the years, various climate and sustainability related pilots and projects have been evaluated and funded.

Figure 57. Sustainability and Parks partnered to install Solar at the Durant Nature Preserve Boat House in spring of 2025 utilizing the Climate Action Fund. This park was designated as a Nature Preserve in 2010 with the goal of protecting and preserving the area's significant natural resources and providing nature-based recreation and environmental education experiences. Solar provides a hands-on learning opportunity for its many visitors.

Projects approved in 2024 and 2025 have included:

- Electrification of the Pullen Park train
- Raleigh Rainwater Rewards 100% funding for eligible residents for water quality and flood reduction projects
- Solar-powered lighting for bike racks for the new City Hall
- Idle reduction training
- Solar and sustainability features for the Durant Nature Preserve Boat House
- Pollinator outreach materials to increase and protect biodiversity by reducing broadcast insecticide spraying in neighborhoods

Piloting the Neighborhood Climate Action Fund for Sustainable Projects

The Neighborhood Climate Action Fund was piloted in 2024-2025 and allowed neighborhoods to apply for special funding to support community-driven projects aligned with the Community Climate Action Plan. This innovative fund won a Community Climate Action Award at Raleigh's Environmental Awards in April of 2025 at the annual Earth Day celebration. So far, this program has funded six neighborhood projects including a community compost project, bike parking installation, LED lighting replacement, native tree planting, and two pollinator gardens. The City offers Neighborhood Enrichment Funds and Neighborhood Arts funds as well to support projects planned by community members to benefit their communities.

Developing Climate Action Ordinances to Support Community Sustainability

The City has developed climate action ordinances to support clean transportation and resilience. The latest in development is for pedestrian passages and crosswalks. It includes:

- Safer crosswalks: reduce crosswalk distance and slow cars at intersections
- Improve safety on pedestrian passages: specify design when they intersect with drive aisles
- Incentivize pedestrian/bicycle/mobility device facilities: encourage new development to include these and provide additional design standards for these facilities.

Equity Budgeting Tool

The City of Raleigh continued to use its equity budgeting tool for its FY26 City budget process. Sustainability partnered with Budget and other departments to create and pilot this tool in 2023, This approach to budgeting is being refined and embedded into the budgeting process each year to ensure the City is prioritizing resources, services, infrastructure and programs that promote economic and social advancement for residents with the highest need. The Community Climate Action Plan's Equity Impact Matrix informs decision-making in ways that align City projects to advance climate goals. To learn more about the Equity Impact Matrix see Chapter 3 in the **Community Climate Action Plan**.

Taking Action through the Strategic Plan for Raleigh's Sustainable Future

In 2025, Raleigh City Council approved the **FY26-29 Strategic Plan**. This plan, developed by the Office of Strategy and Innovation with input from residents and staff across the City, will guide our departments and staff to try new ideas, deliver better services, and keep Raleigh moving forward. The Plan includes many initiatives that align with the CCAP throughout all its Key Focus Areas: environmental resilience, community safety, economic development and innovation, housing, transportation and quality of life. The environmental resilience key focus area will encourage and empower collaboration across departments to consider ways to address climate change risks and encouraging sustainable choices.

Raleigh Hosts Many Innovation and Climate Change Initiatives with a Local to Regional to International Reach

The City of Raleigh hosts several innovative events, competitions, grants and trainings. Sustainability partners with Strategy and Innovation to align climate action work with these opportunities. Fostering an innovative culture, both within the City government as well as within the community, is essential for driving progress on climate action and encouraging sustainable behavior change.

Figure 58. Attendees from across the region and world visited the Smart Cities Connect Conference hosted in Raleigh in 2024.

Raleigh hosts the international Smart Cities Connect Conference and several of Raleigh's projects are showcased including urban heat, flooding and transportation. The City also hosted the Connected Triangle+ Summit again in 2024 that brings leaders from across the Research Triangle and beyond. It focused on how "smart cities" initiatives use data and analysis to address a range of community issues, many related to climate

change. The City hosted a pitch competition where entrepreneurs from our local area and around the world pitched solutions to environmental challenges like flooding, transportation electrification and air quality. We had over 50 proposals from half a dozen countries and from both long-standing existing companies and new entrepreneurs. The company JustAir won, and the City is launching a regional pilot project with them on urban heat monitoring.

Raleigh will again also host the Spring Smart Cities Connect Conference and Expo in March 2026. This international conference brings people, companies and government leadership from around the world to Raleigh. Attendees delve into the critical aspects, strategies, and collaborative approaches required to foster sustainable transformations within city communities.

Raleigh also hosts Big Ideas Raleigh Meetups, which are dynamic gatherings to spark collaboration, innovation, and strategic planning for Raleigh with many ideas aligning with climate action goals. These are hosted with a local strategy and technology consultancy organization, Slalom. The City shares and gathers input on ideas for how to use technology to improve community life.

The Office of Strategy and Innovation (OSI) hosts the Impact Partner Grant and associated events. The grants fund organizations that support innovators, entrepreneurs, and small businesses in Raleigh and the creation of new programs for inclusive economic development. Innovation is a key component of a sustainable and resilient Raleigh. This year, Sustainability is partnering with Strategy and Innovation to focus the grants on climate action implementation with local innovators. The awardees also receive coaching and key events tailored to their professional development. One example of past events is walk & talk networking, where instead of traditional meet-and-greets, attendees were paired for structured networking walks through Dix Park. Another is The Future of Entrepreneurship: A Futures Thinking Workshop. This interactive session introduces strategic foresight techniques, helping businesses identify future challenges and opportunities.

Over the past year, Strategy and Innovation also developed and led trainings and workshops open to all City staff resulting in 7 introductory innovation trainings, 2 strategic departmental workshops, and 2 mindfulness 2-day trainings. These trainings support an innovative culture which is essential in driving climate action and encouraging sustainable behavior change.

Outreach, Education, and Partnerships

Youth Job Training on Climate Action- Our Future Sustainability Leaders

Partnership Raleigh Community Climate Internship Program and Pathways to Public Service Fellowships

Figure 59. Raleigh's Community Climate Internship Program is a partnership between the Community Engagement Department's Partnership Raleigh program and Sustainability. Over 50 young adults have graduated from the program since its inception, and many have found full-time positions in the City and local organizations.

The fifth cohort of the Partnership Raleigh Community Climate Intern Program began work in departments across the City in June 2025. The Partnership Raleigh Community Climate Intern Program is a collaboration among the City of Raleigh Office of Sustainability, the Partnership Raleigh Youth Employment Program, and City of Raleigh departments who host these students to work on climate action projects. The program provides paid internships to young adults residing in or attending school in the Raleigh area. It is geared towards college students interested in carrying out the goals of adopted Community Climate Action Plan. This program promotes climate action, greenhouse gas reduction, social impact, environmental stewardship, and building community resilience to the impacts of climate change; while also providing hands-on experience and technical knowledge in departmental projects including sustainable transportation, green infrastructure, energy efficiency, water resources, climate communications, green space and habitat conservation, renewable energy initiatives and more. Over 50 interns have benefited from this program since its inception in 2021.

Figure 60. Pictured are the 2025 Pathways to Public Service Fellows meeting with Mayor Janet Cowell. The Climate Interns and Pathways Fellows have Professional Development Fridays as well as many team initiatives throughout the year that expose them to many important City and community learning opportunities. These range from meetings with City leadership and staff, to visiting important community sites, to volunteering and working City events like Raleigh's annual Earth Day Celebration each April.

Additionally, this program focuses on recruiting and training those who are underrepresented in the fields of sustainability to prepare participants for future careers. This program is in addition to Partnership Raleigh's Pathways to Public Service Fellowship Program that provides young adults an opportunity to gain experience working in local government, including on sustainability and climate action projects. Several participants in these programs have gone on to work in climate action within and outside of the City of Raleigh, and many have landed full time positions within the City!

Raleigh Parks Leverages Power of Youth to Complete Dix Park Projects

Summer of 2024 marked the fourth year of hosting Conservation Corps North Carolina (CCNC) Youth Conservation Corps at Dix Park. This partnership between Raleigh Parks and CCNC provided an opportunity for local youth to carry

on the original 1930's Civilian Conservation Corps mission of cultivating new generations of land stewards through conservation-based projects in the heart of downtown Raleigh. For six weeks, the group of two young adults and six teens were able to work alongside, and learn from, experts in various fields of environmental stewardship. The crew contributed to ten different projects across Dix Park and the surrounding area. Their project list included: Building six permanent swing pads; trail repair; invasive plant removals; and large-scale event preparation. From these projects, the members gained hands-on experience in plant identification, construction, trail maintenance techniques, and more.

These are just a few of many programs that the City runs to engage youth in sustainability. Other program examples are the Raleigh Youth Council, Neighborhood Ecology Corps, and more.

Championing Raleigh's Environmental Leaders and Stewards

Figure 61. The Environmental Awards trophies for environmental leaders and champions in our community, which are given out during the Environmental Awards Ceremony at the City's annual Earth Day celebration.

The City's Office of Sustainability partners with the Environmental Advisory Board (EAB) to host the **Annual Environmental Awards**, honoring individuals and organizations for their innovation, leadership, and commitment to climate action for Raleigh. Raleigh residents, businesses, school and community groups are eligible to apply and be recognized for projects that reduce GHG emissions, build resilience for their local community; or empower youth engagement in climate action. The City's Stormwater, Solid Waste Services, and Transportation departments, as well as the Office of Strategy and Innovation, contribute to the event where we honor climate champions for their important and noteworthy contributions. A favorite tradition continues to be the Trashion Fashion Show where winners model their wears made from materials that are recycled or diverted from the landfill. Sustainability partners with Parks to host the Environmental Awards at our annual Earth Day Celebration. For the past several years we've held the celebration at Dorothea Dix Park. This event is attended by thousands of residents and visitors, and hosts dozens of community organizations to educate the community on how to take climate action and get involved. Some of the many highlights from the recent events include a Native American Land Acknowledgement and traditional dance, tree plantings, sustainability games, demonstrations, touch an electric truck, environmental parades, bands, and other activities.

Climate Action Outreach and Implementation through Partnerships

The Office of Sustainability collaborates with all City departments to uplift climate action efforts and opportunities to the community through various outreach initiatives. Our collaborations would not be possible without the commitment of both public and private stakeholders at the local, national, and global levels. Below are a few examples of annual partnerships and programs that advance climate action and sustainability throughout Raleigh:

Collaboration with Human Resources to Promote Sustainability Careers in the City

Sustainability partnered with Human Resources to create educational resources about sustainability careers throughout our City Departments. The City offers critical roles that do important sustainability work throughout the City, such as in the fields of planning, transportation, solid waste services, engineering services, housing and

neighborhoods, and more that make significant strides toward advancing the goals of Raleigh's Community Climate Action Plan.

Sustainable Business Toolkit

The Office of Sustainability partnered with the City, State, and community partners to create the **Sustainable Business Toolkit** to provide free resources for businesses, nonprofits, residents and organizations seeking to become more sustainable, save money, be recognized for their sustainability work, and get involved in their community. The Toolkit resources cover a broad set of categories: energy and water conservation, waste reduction, stormwater funding, renewable energy programs, transportation reduction strategies, and more.

Sustainable Neighborhood Toolkit

The Office of Sustainability launched the **Sustainable Neighborhood Toolkit** to help individuals, neighborhoods, and communities become more sustainable. If you've ever wondered how you can contribute to climate action, then this Toolkit is for you! There are resources on solar permitting, recycling, sustainable commuting, funding for neighborhood level-sustainability projects, and more!

Neighborhood Climate Action Fund

The Neighborhood Climate Action Fund was piloted in 2024-2025 and allowed neighborhoods to apply for special funding to support community-driven projects aligned with the Community Climate Action Plan. It won a Community Climate Action Award at the Raleigh Environmental Awards Ceremony at the Earth Day celebration. So far, this program has funded six neighborhood projects including a community compost project, bike parking installation, LED lighting replacement, native tree planting, and two pollinator gardens. The City offers Neighborhood Enrichment Funds and Neighborhood Arts Funds as well to support projects planned by community members to benefit their communities.

Annual Earth Day Celebrations

Figure 62. Earth Day Celebration attendees visit the Office of Sustainability's tent.

The City of Raleigh has long been celebrating Earth Day with the community. In April 2025, led by Parks, Recreation, and Cultural Resources and the Office of Sustainability, the Earth Day and Arbor Day Celebration brought together over 50 City departments and community partners to Dix Park. The program included remarks by Mayor Janet Cowell, David Rahahę·tih Webb of the Tuscarora Nation of North Carolina, and more City of Raleigh leaders. The Office of Sustainability hosted the annual Environmental Awards recognizing community members for their leadership, innovation, and dedication to climate action. The celebration concluded with a tree dedication and a family-friendly movie.

Solid Waste Services Outreach and Education

Solid Waste Services engages the community through tabling events, education opportunities, and facility tours at key locations like Wilder's Grove, Sonoco (the city's recycling processor), and the Yard Waste Center. Facility tours aim to raise awareness about sustainability, recycling, and the importance of being responsible stewards. Tour participants gain insights into the recycling process and the journey of yard waste from pickup to processing, empowering them

with knowledge to make informed decisions. These tours are inclusive, welcoming citizens of all ages and providing ample time for questions and answers, encouraging an open dialogue between staff members and participants. This interactive and educational approach aims to demystify the recycling and yard waste processes, empowering citizens to make informed decisions in their daily practices. Safety measures, including personal protective equipment, are provided during the recycling center visit, offering a hands-on experience to foster a deeper appreciation for the environmental impact of their actions.

The Solid Waste Services department prioritizes engaging with residents and members of the public to enhance their knowledge about sorting and processing waste, and to empower more people to participate in sustainable waste reduction strategies. By fostering a sense of community responsibility, educating the public can contribute to creating a more environmentally conscious and engaged community.

External Partnerships

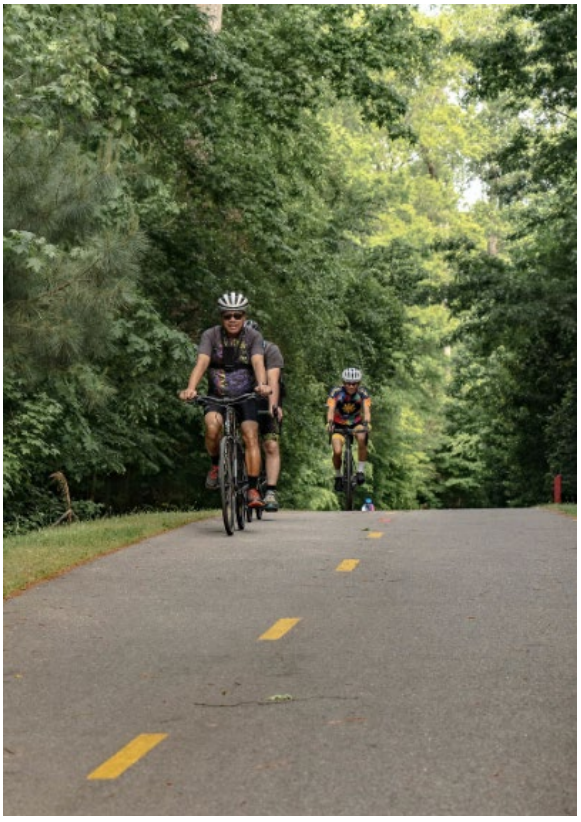
The most vital part of implementing CCAP is the community taking collective action. Hundreds of organizations and individuals came together to create CCAP, and these partnerships continue to grow. City staff throughout all the departments partner with the community on various climate actions. Several examples of these partnerships are listed throughout this document. Here are just a few examples of our partnerships:

- Partners for Environmental Justice: Training community members on how to build resilience and safety in their neighborhoods every day and how to prepare for heat and flooding events.
- Southeast Raleigh Promise: Collaborating on goals to strengthen economic mobility and neighborhood growth
- North Carolina Sustainable Energy Association: Tracking the growth of high impact climate actions like solar, electric vehicle charging, and energy efficiency in the community.
- Clean Energy Fund of the Carolinas: Developing clean energy finance models for reducing energy bills for low-income families.
- The Great Raleigh Cleanup: Employing residents experiencing homelessness to do beautification projects around Raleigh through a partnership program called “The Workforce.”
- Duke Energy and other groups: Educating the community on Duke’s cost saving programs like Duke Energy’s Charger Prep Credit Program. This is shared in various places, including in Raleigh’s Sustainable Business Toolkit and at affordable housing open houses to help the community save on energy bills.
- Central Pines Regional Council (CPRC): Applying for federal Climate Pollution Reduction Grants.
- CRPC and Preserving Home: Developing a program to make solar more accessible for low-to-moderate income households.

CCAP is only successful if we all work together, demonstrate leadership, create opportunities for change, find ways to implement in our daily lives, and plan for the future. The City will continue to look to its partners across the region and beyond to implement climate action over time.


Climate Change in Raleigh
Let's Talk Transportation
The Impacts of Climate Change
Taking Climate Action in Raleigh
Transportation
Buildings
Resilience, Equity, & Community Health
What Can I Do?
Raleigh


Raleigh




PULLEN PARK
TICKETS

Raleigh's Community Climate Action Plan (CCAP) implementation and reporting will continue over time. Additional tracking metrics and community climate actions will be developed and reported out in future CCAP Annual Reports.

Please reach out to us if you have information you'd like to share related to community climate action at ***Sustainable.Raleigh@raleighnc.gov***