COLUMB**US**
CLIMATE ACTION
PLAN

SUSTAINABLE
COLUMBUS
ANDREW J. GINTHER, MAYOR

ACKNOWLEDGMENTS

This plan would not be possible without the many people and organizations whom contributed to make this a community-wide plan for a better future in Columbus.

IMAGE CREDITS

All photographs that do not list source information are the property of the City of Columbus.

Completed and published January 2026

A MESSAGE FROM THE MAYOR

Dear Friends and Neighbors,

As Mayor of Columbus, I am proud to introduce the 2025 update to the Columbus Climate Action Plan—our city's roadmap to a cleaner, healthier, and more prosperous future. In 2020, I set the goal of becoming a carbon neutral Columbus by 2050, ensuring our community does our part to fight climate change. Today, that commitment is more urgent than ever and we aren't backing down.

Our residents are already feeling the strain of a changing climate. Extreme temperatures lead to higher energy bills and more frequent home repairs. Heavy rains bring worsening flooding. And with more 90-plus degree days, children managing asthma face greater air quality risks, while those without access to cooling are increasingly vulnerable to heat-related illnesses. These realities make clear that climate action is not just an environmental priority—it is a matter of public health, safety, and justice.

This updated Climate Action Plan reflects the path by which we will continue working toward full carbon neutrality. It would not have been possible without the dedication of City of Columbus staff and partners, environmental experts, business and industry leaders, and—most importantly—our residents. Their commitment has shaped a plan rooted in equity, science, and shared responsibility.

Since introducing our Columbus Climate Action Plan, we have made significant progress toward our sustainability goals. The Clean Energy Columbus aggregation program now provides residents with 100% clean energy, including solar from right here in Ohio, while saving participating households over $60 million since the program's inception. The City's Division of Power has installed 45 MW of new solar – enough to power 4,000 homes - and a new net-metering policy from the Columbus Division of Power allows customers with solar panels to receive credit for the energy they produce, lowering bills and encouraging clean energy adoption.

The city has also increased recycling efforts by moving from bi-weekly to weekly pickups and, for the first time ever, invested in composting infrastructure with the opening of nine Food Scrap Drop-Off locations. The city also opened two Waste & Reuse Convenience Centers, giving residents more options and expanded access to organics recycling and disposal of hard-to-recycle materials.

Columbus was also chosen for the inaugural Bloomberg Philanthropies Youth Climate Action Fund, joining more than 100 cities worldwide. With a $150,000 award, we launched a micro-grant program supporting youth-led climate projects across Columbus—empowering young people to shape the resilient future they will inherit.

Collaboration remains essential. Our Sustainable Columbus office worked closely with the Mid-Ohio Regional Planning Commission, Power a Clean Future Ohio, IMPACT Community Action, and The Ohio State University to develop the Central Ohio Climate Action Plan. This regional plan strengthens climate action across our 10-county area and centers the communities most impacted by climate change.

Additionally, with the passage of Issue 47 and strong regional support for the LinkUs regional transit initiative, we are poised to make historic investments in transit, sidewalks, bikeways, and trails—building a more connected, less polluted Columbus.

Science is clear. The stakes are high. Our obligation to our children, and their future, compels us to act now. We owe it to our city, our region, our country, and our world.

Sincerely,

The Honorable Andrew J. Ginther
Mayor, City of Columbus

TABLE OF CONTENTS

INTRODUCTION

Executive Summary

The City of Columbus is proud to renew its commitment to achieving our community's climate goals. To keep Columbus on track to reach a 45% reduction in greenhouse gases by 2030 and carbon neutrality by 2050, the City is updating the Columbus Climate Action Plan (CAP). This update includes adjusting our climate actions to ensure we're achieving our 2030 climate goals and aligning the plan with the progress we have made.

45%
GHG Reduction By 2030

100%
GHG Reduction By 2050

Bold Steps Forward

The City of Columbus is taking bold steps forward. We're not just updating our climate actions - we're adapting our approach to create a more resilient, equitable, and sustainable future for all that work, play, and live in the City. The updated climate actions represent a careful analysis of what is necessary and what is achievable to reach our 2030 climate goals. These ambitious yet attainable targets build upon our Climate Action Plan foundation, identifying high-impact interventions where we can accelerate progress while delivering meaningful co-benefits to Columbus neighborhoods.

Progress to Date

Since 2021, the City has used our community's climate actions to guide the creation of policies and programs to deliver resources to our communities. Columbus is making progress towards our community's climate goals—progress that has been spurred and guided by the initial CAP. We're celebrating these successes and the impacts they've had across our community.

97 graduates from the Empowered! Program, 60% employed in green jobs. Since 2021, the Columbus Region Green Fund has invested $9 million in local clean energy projects.

In 2024, the City began modernizing the zoning code for the first time in 70 years, prioritizing development density and sustainable transit options. The Columbus Urban Forestry Master Plan was adopted in 2021 to preserve the nearly 5 million trees growing in our City.

Columbus residents voted to approve the City's 100% clean energy aggregation program, saving residents over $60 million on their utility bills since 2021. Columbus is the only city in Ohio with a benchmarking program, reducing energy usage in large buildings by 7% on average.

LinkUS will invest in the Central Ohio Transit Authority (COTA) bus system, to expand service by 45%. Over 500 miles of new bikeways are planned through the new BikePlus plan adopted in 2024.

9 food waste drop off sites across the City allow residents to easily compost their table scraps and avert them from the landfill. The City now collects household recycling weekly!

Hitting Our 2025 Targets

Each climate action in the Columbus Climate Action Plan is aligned with near-term and long-term targets. As we renew our commitment to climate action, we are celebrating achievement of the near-term 2025 climate actions targets, listed below. Further information on the 2025 climate action target achievements is available in Appendix A.

Established a green bank by 2025
Climate Action 2.2
Increase annual sustainable development funding

Prioritized strategies outlined by 2025
Climate Action 3.1
Develop a regional adaptive management strategy

Developed an implementation plan for priority resilience hub locations by 2025
Climate Action 4.1
Establish coordinated network of resilience hubs

Implemented a regional alert system for climate hazards by 2025
Climate Action 4.2
Establish regional emergency alert system for climate hazards

Implemented short-term Sustaining Scioto strategies by 2025
Climate Action 5.1
Implement water adaptation strategies

Established vacant property redevelopment targets by 2025
Climate Action 5.1
Increased development density

Completed a physical vulnerability assessment by 2025
Climate Action 6.1
Assess and protect assets from the impacts of climate change

Completed a microgrid and energy storage prioritization study by 2025
Climate Action 6.3
Evaluate microgrid + storage projects

Completed a Community Solar Plan by 2025
Climate Action 7.1
Increase residential on-site solar

Adopted municipal zero carbon design standards by 2025
Climate Action 9.1
Prototype zero carbon buildings

Developed and piloted resilient design checklist by 2025
Climate Action 9.2
Adopt resilience standards

Equitable EV charging plan developed by 2025
Climate Action 10.1
Increase private ZEV adoption

EV Readiness Ordinance implemented by 2025
*Climate Action 10.1*
Increase private ZEV adoption

Benefiting Columbus Communities

City of Columbus Strategic Roadmap Benefits

The Columbus Climate Action Plan supports the values, mission, and vision of Columbus's Strategic Roadmap North Star. The climate actions are aligned with the Strategic Roadmap's goals. Climate actions support housing security by reducing energy burden through renewable energy and energy efficiency for residents. They promote physical health and economic health for residents, driving prosperity in our communities. Expanding access to micro-mobility and improving public transit means improved mobility and access to jobs and recreation. Multiple actions protect our City's green spaces and biodiversity, supporting mental health prosperity for generations to come. Municipal actions included in the CAP promote improvement in services to residents and more efficient operations, weaving these co-benefits through all aspects of Columbus residents' experience of our City.
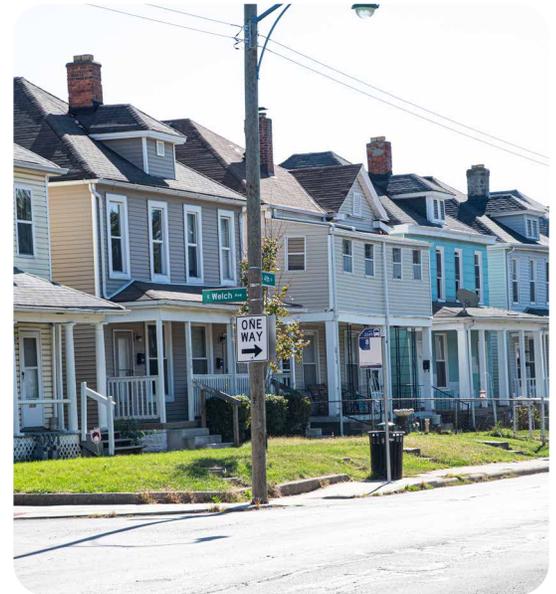
Leading with Equity

Columbus residents are feeling the impacts of climate change on a daily basis. A U.S. EPA report quantified climate change impacts on communities at a national level. The report showed that people of color are most likely to live in areas that will be impacted most by climate change. Black and African American individuals are 40% more likely to live in areas with the highest projected increase in mortality rates due to climate-driven extreme temperatures, and are 34% more likely to live in areas with the highest projected increase in childhood asthma due to climate-driven air pollution. Hispanic and Latino individuals live in areas with the highest projected labor hour losses in weather-exposed industries due to more frequent climate-driven hot days with high temperatures.

It is important to understand the challenges different communities are experiencing in the face of climate change impacts and the barriers to climate solutions experienced by residents. Teams working to implement strategies and actions from the CAP can use tools that may help to provide an evaluation within a local context.

Potential tools include:

1. The Low-Income Energy Affordability Data tool that provides data on energy burden, an indicator of housing instability due to a significant portion of household income spent on energy costs.
2. The Center for Disease Control (CDC) Social Vulnerability Index that evaluates populations that have special needs or disabilities, lack access to vehicles, have limited English proficiency and/ or live in crowded housing and experience high energy burden.

City of Columbus Strategic Roadmap Alignment

	Housing	Safety	Mobility	Prosperity	Operations	Culture
1 | Empower a Community of Climate Leaders						
1.1				✓		✓
2 | Develop a Clean Energy Economy						
2.1	✓			✓		
2.2	✓			✓		
3 | Enhance Partnerships for Preparedness Efforts						
3.1		✓	✓	✓		✓
3.2	✓			✓		
4 | Support a Healthy and Resilient Community						
4.1		✓		✓	✓	✓
4.2		✓				
5 | Implement Land Use Planning Strategies						
5.1	✓		✓	✓		
5.2		✓			✓	
5.3				✓		✓
5.4				✓	✓	
6 | Prepare for Warmer and Wetter Seasons						
6.1		✓			✓	
6.2				✓		
6.3		✓			✓	
7 | Increase Renewable Energy						
7.1	✓			✓		
7.2				✓	✓	
7.3				✓	✓	
8 | Increase Building Efficiency						
8.1	✓			✓	✓	
8.2				✓	✓	
9 | Adopt Net Zero and Resilient Building Standards						
9.1					✓	
9.2	✓	✓				
10 | Enable Carbon Free Vehicles						
10.1			✓	✓		
10.2			✓	✓		
10.3				✓		
11 | Support Equitable Mode Shift						
11.1	✓		✓	✓		✓
11.2			✓	✓		
11.3			✓	✓		✓
11.4			✓	✓		✓
12 | Reduce Waste Generated						
12.1				✓	✓	
12.2				✓	✓	
13 | Increase Waste Diversion						
13.1				✓		

Addressing Inequities

American Addition: Net-Zero Neighborhood

The City of Columbus is embedding equity at the center of the City's climate action efforts, as showcased by a net-zero neighborhood project in American Addition. American Addition is among the oldest African American communities in Ohio and is a neighborhood that has been historically under-resourced. Columbus was selected by Bloomberg Philanthropies as one of 25 U.S. cities to join a three-year, $200 million initiative to provide deep support to selected cities to pursue transformative solutions in climate justice and racial wealth building. By participating, Columbus will receive a Bloomberg Philanthropies-funded innovation team (i-Team) with up to three dedicated staff. In 2024 an i-Team Director was hired and began a deep focus on working with the American Addition neighborhood and community partners to create a net-zero neighborhood.
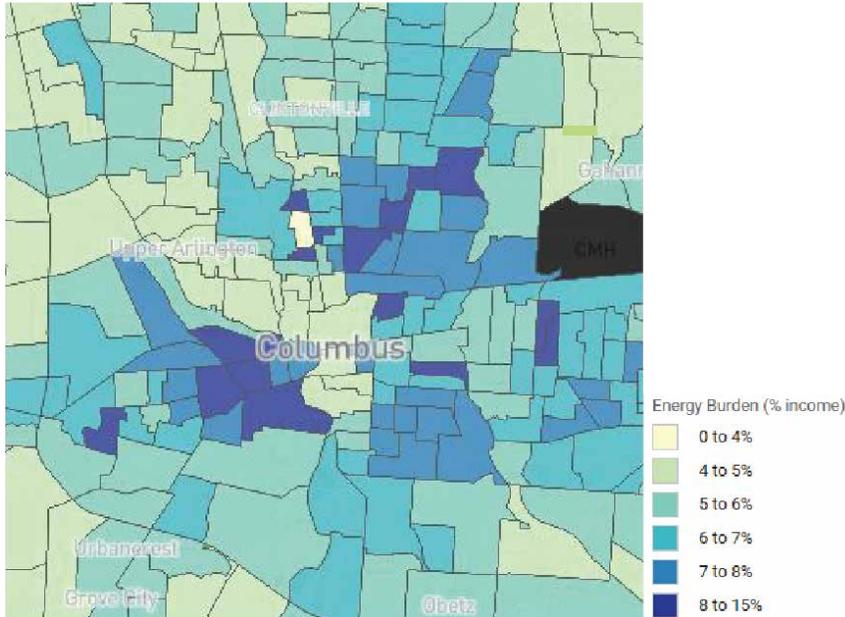
Columbus Region Social Vulnerability Index
Source: 2025 Social Vulnerability Index Map, CDC.gov
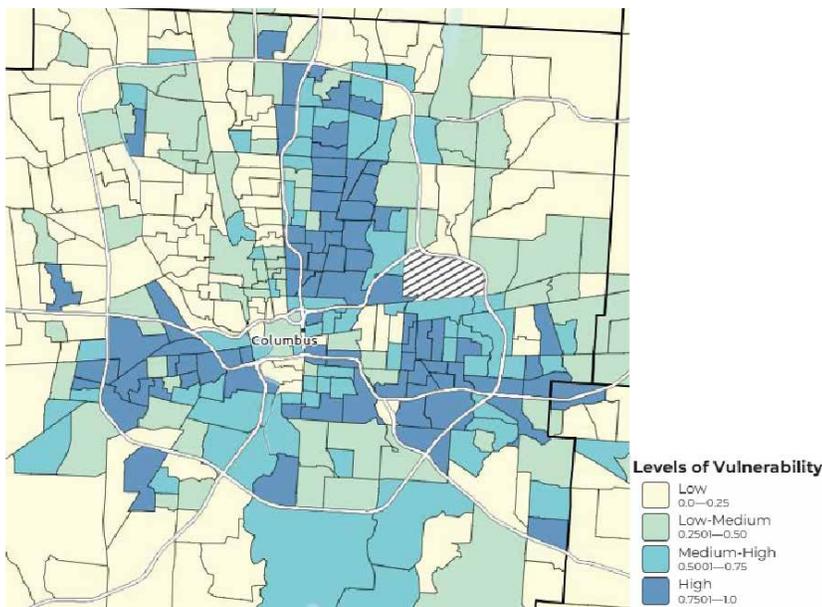
Columbus Region Energy Burden
Source: 2025 U.S. Department of Energy Lead Tool map, energy.gov

Using community engagement and human centered design, the team is ensuring that residents most affected by climate change and energy burden have a voice in shaping solutions. In American Addition, a historically under resourced neighborhood, the i-Team has been working alongside residents to surface priorities and guide the city's vision of a healthier, more sustainable future.

This work has focused on initiatives that directly improve quality of life while advancing climate goals, including addressing air quality concerns, expanding access to weatherization and home repair programs, and exploring pathways

to net-zero housing—with the goal to create the first entirely net-zero neighborhood in Ohio.

By translating the lived experiences of residents into actionable insights, the i-Team is helping the City design climate solutions that not only reduce emissions, but also reduce household costs, improve health outcomes, and strengthen community resilience. Through this approach, the i-Team is building trust between residents and city government while laying the foundation for climate solutions that are technically sound, socially inclusive, and responsive to the realities of everyday life. By putting people at the center of climate innovation, Columbus is working to ensure that the transition to a sustainable future benefits every community.

Columbus was selected by Bloomberg Philanthropies as one of **25 U.S. cities** to join a three-year, **$200 million initiative** to provide deep support to selected cities to pursue transformative solutions in climate justice and racial wealth building.

Working alongside residents: Community engagement event in American Addition
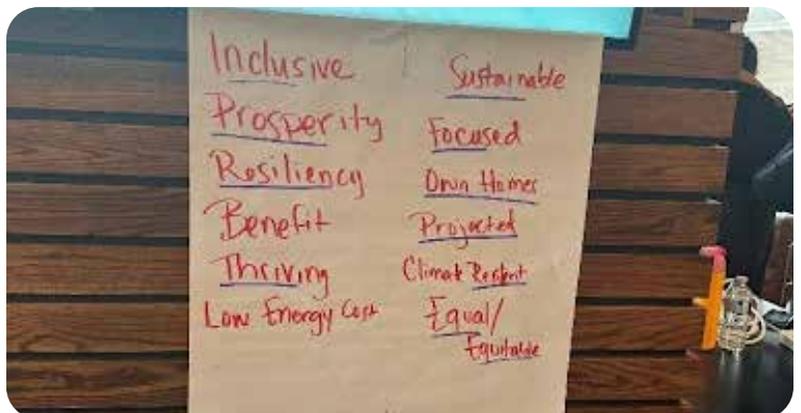
Surfacing community priorities at a community engagement event in American Addition

Low to Moderate Income Solar Co-op Pilot program

In 2024, the City of Columbus partnered with Solar United Neighbors and IMPACT Community Action to launch a Low to Moderate Income Solar Co-op Pilot program. Free 4kW solar systems and battery backups were provided to 17 income qualified households. These systems will reduce the energy bills of these households by 30-40%.

By providing the solar systems and battery backups for free, these households will be able to receive the health and economic benefits of solar without the upfront costs. The lessening of monthly energy bills reduces energy burden and improves financial wellbeing, and these systems also provide power resilience in the face of severe weather like extreme winds or heat for decades to come. This pilot program provided valuable program development insights that will guide Sustainable Columbus in continuing to encourage solar adoption for low-income communities.

Solar energy system is installed on the roof of one of the households benefiting from the Low to Moderate Income Solar Co-op Pilot Program

Community Framework

The City of Columbus Strategic Roadmap prioritizes the culture of our communities, fostering inclusion, transparency and collaboration to ensure that all neighbors feel valued and heard. As the City of Columbus continues implementing the Climate Action Plan, we can center valuing and hearing neighbors by guiding our decisions and processes with a set of questions that provide a framework for inclusion and collaboration:

- How have stakeholders and members from marginalized communities been intentionally involved and what are the potential impacts?
- How does this policy or decision-making process increase access, equity, and inclusion? How does it produce or worsen any disparities?
- What are the barriers or unintended consequences to more equitable outcomes around this

policy or decision-making process? What supplementary strategies can mitigate barriers or unintended consequences?
- What information are we basing our decisions on? What are the existing or historical racial inequities?
- What data or metrics will you collect and use to track impacts of the policy or process on the identified populations?
- How will we evaluate and be accountable?

Engagement

Starting in 2024, the City of Columbus launched a campaign to engage residents in Columbus and the surrounding region around climate action. Our goal was to provide inclusive and meaningful ways for residents to share the needs of their communities.

Columbus Region Outreach

As part of a broader regional initiative, Sustainable Columbus and partners engaged with local residents and organizations. To maximize participation and gather diverse perspectives, the engagement strategy included the following approaches:

- Online Resources: Maintained project web pages on Sustainable Columbus and MORPC websites, used social media (X, Instagram, Facebook, TikTok), and sent e-newsletters.
- Community Events: Attended regional events at community locations to meet residents where they are.
- Flexible Participation Options: Provided options for in-person and virtual participation, recognizing the barriers some residents face in getting to and from engagement opportunities.
- Targeted Outreach: Engaged directly with community-based organizations and trusted community leaders.
- Geographic Diversity: Conducted 23 focused engagement events throughout Hilltop, Near East/South Side, Linden, Newark, and Circleville.
- Meeting People Where They Are: Implemented door-to-door outreach and structured community conversations to identify climate priorities and barriers.

> " We want to be part of the solution, but we need real opportunities to get involved, not just be informed. "

> " We're seeing more extreme heat in the summer, and it's affecting our seniors and kids. How can the City help us adapt? "

> " Public transit improvements are crucial. If we had better bus routes and walkable streets, more people would use them instead of driving. "

Columbus Climate Action Plan Updates Targeted Outreach

Sustainable Columbus used multiple approaches to get targeted feedback for the 2025 Columbus Climate Action Plan update.

Community Wide Survey

450+ Participants | *140+* Comments

Sustainable Columbus surveyed over 450 residents to understand how climate change is impacting them and their community needs for climate action.

Residents are impacted by:

Category	Percentage
Hotter Summers	83%
Air Quality	65%
Warmer Winter	62%
Changing Length of Seasons	62%
Heavy Rain Events	52%
Drought	42%
Flooding	36%
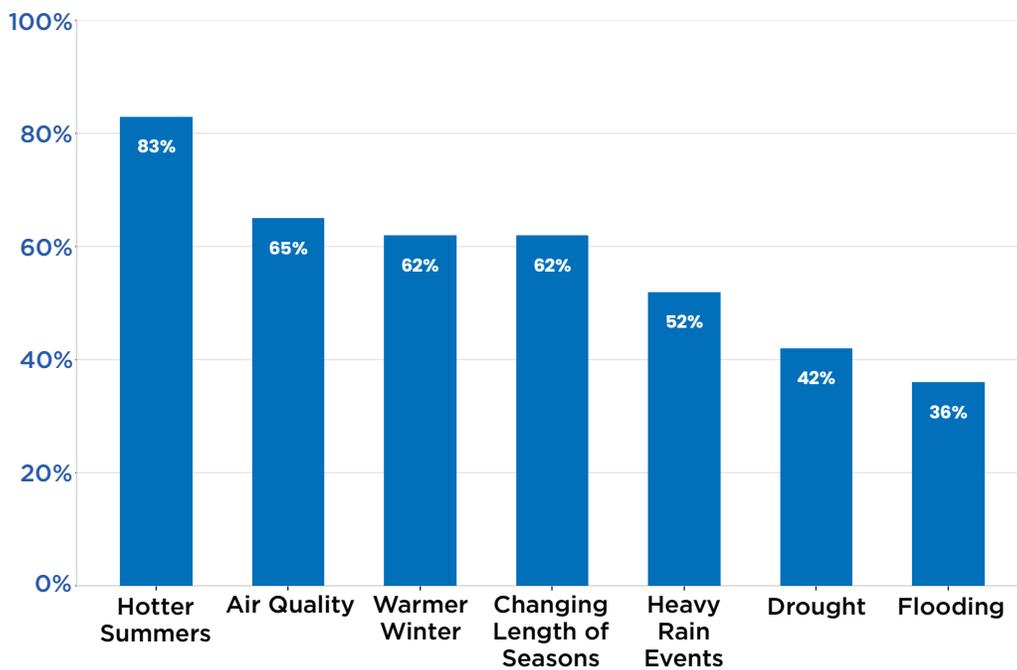
Residents ranked the following needs in their communities:

1. Increased Tree Cover
2. Increased Energy Efficiency in Homes and Businesses
3. Increased Access to Recycling
4. Increased Public Transit
5. Food Waste Reduction and Composting
6. Increased Installation of Solar Energy Systems

Adapting to our Future Climate

Mitigation and Adaptation

While the overarching goal of the CAP is to reduce, or "mitigate," our GHG emissions and develop a blueprint for accomplishing our 2050 carbon neutrality goal, we can't ignore the impacts of climate change that we are already experiencing. We also need to acknowledge that these impacts are felt disproportionately across our community. Climate impacts such as extreme temperatures, flooding, and drought, are becoming increasingly apparent in our everyday lives. This plan seeks to identify critical opportunities for the City to address both the causes and effects of climate change.

Mitigation refers to efforts to reduce the root cause of our changing climate – greenhouse gas emissions. These mitigation efforts include most of the actions described in this plan: reducing energy use and increasing energy efficiency, switching to alternative fuels and clean energy supplies, and promoting the use of low- or zero-emission vehicles, to name a few.

Adaptation refers to the efforts to address the effects of climate change. These effects include changes in rainfall patterns, leading to more extreme flooding or more intense drought impacts; rising temperatures; and more severe storm events.

The climate is already changing, and we are past the point where mitigation can fully prevent the impacts of climate change. Mitigation efforts stem the magnitude of the impacts, but adaptation efforts will go hand in hand with mitigation in order to truly prepare for a more sustainable and resilient Columbus.

Future Climate

Rising Temperatures and Severe Storms

Heat stress is the leading cause of weather-related deaths in the United States. Rising temperatures can worsen chronic conditions such as asthma, heart disease, and diabetes, and increase the incidence of heat exhaustion and heat stroke. Hotter days also increase costs for residents attempting to stay cool, leading to higher utility bills and more frequent home repairs.

Temperatures are already higher year-round in Columbus. In the summer, heat becomes a health threat. Historically, Columbus has experienced around 19 days of over 90-degree heat. By 2050, Columbus will experience an average of 55 days of over 90-degree heat,
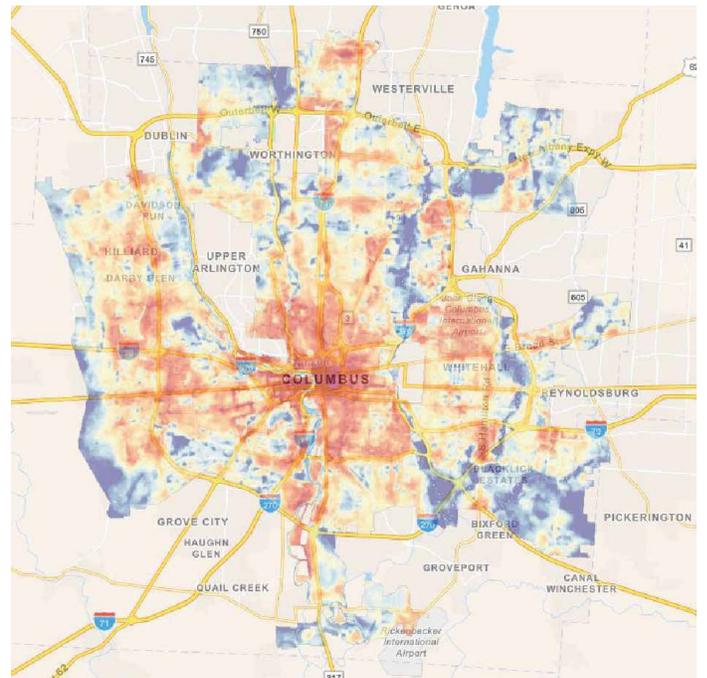
Map of heat on a summer day in Columbus. Red indicates higher temperatures and blue indicates cooler. Some neighborhoods experience temperatures up to 13 degrees hotter than others

rising to 65 days later in the century. Columbus neighborhoods experience temperature differently during heat waves, highlighting the inequitable impacts of climate change. Sustainable Columbus's urban heat island study found a 13-degree difference in temperatures across the city with lower income communities at greater risk.

Precipitation is also increasing dramatically in Ohio, especially during the wet seasons. Annual precipitation in the Midwest has increased 5-10% since 1950. And Ohio has experienced a significant increase in the number of heavy rain events where we see more than two inches of rain at a time. The region has seen an approximate 36% increase in rainfall during the heaviest

Observed and Projected Temperature Change
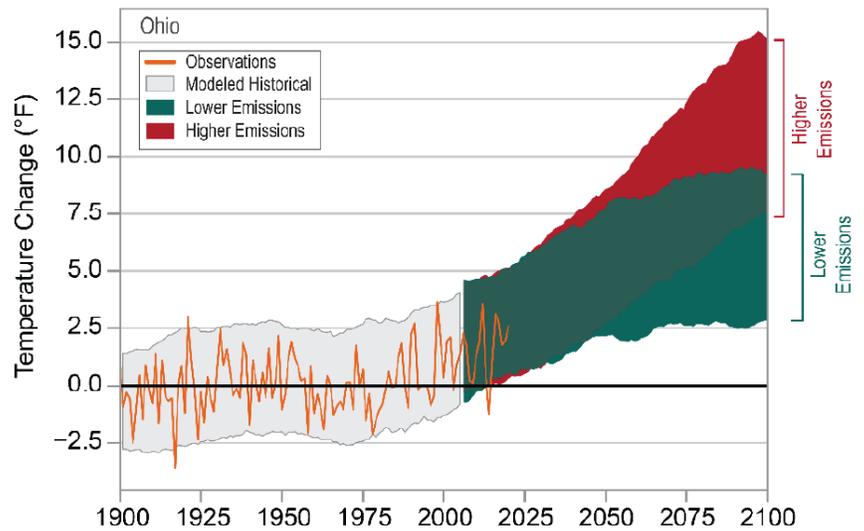
Observed and projected changes in air temperature for Ohio. Temperatures in Ohio have risen more than 1.5 degrees since the start of the 20th century. Unprecedented warming is expected to continue through this century.

precipitation events. Heavy rain events strain aging stormwater infrastructure, causing flooding in our neighborhoods, and reduce water quality due to runoff and sewer system overflows.

Observed Annual Precipitation
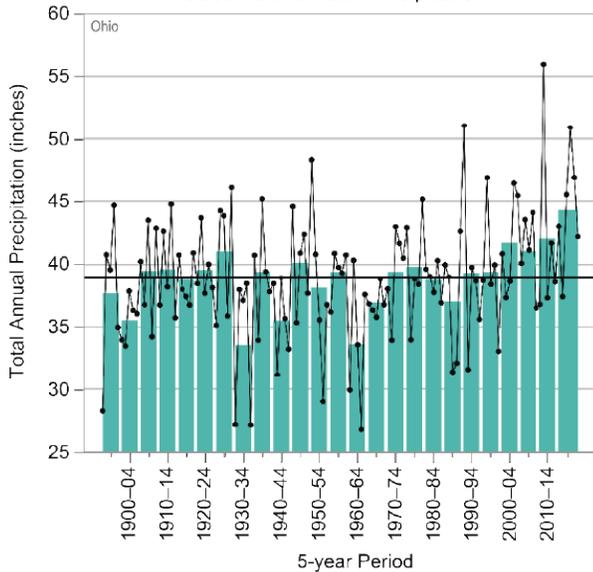
Amount of rain and snowfall each year in Ohio. The amount of precipitation has been above average since 1990.

Observed Number of 2-Inch Extreme Precipitation Events
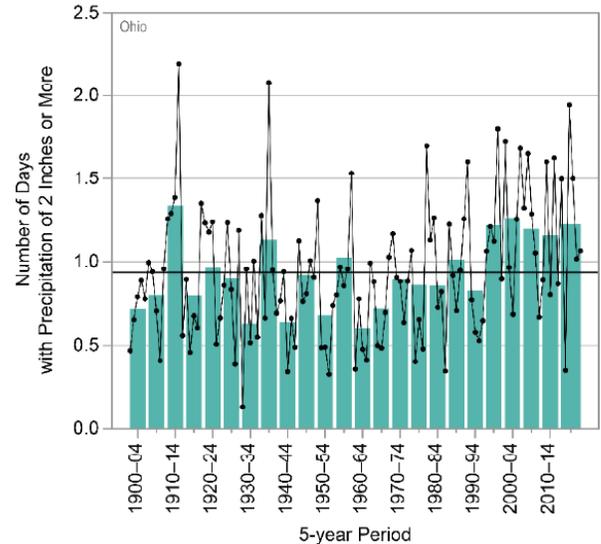
Number of extreme rain events each year in Ohio. Ohio has experienced a significant increase in the number of extreme precipitation events since the mid-1990s.

Health Implications

The health of Ohioans is at risk from extreme heat, drought, extreme rain events, flooding, poor air quality, and increasing illnesses from mosquitoes and poor water quality. Historical policies and systemic racism created conditions that make people of color and lower-income people more vulnerable to these risks.

Increasing heat directly causes heat stroke and exacerbates heart disease. It also has indirect health impacts by worsening air quality. Pollutants called 'ground-level ozone' and 'particulate matter' trigger air quality alerts in Columbus. Hot days will create more ground-level ozone, causing worsening asthma and cardiovascular diseases.

Increased exposure to particulate matter in wildfire smoke also contributes to worsening respiratory and cardiovascular conditions. Wildfire smoke exposure in the Midwest is correlated with an increase in intensive care unit admissions. Another consequence of climate change that affects respiratory disease is the increase in plant pollen due to a longer, warmer growing season from spring to fall. By 2050, increased oak pollen is expected to lead to a 7% annual increase in asthma-related emergency room visits in the Midwest.

May 2020 Columbus flood event, rescue photo from Stormcroft Ave.

II DEVELOPING THE PLAN

Greenhouse Gas Inventory

A greenhouse gas (GHG) inventory quantifies the amount of heat-trapping gases released from human activity within municipal limits. Columbus has been reporting community scale greenhouse gas inventories since 2013. These metrics capture a snapshot of the sources of greenhouse gases contributing to climate change and are essential to manage future emissions. The CAP uses the community-scale inventory, which follows the global standard reporting method, Global Protocol for Community-scale Greenhouse Gas Emissions (GPC), for a Basic reporting level.

Community Scale Inventories

The City of Columbus tracks GHG emissions from human activity within the City for seven different sectors. From 2013 to 2023, the population within Columbus's city limits has grown by 13.5%, while GHG emissions have decreased by 8%. Accounting for this population increase, the amount of greenhouse gases released per each person living within Columbus has decreased by 19% since 2013. Unlike other major metropolitan areas, Columbus's emissions remain lower than pre-pandemic levels by 2.4% as of 2023.

Energy use in homes and commercial buildings is the largest source (18% and 28%) of emissions in Columbus, followed closely by transportation (45%). Since 2013, emissions from transportation have been steadily increasing aligned with population growth, while residential and commercial energy have been decreasing due to efficiency efforts and a cleaner electric grid.

Columbus is currently a car-dependent city, with the average household having two cars and a majority of commuters traveling alone to work. The largest proportion of transportation emissions are from these single-occupant vehicle miles.

Community - Scale CO2e Emission
Population and Annual Per Capita Emissions | 2013 – 2024

— Annual Total Emissions (MMT CO2e)　　— City of Columbus Population

Community - Scale CO2e Emission
Sector Percentage of Total | 2024

Energy use in buildings accounts for 46% of emissions.

45% Transportation	28% Commercial Energy	18% Residential Energy	5% Industrial Energy	3% Solid Waste	0.8% Water & Wastewater	0.5% Fugitive Emissions
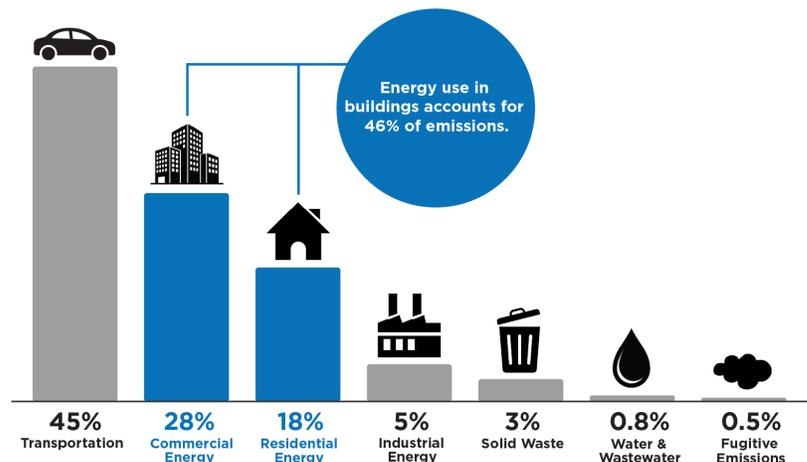
Municipal Government Inventory

While the municipal facilities and operations account for less than 4% of the total community 2013 GHG inventory, it is important to highlight these areas where City departments have the most influence and can lead by example. Nearly all City government operations sources of greenhouse gases produced fewer total emissions in 2024 than in 2013. Waste facility emissions scale proportional to population growth.

Nearly all City government operations sources of greenhouse gases produced fewer total emissions in 2024 than in 2013. Waste facility emissions scale proportional to population growth.

Government Operations CO2e Emissions
Percent Change in Emissions | 2013 – 2024

-65.1%	-42.8%	-40.8%	-29.7%	-22.4%	-7.5%
Streetlights & Traffic Signals	Vehicle Fleet	Water & Wastewater	Total Emissions (Metric tons CO2e)	Buildings & Facilities	Solid Waste
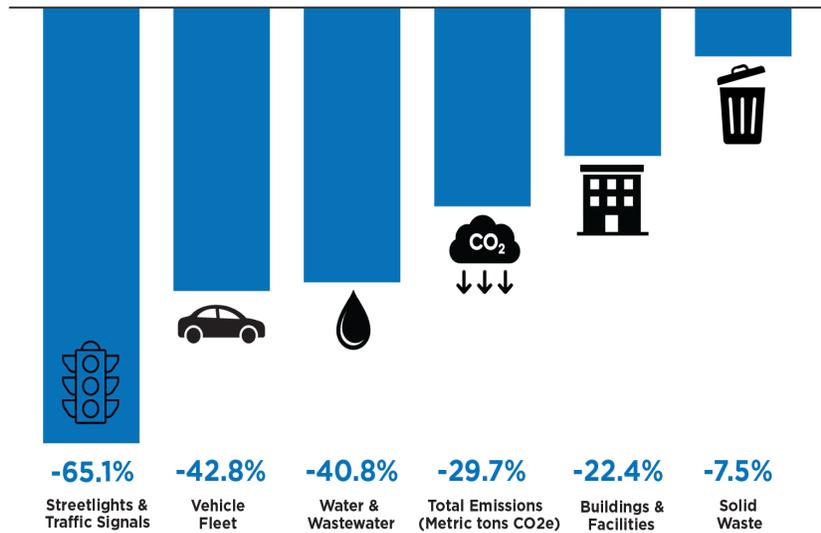
Government Operations CO2e Emissions
Annual Total Emissions in Metric Tons of CO2e | 2013 - 2024

Legend:
- Water & Wastewater Treatment Facilities
- Solid Waste Facilities
- Vehicle Fleet
- Streetlights & Traffic Signals
- Buildings & Facilities
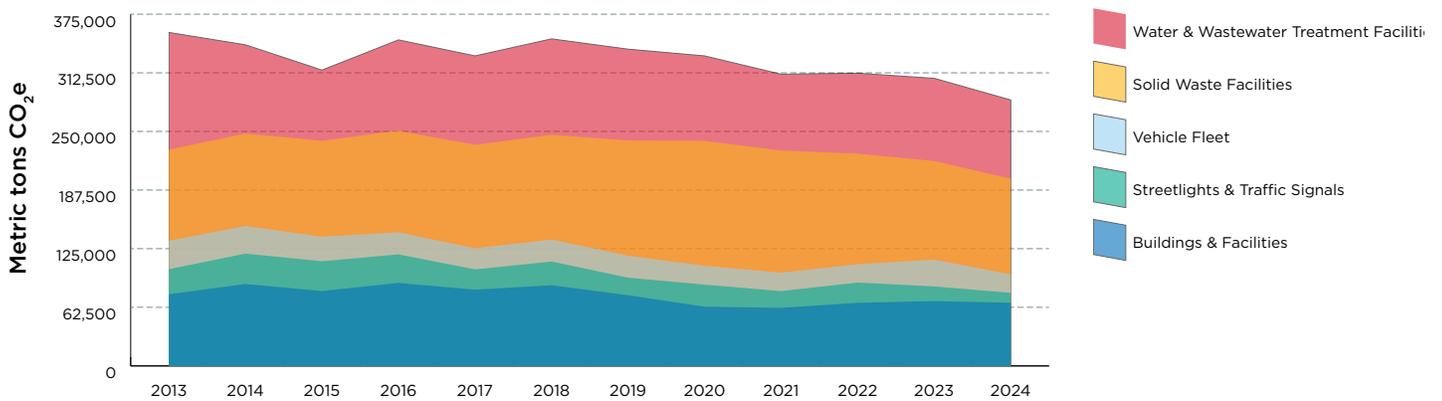
Updated Business-As-Usual Emissions Projection
Original and Updated Total Annual Emissions Projection in Metric Tons of CO2e | 2013 – 2050
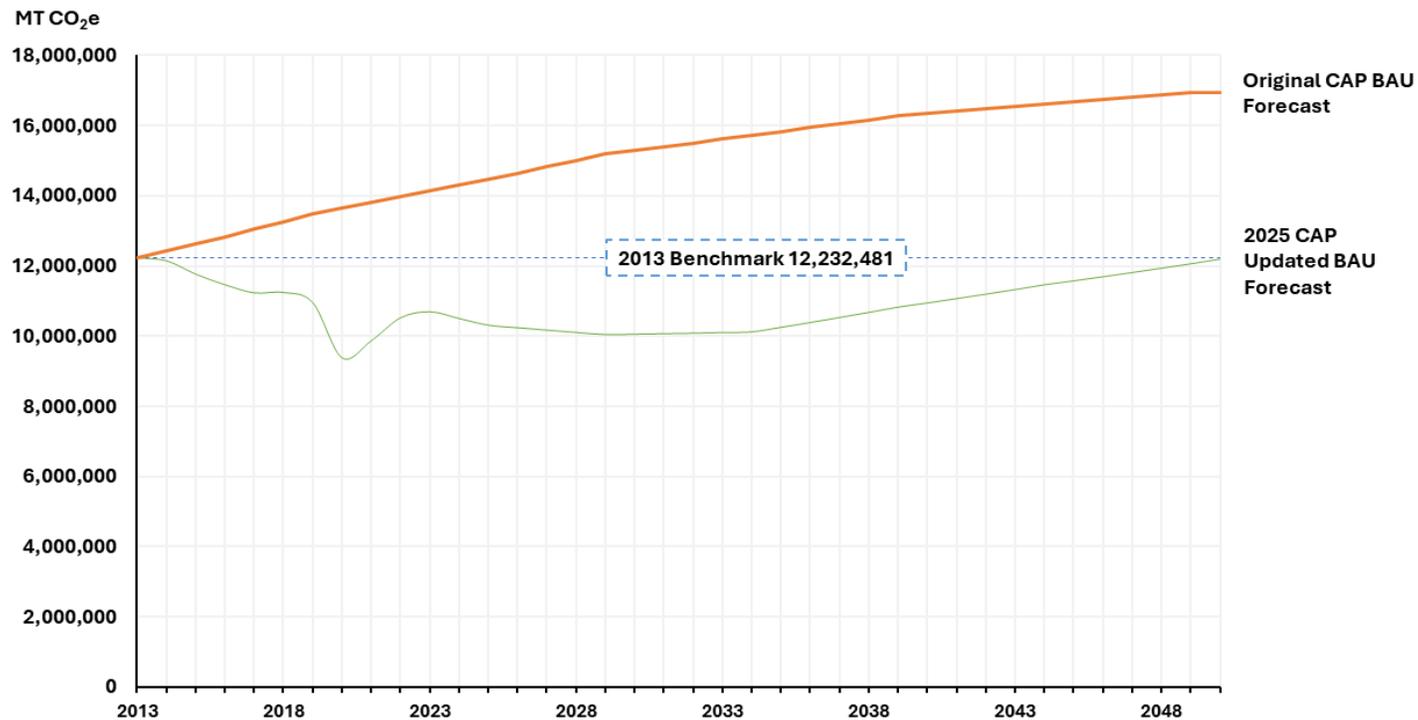
Updated modeled emissions trajectory for Columbus compared to previous trajectory from 2021 CAP

Greenhouse Gas Analysis

The foundation of the Climate Action Plan modeling is the 2013 Greenhouse Gas (GHG) Inventory, which serves as the official community-wide baseline for measuring future reductions. Columbus has been tracking community-scale GHG emissions since that year. In the 2013 baseline, the sectors contributing the most were collectively the energy sectors (Industrial, Commercial, and Residential) at about 60% of total emissions, while Transportation made up the largest single proportion at 33%.

Emissions Reduction Goals

The two primary goals of the Columbus Climate Action Plan are to achieve a 45% reduction in GHG emissions by 2030 and 100% carbon neutrality by 2050, both measured against the scaled 2013 baseline. The 2030 target (roughly 6.1 million MT CO2e) aligns the city with the scientific urgency reflected in the Intergovernmental Panel on Climate Change (IPCC) findings, emphasizing the need to limit global temperature rise. Achieving this interim milestone requires both immediate, aggressive implementation of high-impact strategies and ongoing collaboration across all sectors of the community.

The ultimate target is to achieve full carbon neutrality (100% reduction) by the year 2050. This means ensuring that any remaining hard-to-abate emissions are balanced out, primarily through clean energy procurement and high-quality, verified carbon offsets, thereby reaching net-zero emissions.

To hold the city and community accountable, the plan calls for regular review cycles, specifically a major CAP revision in 2030 and another in 2040, to evaluate technological advancements and market shifts, changes in our Columbus community, and to realign strategies to achieve the carbon neutrality goal.

Updated Business-As-Usual (BAU) Modeling (2025)

As part of the 2025 CAP update, Columbus conducted new modeling using updated growth rates and current trends to establish a more realistic Business-as-Usual (BAU) trajectory for the coming decades. Columbus's emissions performance since 2013, combined with shifts in economic activity and energy consumption patterns, necessitates this recalibration to accurately gauge the impact of planned climate actions.

Based on this new modeling, the overall emissions trajectory has shifted significantly downward. Assuming current patterns continue without the implementation of additional aggressive CAP strategies, Columbus's community-wide emissions are not expected to near the 2013 benchmark of 12.2 million MTCO2e until 2050. This revised forecast is approximately 32% lower on average than the original 2021 BAU forecast, reflecting actual progress in decarbonization and structural changes within the city's energy and mobility sectors. This lower starting trajectory is a positive development, but it highlights the importance of re-evaluating the specific climate actions to ensure they remain high-impact and targeted toward achieving the absolute reduction goal of 45% by 2030.

Results: Modeled Emissions Potential of CAP Strategies

Modeled Emissions Potential of Climate Actions
Annual Emissions Reductions from Climate Actions in Metric Tons CO2e | 2025 – 2050
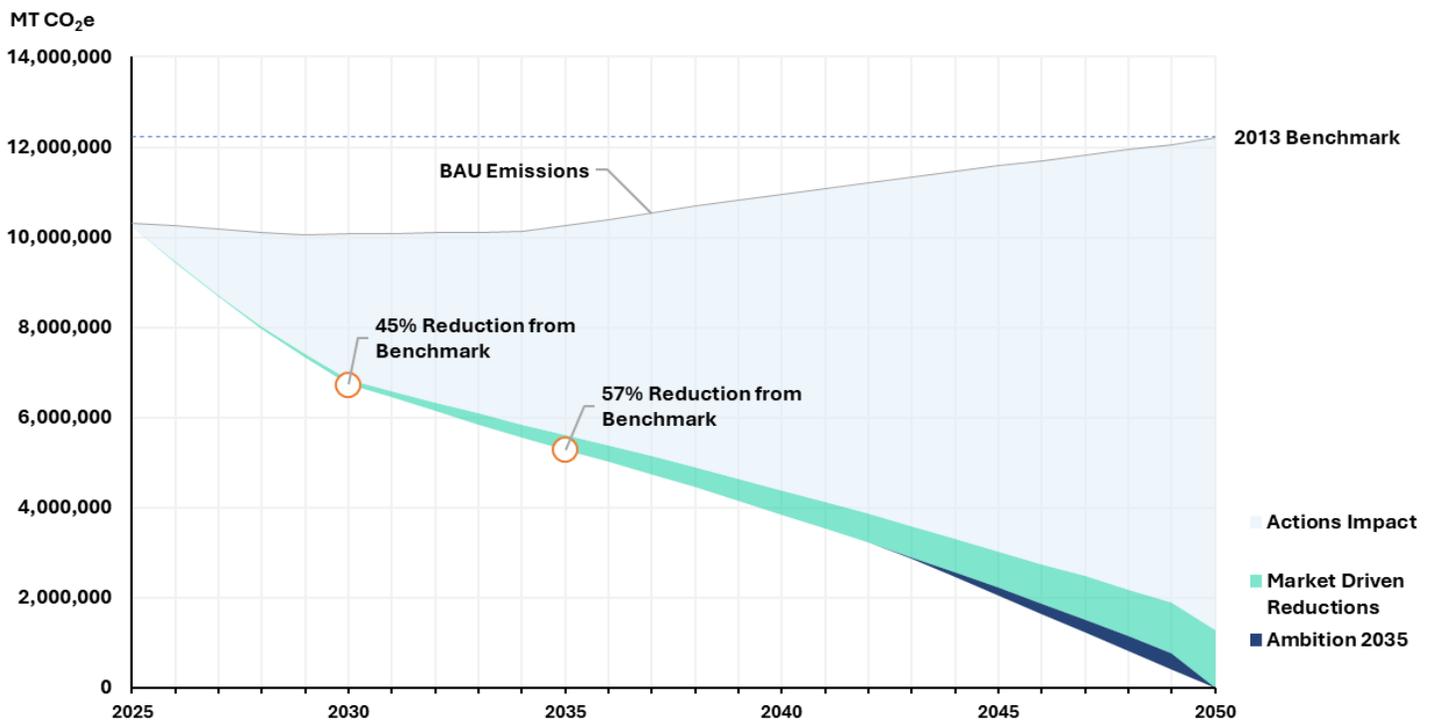
Modeled emissions potential of CAP strategies

The table below summarizes the modeled impact of each action necessary to achieve the City's ambitious 45% reduction target by 2030 and ultimate carbon neutrality by 2050. These figures represent the targeted emissions reductions informed by the iterative modeling approach, ensuring that the combined impact of all strategies remains technically sound and reflective of real-world synergies. Each action has been carefully selected to maximize GHG abatement while delivering meaningful co-benefits to the Columbus community.

Goal	Action	2030	2050
3.3	Ambition 2035	-9,416	-10,705
5.1	Increase Development Density	-6,410	-5,617
5.2	LED Streetlight Retrofits	-8,931	-14,060
6.2	Tree Canopy	-72,271	-105,298
7.1	Increase Residential Onsite Solar	-20,425	-195,463
7.1	Increase Municipal Onsite Solar	-81,701	-78,185
7.2	Increase Commercial Onsite Solar	-245,102	-703,667
7.3	Residential Clean Energy Procurement	-839,276	-1,191,511
7.3	Municipal Clean Energy Procurement	-40,604	-25,136
7.3	Commercial Clean Energy Procurement	-361,551	-2,391,184
8.1	Increase Residential Energy Efficiency	-260,811	-1,106,319
8.1	Increase Commercial Energy Efficiency	-396,085	-2,454,969
8.1	Increase Municipal Energy Efficiency	-23,780	-57,396
8.2	Increase Residential Water Efficiency	-1,712	-7,524
8.2	Increase Commercial Water Efficiency	-979	-4,303
8.2	Increase Municipal Water Efficiency	-584	-1,283
10.1	Increase Private Zero Emission Vehicle Adoption	-239,529	-962,638
10.2	Implement Zero Emission Municipal Vehicle Fleet	-4,360	-3,310
10.2	Implement Zero Emission Commercial Vehicle Fleet	-220,830	-335,292
10.3	Promote MHD Zero Emission Vehicle Adoption	-6,147	-390,796
11.2	Reduce Single Occupancy VMT	-254,849	-541,598
11.3	Increase Transit Use	-18,356	-36,581
12.1	Reduce Landfilled Organic Waste	-59,169	-122,090
12.2	Reduce Recyclable Waste Sent to Landfill	-68,113	-185,441
-	Market Driven Reductions	-97,627	-1,268,768
	Total	-3,338,618	-12,199,134

Updated Goals

- Residential energy efficiency increased from a 20% improvement to a 25% improvement by 2030. The 2050 goal remains the same at 50%

- Commercial energy efficiency increased from a 15% improvement to a 20% improvement by 2030. The 2050 goal remains the same at 50%.

- Carbon sequestration from the tree canopy is now included. The current canopy (22%) is to be conserved through 2030, while being expanded to 40% canopy by 2050.

- An Ambition Goal is included to ensure the city meets the 2030 goal of 45% emissions reduction, 50% by 2035 in line with the Central Ohio Climate Action Plan, and net-zero by 2050.

- The Market Driven Reductions category is included to reflect emission reduction activities that will need to be led by the private sector. This includes emissions from uses such as aviation, rail, industrial uses, and fugitive emissions.

CLIMATE ACTIONS

CLIMATE SOLUTIONS: THE COLUMBUS WAY

Collaborating with the public, private, and nonprofit sectors, utilizing local academic and organizational institutional knowledge, and engaging with neighboring communities is nothing new for Columbus. This experience will be leveraged to implement further plans, policies and agreements to put the necessary tools and training in place for successful climate action to achieve carbon neutrality for the community members that will be thriving here in 2050.

STRATEGIES

1. Empower a community of climate leaders

2. Develop a clean energy economy

3. Enhance partnerships for preparedness efforts

CLIMATE SOLUTIONS: THE COLUMBUS WAY PROGRESS REPORT

Empowered! Program

Clean Energy Columbus (CEC), the City of Columbus's clean energy aggregation program, isn't just about changing energy systems. It's also about helping our community grow. The EMPOWERED! Program is at the heart of CEC's workforce development. EMPOWERED! provides certifications and trainings for participants in construction, safety and environmental fields, giving them the skills they need to succeed. Over 110 people have completed trainings through the Empowered! Program.

Columbus Region Green Fund

In 2021, the Columbus Region Green Fund was founded as part of the Columbus Climate Action Plan through a collaboration between the Columbus Partnership, the City of Columbus, and Franklin County.

The Fund is mobilizing private investment to maximize the impact of public investments in carbon neutrality and inclusive economic growth. It is facilitating a transition where all Columbus Region residents benefit from a cleaner and prosperous region. Recently, the Fund, in partnership with Google and Elevate, launched the Ohio Grid Innovation Fund, an initiative to back practical, community-led solutions that reinforce the state's electric grid — supporting energy efficiency, industry workforce training, and energy education.

Youth Climate Action Fund

The City of Columbus, through Sustainable Columbus, receives funding from the Bloomberg Foundation for the Youth Climate Action Fund. This program provides micro-grants to youth aged 15-24 for projects addressing climate change, environmental justice and community engagement. Over 25 youth-led climate projects have been funded so far, including tree plantings, a transportation education event, a climate tech hackathon, a mobile textile waste upcycling cart, and more.

1

EMPOWER A COMMUNITY OF CLIMATE LEADERS

1.1 Empower A Community of Climate Leaders Through GreenSpot

GreenSpot outreach increases climate change awareness among residents, businesses, and organizations

GreenSpot is a free, membership-based program that provides a framework to think about sustainability and a way to track individual successes. Through direct impact and partnerships with local organizations, GreenSpot educates community members on how to conserve water, divert organic and recyclable waste from landfills, increase the urban tree canopy, and improve energy efficiency.

Since its creation in 2008, GreenSpot has engaged over 30,000 residents, businesses, and community groups. The program not only bolsters community awareness on the effects of climate change, but provides concrete steps that households, businesses, and community groups can take to lessen their climate impacts. Generating partnerships, trust, and community storytelling is an important aspect of GreenSpot's mission and success.

Greenspot stormwater pollution awareness event

TARGETS
200 new businesses and community groups engaged by 2030
5,000 new residents engaged by 2030

GHG IMPACT	
2030 Reduction	Direct
2050 Reduction	Direct

LEADERSHIP	
Lead Agency	Columbus Water and Power
Supporting Agencies	Smart Columbus, Department of Neighborhoods, Sustainable Columbus

EXPECTED BENEFITS
Climate Justice
major
Environmental Quality
major
Human Health
moderate
Economic Prosperity
moderate

2

DEVELOP A CLEAN ENERGY ECONOMY

2.1 Support Green Business Initiatives

Provide Critical Resources to Spur Job Creation

The City of Columbus is committed to providing residents with well-paying, quality green jobs and paid apprenticeships. Providing training opportunities and investing in green jobs drives equitable economic development. "Green jobs" are defined as those that benefit the environment or conserve natural resources in our region.

The City of Columbus is partnering with local training providers including IMPACT Community Action, ARCH, Eckerd Connects, and Goodwill Columbus to provide green job training opportunities. These organizations have deep ties in the community and the ability to provide meaningful green career pathways in clean energy, construction, and manufacturing industries.

Funded by Sustainable Columbus, the 2025 Columbus Green Jobs Study reveals that there are currently 19,400 green jobs in the Columbus region, with at least 2,000 new green jobs being created over the next decade. The City of Columbus and partners in workforce development are committed to filling 10,000 existing and new green jobs and apprenticeships by 2030. This ensures sufficient workforce to support established and growing work in the green economy.

EMPOWERED! program event

TARGETS
Fill 10,000 new and existing green jobs by 2030

GHG IMPACT	
2030 Reduction	Indirect
2050 Reduction	Indirect

LEADERSHIP	
Lead Agency	Sustainable Columbus
Supporting Agencies	One Columbus, Aspyr, Development

EXPECTED BENEFITS
Climate Justice
moderate
Environmental Quality
some
Human Health
some
Economic Prosperity
major

2.2 Increase Annual Sustainable Development Funding

Utilize low-cost solutions for high performance retrofits and clean energy transition

Through Property Assessed Clean Energy (PACE), the Columbus-Franklin County Finance Authority provides financing for Central Ohio businesses, non-profits and local governments to fund cost-effective, energy efficiency improvements to buildings resulting in lower energy costs. PACE funding ensures that renovation and development plans are associated with measurable energy, water, and resilience benefits resulting in lower operational expenditures for owners and tenants, and safer environments in the buildings where we live, work and learn.

Columbus has seen great success with PACE funding, and with the Columbus Region Green Fund, founded in 2021 as a goal of the CAP.

TARGETS
$250 million average annual PACE investments by 2030

GHG IMPACT	
2030 Reduction	Indirect
2050 Reduction	Indirect

LEADERSHIP	
Lead Agency	Development
Supporting Agencies	Columbus-Franklin County Finance Authority, Columbus Region Green Fund, Smart Columbus

EXPECTED BENEFITS
Climate Justice
moderate
Environmental Quality
moderate
Human Health
some
Economic Prosperity
major

PACE funding provided upfront financing for PNC Plaza that resulted in nearly $200,000 annual energy savings

3

ENHANCE PARTNERSHIPS FOR PREPAREDNESS EFFORTS

3.1 Develop A Regional Strategic Resiliency Plan

Strategic resilience program implementation to best meet community needs across the region

Climate change impacts do not respect political boundaries. Climate solutions are stronger when implemented across jurisdictions.

Regional strategic resilience planning across geographical boundaries is crucial to create climate solutions and to address climate impacts. Creating awareness among local governments and organizations of potential regional climate impacts, including extreme temperatures, flooding, drought, and severe weather, while providing opportunities for learning and collaboration, is key to protecting communities. The Mid-Ohio Regional Planning Commission (MORPC)'s Regional Sustainability Agenda outlines climate adaptation and mitigation strategies available to local governments and communities with varying resources available to them. The City of Columbus will work with local partners to ensure collaboration across boundaries to implement climate solutions and address the impacts of climate change.

Preserving wetlands in Columbus

TARGETS
Implement **short-term** strategies by 2030
Implement **long-term** strategies by 2050

GHG IMPACT	
2030 Reduction	Indirect
2050 Reduction	Indirect

LEADERSHIP	
Lead Agency	MORPC
Supporting Agencies	Franklin County, Local Governments, Public Health Departments

EXPECTED BENEFITS
Climate Justice
moderate
Environmental Quality
some
Human Health
some
Economic Prosperity
moderate

3.2 Advocate for State Policies that Align with Low Carbon, Resilient Solutions

Work together at the City level to advocate for State and Federal policy changes

The City of Columbus represents one of multiple layers of government. As such, different aspects are directly or indirectly in the realm of control to direct policy changes. Building codes and renewable energy portfolio standards (RPS) are two important state-level policies that are critical to the Columbus Climate Action Plan and will require diligent efforts to ensure progressive changes are made.

A state-level RPS will set goals for electric utility companies to develop clean energy sources from in-state resources that are carbon-free. This is critical as many fossil fuel sources are reaching the end of their expected useful lifespan and will need replaced.

Building codes for renovations and new construction follow standards adopted by the Ohio Board of Building Standards and include specific energy code requirements. Current commercial energy code compliance pathways reference standards that are at least nine years old. Updating energy codes will provide the community energy cost savings and carbon emission reductions.

As the largest City in Ohio, Columbus will continue to engage with State and Federal legislators to advocate for policies that benefit us all.

TARGETS
Reinstate 20% renewable portfolio standard by 2030
Establish an **energy code review** cycle by 2030

GHG IMPACT	
2030 Reduction	Indirect
2050 Reduction	Indirect

LEADERSHIP	
Lead Agency	Mayor's Office
Supporting Agencies	Building and Zoning, Finance

EXPECTED BENEFITS
Climate Justice
some
Environmental Quality
major
Human Health
moderate
Economic Prosperity
major

3.3 Align Regional and Local Climate Action Goals

Unlock potential for coordinated climate action

In 2025, a coalition of organizations in Central Ohio, including the City of Columbus, the Mid-Ohio Regional Planning Commission, Power a Clean Future Ohio, and The Ohio State University, created the Central Ohio Climate Action Plan (COCAP). The Plan spans ten counties in Central Ohio: Delaware, Fairfield, Franklin, Hocking, Licking, Madison, Morrow, Perry, Pickaway, and Union. Building on community-sourced actions, ideas and priorities identified by people living and working in the region, the COCAP sets two ambitious targets: reduce greenhouse gas emissions by 50% by 2035 and 100% by 2050.

Alignment between the regional and City of Columbus Climate Action Plans can strengthen and amplify the impacts of our actions through partnerships, transfer of best practices, and shared resources. Knowing that both our community and climate solutions will continue to evolve, this measure will identify a path in 2030 to achieving a further 5% reduction in greenhouse gas emissions from the City of Columbus from 2030 to 2035, aligning the goals for the two plans. By reflecting on the successes and challenges of implementing both plans and assessing new opportunities for climate solutions, we can unlock the strength of coordinated climate action.

TARGETS
Outline a pathway to **align City and regional greenhouse gas reduction goals** by 2030

GHG IMPACT	
2030 Reduction	9,416 MT
2050 Reduction	10,705 MT

LEADERSHIP	
Lead Agency	Sustainable Columbus
Supporting Agencies	MORPC

EXPECTED BENEFITS
Climate Justice
major
Environmental Quality
moderate
Human Health
some
Economic Prosperity
some

SUSTAINABLE NEIGHBORHOODS

Columbus has a diverse mix of neighborhoods offering residents a unique sense of pride and ownership. Affordable, safe and resource efficient communities are necessary throughout Columbus. Responsible plans to provide housing solutions for our unhoused neighbors, promote equitable access to transportation services, and increase connectivity to good jobs will be required to sustain a thriving community in the face of climate change.

STRATEGIES

4. Support a healthy and resilient community

5. Implement land use planning strategies for healthy ecosystems

6. Prepare for warmer and wetter seasons

SUSTAINABLE NEIGHBORHOODS PROGRESS REPORT

Zone In Columbus
Adopted by City Council in 2024, the City of Columbus is modernizing its zoning code for the first time in more than 70 years. While addressing housing affordability and prosperity, Zone In will also improve multi-modal transit accessibility by focusing development along transit corridors. The zoning update will facilitate walkable neighborhoods with easy access to job centers, parks, restaurants, shops, community centers, and schools.

Urban Forestry Master Plan
In 2021, Columbus City Council voted to support the Columbus Urban Forestry Master Plan. The Columbus Urban Forestry Master Plan (UFMP) is the first Citywide, strategic plan to invest long-term in Columbus's trees. Over the next decades, the UFMP will guide the entire Columbus community to prioritize, preserve and grow our tree canopy. In 2023, a new public tree code was adopted by City Council.

Priority Resilience Hub Implementation Plan
In 2025, the City of Columbus held multiple focus groups to develop a list of priority locations for resilience hubs that reflect trusted community spaces. The resulting Priority Resilience Hub Implementation Plan makes recommendations for citywide resilience hub locations, as well as a set of next steps to guide the continuing development of a coordinated network of resilience hubs.

4

Support a Healthy and Resilient Community

4.1 Establish Coordinated Network of Resilience Hubs

Community resource centers create strong communication channels

Climate change continues to exacerbate and increase the frequency of severe weather-related events, including droughts, wildfires, flooding, and tornadoes, as well as extreme heat and cold. While not all communities face the same risks, these climate-related events do have greater impacts on our underserved communities.

The City of Columbus is researching the establishment of resilience hubs to prepare for, recover from, and support residents during climate-related events and disasters. Resilience hubs are community-serving facilities that both help residents on a daily basis, and in times of climate disasters, emergencies, or other disruptions, they are able to coordinate communication, serve as shelters, and distribute resources. These hubs, which help to address the multifaceted challenges wrought by climate change, are often existing spaces such as community or recreation centers, schools, or libraries.

TARGETS
Implement resilience hubs within a **15-minute walk** for all residents by 2050

GHG IMPACT	
2030 Reduction	Indirect
2050 Reduction	Indirect

LEADERSHIP	
Lead Agency	Sustainable Columbus
Supporting Agencies	Columbus Public Health, Public Service, Neighborhoods, Public Safety, Recreation and Parks, Technology

EXPECTED BENEFITS
Climate Justice
major
Environmental Quality
some
Human Health
major
Economic Prosperity
some

4.2 Establish Regional Emergency Alert System for Climate Hazards

Ensure residents receive time sensitive warnings

Franklin County Emergency Management and Homeland Services (FCEM&HS) coordinates and prepares for all-hazards disaster planning, education, warning, response, and recovery efforts to prepare and protect the citizens of Franklin County before, during, and after natural and man-made disasters. FCEM&HS maintains a countywide emergency management alert system, ALERT Franklin County. It is a mass notification and warning program used to inform residents about severe weather and important emergency and disaster alerts.

Franklin County and other local jurisdictions also maintain the Franklin County, Ohio Multi-Jurisdictional Hazard Mitigation Plan to better protect residents and their property throughout the region from hazardous events. In 2023, the Plan was updated and includes the impacts of climate change in the local hazard risk assessment such as drought, disease outbreak, extreme temperatures, and severe weather.

Within Columbus, Columbus Public Health called together an agency-wide team in 2024 to prepare and respond to extreme temperature events to safeguard residents. These coordinated solutions act as an effective, systemic approach to support Columbus communities in adapting to the impacts of climate change.

TARGETS
Develop coordinated **multi-county** alert system by 2030

GHG IMPACT	
2030 Reduction	Indirect
2050 Reduction	Indirect

LEADERSHIP	
Lead Agency	Franklin County Emergency Management and Homeland Services
Supporting Agencies	Columbus Public Health, Technology, Public Safety

EXPECTED BENEFITS
Climate Justice
moderate
Environmental Quality
some
Human Health
some
Economic Prosperity
major

5

Implement Land Use Planning Strategies for Healthy Ecosystems

5.1 Increase Development Density

Strategically manage development to prioritize environmental and economic sustainability through multi-modal transit access and housing opportunities

The population within Franklin County is expected to grow to over 3 million by 2050. To manage the resulting development sustainably, Zone In Columbus began the process of assessing and modernizing Columbus' zoning code in 2021. This is the first time the code has been modernized in more than 70 years.

While addressing housing affordability and prosperity, Zone In will also improve multi-modal transit accessibility by focusing development along transit corridors and routes in coordination with LinkUS, COTA's concurrent effort to modernize the local transit system. The zoning update will facilitate walkable neighborhoods in locations with easy access to community assets such as job centers, parks, restaurants, shops, community centers, and schools.

Livingston Park adjacent to the Southern Orchards neighborhood in South Side of Columbus

TARGETS
40% of new housing is within 1/4 mile of employment centers by 2030
60% of new housing is within 1/4 mile of employment centers by 2050

GHG IMPACT	
2030 Reduction	6,410 MT
2050 Reduction	5,617 MT

LEADERSHIP	
Lead Agency	Building and Zoning
Supporting Agencies	COTA, Public Service, Development

EXPECTED BENEFITS
Climate Justice
some
Environmental Quality
some
Human Health
moderate
Economic Prosperity
moderate

5.2 LED Streetlight Retrofits

Investing in fixture upgrades for positive environmental, social, and financial benefits

Sufficient and well-maintained streetlighting is key to safety in Columbus neighborhoods. Light emitting diodes (LEDs) use less energy and have a longer lifetime than low and high-pressure sodium lights. Smart Lighting software allows the City of Columbus to manage the streetlighting system with a central control center so staff can control the lighting system remotely, get light outage notifications, and adjust light brightness settings to fit the local lighting needs. Using LEDs in combination with Smart Lighting systems means we will create less greenhouse gases, decrease streetlighting maintenance time, and create better safety on our streets.

There are upwards of 58,000 streetlights within the City of Columbus. Current streetlighting standards for the City of Columbus require that all newly installed or replaced streetlights be LED lights. As of the end of 2024, over 11,864 streetlights in the city had been converted to LEDs, about 20 percent of the City's streetlight system.

TARGETS
100% LED streetlights by 2030

GHG IMPACT	
2030 Reduction	8,931 MT
2050 Reduction	14,060 MT

LEADERSHIP	
Lead Agency	Columbus Water and Power
Supporting Agencies	AEP Ohio, Public Service, Finance, Technology

EXPECTED BENEFITS
Climate Justice
moderate
Environmental Quality
major
Human Health
some
Economic Prosperity
moderate

5.3 Increase Equitable Access to Green Space

Access to safe outdoor spaces creates strong, healthy communities

Easy access to parks, natural areas, and enjoyable outdoor space provides social and recreational benefits to all Columbus residents. In line with Columbus's commitment to equitable access to green spaces, this action will track progress and inform decisions to increase access for all communities; prioritizing areas where there are the greatest disparities first. Green spaces tracked for this measure consist of parks, natural areas, and connectivity corridors or greenways.

The preservation and restoration of sufficient acreage of green space is also a proven climate adaptation strategy—reducing stormwater impacts from severe weather events and increasing the tree canopy to sequester CO2.

Scioto Mile Fountain in Bicentennial Park, downtown Columbus

TARGETS

430 accessible green spaces by 2030
500 accessible green spaces by 2050
Access to green space within a **10-minute walk** for all residents by 2050

GHG IMPACT

2030 Reduction	Indirect
2050 Reduction	Indirect

LEADERSHIP

Lead Agency	Columbus Recreation and Parks
Supporting Agencies	Development, Building and Zoning

EXPECTED BENEFITS

Climate Justice	
	major

Environmental Quality	
	major

Human Health	
	moderate

Economic Prosperity	
	moderate

5.4 Implement Water Resilience Strategies

Maintaining a resilient water supply is a critical priority for the community

Clean water is a basic human need and must be provided to all residents. Increased water treatment demands are expected as Columbus's population grows and development increases. In addition to the need for clean drinking water, the demands on stormwater and sewage infrastructure are also expected to greatly increase.

With the completion of the Regional Water Study for Central Ohio in 2025, the Central Ohio Water Advisory Council is positioning itself as an implementation body to help move the recommendations from the study into actions.

The Council consists of project funders such as the City of Columbus, Del-Co Water, and the City of Marysville, as well as representatives from key stakeholder groups including agriculture, local and state government, higher education, water and wastewater service providers, non-profit conservation groups, and other community-based organizations. The Council will continue to provide strategic leadership on the management, planning, stewardship and resiliency of waters in the region while continuing to ensure clean and abundant water is readily available for everyone in Central Ohio in the face of a changing climate, growth, and development.

TARGETS
Implement **near-term** recommendations from Regional Water Study by 2030
Implement **long-term** recommendations from Regional Water Study by 2050

GHG IMPACT	
2030 Reduction	Indirect
2050 Reduction	Indirect

LEADERSHIP	
Lead Agency	MORPC
Supporting Agencies	Central Ohio Water Advisory Council, Columbus Water and Power, Water Utilities

EXPECTED BENEFITS
Climate Justice
major
Environmental Quality
major
Human Health
some
Economic Prosperity
moderate

6

Prepare for Warmer and Wetter Seasons

6.1 Assess and Protect Assets from the Impacts of Climate Change

Critical infrastructure must be prioritized, especially in underserved communities

Maintaining sufficient critical infrastructure in every Columbus neighborhood is key to quality of life in our vibrant communities. Insufficient stormwater control, poor water quality, and aging electric utility infrastructure impact the health and safety of residents.

Columbus Water and Power is advancing strategic efforts to assess the overlap of climate change impacts, underserved communities, critical infrastructure assets, and ongoing and upcoming projects to identify priority areas where focused, equitable resilience planning can have the greatest impact. The asset management section within Columbus Water and Power will ensure that infrastructure investment decisions are equitable and data driven, aligning infrastructure upgrades with community needs.

Across every division, Columbus Water and Power is investing in smarter, safer, and more sustainable infrastructure to protect our communities from the impacts of climate change. These efforts strengthen our water and power systems today and ensure a healthier, more equitable future for generations to come.

TARGETS
Implement **short-term** strategic resilience planning efforts by 2030
Implement **long-term** strategic resilience planning efforts by 2050

GHG IMPACT	
2030 Reduction	Indirect
2050 Reduction	Indirect

LEADERSHIP	
Lead Agency	Columbus Water and Power
Supporting Agencies	Columbus Public Health, Development, Technology

EXPECTED BENEFITS
Climate Justice
moderate
Environmental Quality
major
Human Health
some
Economic Prosperity
moderate

6.2 Reduce Urban Heat with Tree Canopy Cover

Trees help manage stormwater and heat and increase property values

Columbus's average citywide tree canopy is currently 22%, but coverage across neighborhoods ranges from 11-38%. The Columbus Urban Forestry Master Plan outlines our goals to stop net tree canopy loss and focus on priority neighborhoods that need trees the most. In addition to reducing urban heat, trees benefit community health by improving air quality, cardiovascular health, and mental health.

Since the Urban Forestry Master Plan was approved in 2021, Columbus Recreation and Parks has updated the City's street tree inventory and created fact sheets for each Columbus community; collaborated with the Franklin County to analyze tree canopy cover county-wide over a 10-year period; strengthened Columbus City Code to protect public trees and require mitigation for their removal; and funded a Tree Assistance Program with the Franklin County Soil & Water Conservation District to plant trees on private property.

TARGETS
Invest in **equitable canopy** across all neighborhoods by 2030
Stop tree canopy net losses by 2030
40% city-wide tree canopy by 2050

GHG IMPACT	
2030 Reduction	72,271 MT
2050 Reduction	105,298 MT

LEADERSHIP	
Lead Agency	Columbus Recreation & Parks
Supporting Agencies	Columbus Water and Power, Public Safety, Development, Green Columbus

EXPECTED BENEFITS
Climate Justice
moderate
Environmental Quality
major
Human Health
major
Economic Prosperity
some

6.3 Evaluate Microgrid and Storage Projects

Rethinking our century-old grid infrastructure will allow for implementing new technologies

Electrification is an important step in switching from CO_2 emitting fossil fuels—but the demand for increased electricity comes with infrastructure upgrade requirements and capital improvement costs. Focusing efforts where upgrades can be centralized with shared interests to implement lower-carbon energy solutions will also improve reliability and boost overall grid resilience.

Microgrids serve as smaller, contained versions of our main electric grid. Areas with vulnerable communities, critical healthcare, and other key facilities with 24-hour demands should be identified and prioritized for pilot storage and microgrid projects. Best practices for future adaptability should also be outlined and shared with stakeholders.

TARGETS
Support stakeholders for implementation of **5 microgrid** or energy storage pilots by 2030

GHG IMPACT	
2030 Reduction	Indirect
2050 Reduction	Indirect

LEADERSHIP	
Lead Agency	Columbus Water and Power
Supporting Agencies	AEP Ohio

EXPECTED BENEFITS
Climate Justice
moderate
Environmental Quality
some
Human Health
some
Economic Prosperity
moderate

BUILDINGS

Columbus's buildings are a major consumer of energy from local utilities and the largest single source of GHG emissions community-wide; they must be fine-tuned to optimize each kilowatt of energy used. By 2050, buildings must be carbon neutral and operating on 100% clean power to achieve the CAP goals.

Buildings can be built and renovated using net-zero design standards, high efficiency systems, and passive strategies to first reduce the energy needed; and second generate clean energy on-site to meet the reduced demand.

STRATEGIES

7. **Increase renewable energy**

8. **Increase building efficiency**

9. **Adopt net zero and resilient building standards**

BUILDINGS PROGRESS REPORT

Clean Energy Columbus

Clean Energy Columbus is the City's 100% clean energy aggregation program, delivering clean power and electricity savings to our community. Voted on and approved by residents in 2020, CEC has given residents and small businesses access to renewable energy at competitive rates. Participating residents have saved about $110 per year on their utility bills and have saved over $60 million over the life of the program. CEC's focus on local clean energy has created over 300 local jobs with the Atlanta Farms solar project in Pickaway County.

Residential Energy Efficiency

Despite a growing population in Columbus, residential carbon emissions are below two million tons for the first time in recent years. Sustainable Columbus supports IMPACT Community Action to administer an energy efficient appliance replacement program for income qualified residents, furthering energy efficiency and equity goals. Sustainable Columbus also supports the expansion of IMPACT's Home Weatherization Assistance Program, ensuring residents in Columbus between 200-300% of the Federal Poverty Level are eligible. The program provides home energy efficiency and repair measures such as insulation, window sealing and replacement, roof repair, and chimney sealant.

Columbus Solar Co-Ops

Sustainable Columbus partners with Solar United Neighbors to offer Solar Co-ops that support residents in going solar. The Solar Co-op brings residents together, provides education, and works with participants to select an installer. Since the Co-ops began in 2021, the program has educated over 600 residents and installed 670 kW of new solar in the community. To deepen community impact, a pilot version of the program is providing income-qualified homes with free solar and battery backup, creating clean energy ambassadors in communities of color. The effort ensures vulnerable communities benefit from clean energy.

City of Columbus Energy and Water Benchmarking Ordinance

The City of Columbus's Energy and Water Benchmarking and Transparency Ordinance requires building owners and managers of commercial buildings over 50,000 square feet to track their electricity, gas, and water use. Benchmarking is an easy way for building owners to measure and manage their energy and water use. By providing reliable data to building owners and tenants, benchmarking and transparency has been shown to reduce building energy use by 2-3% each year.

7

Increase Renewable Energy

7.1 Increase Residential On-Site Solar

On-site solar helps residents save money and keeps our community healthy and resilient

With the regional grid using a significant amount of fossil fuels for our increasing electric power generation demand, many Columbus citizens desire to develop their own on-site solar installations to source clean, reliable power. Columbus will continue to foster educational programs, cooperative purchasing opportunities, and innovative solutions to support residents of all income levels and local electric utilities go solar. Our residential solar programs help residents overcome the three main barriers to rooftop solar: cost, trust, and knowledge.

In 2023 the City of Columbus Building and Zoning Services achieved a Gold SolSmart designation for issuing small scale solar PV permits within one day, making it easier for Columbus residents to quickly and efficiently install solar. The City also established a net metering policy, authorizing the City's Division of Power to credit clean energy generated on residents' roofs to their utility bills.

TARGETS
50 MW installed by 2030
500 MW installed by 2050

GHG IMPACT	
2030 Reduction	20,425 MT
2050 Reduction	195,463 MT

LEADERSHIP	
Lead Agency	Building and Zoning
Supporting Agencies	Columbus Water and Power, Sustainable Columbus

EXPECTED BENEFITS
Climate Justice
moderate
Environmental Quality
major
Human Health
some
Economic Prosperity
major

7.2 Increase Commercial On-Site Solar

Commercial rooftop, parking canopy, and ground mount solar systems are reliable long-term investments

Municipal, private, and non-profit commercial property owners can benefit from clean energy with on-site solar system installations. Multiple types of systems are available including rooftop solar, parking canopy, or ground mount systems. The City of Columbus currently has multiple rooftop solar systems installed on municipal facilities with additional ground mount systems under contract for development.

As part of the implementation of the Columbus Climate Action Plan, the Columbus Region Green Fund was founded in 2021 through a collaboration between the Columbus Partnership, the City of Columbus, and Franklin County. The Green Fund equitably accelerates the clean energy transition by mobilizing public and private funding, deploying new financial solutions that eliminate market barriers such as providing gap financing, removing up-front costs, and maximizing the impact of public investments in carbon neutrality,
climate resiliency, and inclusive economic growth.

Removing these common financial barriers allows for deployment of solar systems that save money and provide clean energy. The Green Fund prioritizes financing solar projects for nonprofits, low-to-moderate income businesses, and affordable housing.

The City of Columbus currently has multiple rooftop solar systems installed on municipal facilities with additional ground mount systems under contract for development.

TARGETS
200 MW municipal installed by 2030
600 MW private installed by 2030
2 GW total installed by 2050

GHG IMPACT	
2030 Reduction	326,803 MT
2050 Reduction	781,852 MT

LEADERSHIP	
Lead Agency	Columbus Region Green Fund
Supporting Agencies	Smart Columbus, Columbus Water and Power, Development

EXPECTED BENEFITS
Climate Justice
moderate
Environmental Quality
major
Human Health
some
Economic Prosperity
major

7.3 Implement Clean Energy Procurement

Procurement options allow all community members access to clean energy options regardless of ownership

The City of Columbus successfully implemented our Clean Energy Columbus aggregation program in 2021, giving residents and small businesses the option to utilize 100% clean, renewable energy. Participating residents have saved about $110 per year on their utility bills and have saved over $60 million over the life of the program.

City government, private businesses, and local organizations have commercial energy accounts, meaning they are able to procure clean energy options using either power purchase agreements (PPAs) or renewable energy credits (RECs) for either an individual building or suite of buildings. As the City and other entities build more renewable energy systems locally, there will be additional opportunity for local clean energy procurement. Purchasing local clean energy means more Ohio green job development and a healthy local economy.

TARGETS
100% municipal clean energy procurement by 2030
100% residential clean energy procurement by 2030
25% commercial clean energy procurement by 2030
100% commercial clean energy procurement by 2050

GHG IMPACT	
2030 Reduction	1,241,431 MT
2050 Reduction	3,607,831 MT

LEADERSHIP	
Lead Agency	Sustainable Columbus
Supporting Agencies	Columbus Recreation and Parks, Columbus Water and Power, Finance, Smart Columbus

EXPECTED BENEFITS
Climate Justice
some
Environmental Quality
major
Human Health
some
Economic Prosperity
some

8

Increase Building Efficiency

8.1 Increase Energy Efficiency

Energy efficiency is a cost-effective tool to reduce greenhouse gas emissions and cut utility bills

Energy use in buildings accounts for 46% of community-wide greenhouse gas emissions and most existing buildings will remain in use for decades. Increasing energy efficiency in buildings does more than just lessen GHG emissions—it also results in lower utility bills and healthier buildings to work, learn, and live in.

Columbus passed a benchmarking ordinance in 2020, requiring buildings above 50,000 square feet to monitor and submit their energy usage to the City. To build off of the successes of benchmarking, the City is pursuing the adoption of a Building Performance Standard (BPS) and has joined the National BPS Coalition to begin working towards this goal.

Columbus will continue to reduce energy burden for all Columbus residents by expanding residential energy efficiency programs such as Clean Clothes and the new Division of Power Smart Thermostat Marketplace. These programs educate residents about the opportunities they have to decrease their energy bills and the incentives available in the community to help offset the upfront costs.

Municipal energy efficiency has been evaluated and should track implementation progress in line with the Comprehensive Energy Management Plan for City facilities.

TARGETS
20% commercial energy use reduction by 2030
25% residential energy use reduction by 2030
25% municipal energy use reduction by 2030
50% residential, commercial and municipal energy use reduction by 2050

GHG IMPACT	
2030 Reduction	680,677 MT
2050 Reduction	3,618,684 MT

LEADERSHIP	
Lead Agency	Building and Zoning
Supporting Agencies	Columbus Recreation and Parks, Development, Columbus Water and Power, Sustainable Columbus

EXPECTED BENEFITS
Climate Justice
moderate
Environmental Quality
moderate
Human Health
moderate
Economic Prosperity
major

8.2 Increase Water Efficiency

High efficiency fixtures can save significant amounts of water and lower wastewater treatment demands.

Columbus Water and Power operates more than 300,000 water meters and serves more than 1.2 million people. In 2023, Columbus Water and Power began upgrading its water and power meters through the Enhanced Meter Project. The program is replacing over 300,000 meters, aiming to replace outdated meters with modern, advanced metering infrastructure to enhance efficiency, accuracy, and customer service. Advanced metering infrastructure drives water conservation through early leak detection and improved water use tracking resulting in changes in water use by consumers.

Water fixtures utilize potable water resources, as well as energy to transport water to, from and within end uses. Replacing inefficient fixtures and appliances with EPA certified WaterSense fixtures can reduce water consumption by more than 20% compared to a typical baseline product, reducing utility bills and the demand on wastewater treatment plants.

In addition to the reduced energy expenditure and associated emissions from lower volumes of water, these programs will also help reduce water treatment facility stress due to climate impacts due to heavy precipitation or drought.

TARGETS
5% residential and commercial water use reduction by 2030
10% municipal water use reduction by 2030
20% community-wide water use reduction by 2050

GHG IMPACT	
2030 Reduction	3,274 MT
2050 Reduction	13,110 MT

LEADERSHIP	
Lead Agency	Columbus Water and Power
Supporting Agencies	Neighborhoods, Development

EXPECTED BENEFITS
Climate Justice
moderate
Environmental Quality
moderate
Human Health
moderate
Economic Prosperity
major

9

Adopt Net Zero and Resilient Building Standards

9.1 Prototype Net Zero Energy Buildings

Technologies have advanced to enable building designs to balance energy demand and renewable offsets

A net-zero energy building is built to the highest efficiency standards and is served by on-site renewable energy, with the capacity to generate as much energy as it consumes in one calendar year. Columbus has created resources to support City departments in constructing highly efficient buildings that have renewable energy where feasible. City departments have invested greatly in training facilities staff and supporting them with the technology needed to automate and operate our buildings at the highest level of efficiency. This led to the successful construction of our first net-zero energy building, Wyandotte Lodge, and a high-performance building, Fran Ryan Center.

Columbus will continue to explore and implement best practices from other cities and experts regarding high-performance design and construction for all municipal buildings. City leaders will identify upcoming design and renovation projects that would be suitable for net-zero energy pilot implementation.

The Fran Ryan Center, a high-performance building

TARGETS
4 municipal net zero energy pilot buildings by 2030
Adopt **net zero energy design** standards by 2050

GHG IMPACT	
2030 Reduction	Indirect
2050 Reduction	Indirect

LEADERSHIP	
Lead Agency	Finance
Supporting Agencies	Building and Zoning, Columbus Parks and Recreation, Technology

EXPECTED BENEFITS
Climate Justice
some
Environmental Quality
major
Human Health
moderate
Economic Prosperity
moderate

9.2 Adopt Resilient Standards

Safe, resilient buildings are needed to prepare for the changing climate

Preparing our building stock to survive and thrive in extreme heat and flood conditions is critical to keeping Columbus a safe, healthy, and affordable place to live and work. Resilient design guidelines are intended to support and incentivize building developers to go beyond code requirements and plan for future conditions, helping the building owner save money on future repair and retrofit costs and keep occupants safe for decades to come.

The first resilient design checklist began integration into the Building and Zoning Services site plan review process in 2025, with the goal of providing resources and suggestions to incoming developers about how they can build and retrofit their buildings to be more resilient to a changing climate. The checklist will be supported by a tool to identify future climate risks on a community level to better inform recommendations for building and community design.

TARGETS
Assess and map future climate risks for communities across Columbus by 2030

GHG IMPACT	
2030 Reduction	Indirect
2050 Reduction	Indirect

LEADERSHIP	
Lead Agency	Building and Zoning
Supporting Agencies	Sustainable Columbus, Columbus Water and Power, Development, Technology

EXPECTED BENEFITS
Climate Justice
moderate
Environmental Quality
moderate
Human Health
major
Economic Prosperity
moderate

TRANSPORTATION

An historically car-centered city and one of the fastest grow-ing metropolitan areas in the Midwest, Columbus is setting examples for innovative transit, micro-mobility, and active transportation.

STRATEGIES

10. Enable carbon free vehicles

11. Support equitable mode shift

TRANSPORTATION PROGRESS REPORT

LinkUS

LinkUS is Central Ohio's comprehensive transportation and development initiative to address growth, housing, and opportunity gaps in our community. In November 2024, voters approved a levy for build-out and implementation of LinkUS. This funding is projected to generate $8 billion in new investments by 2050.

LinkUs will also increase transit service hours by 45%, build 5 new rapid transit lines, and construct 500+ miles of sidewalks, bikeways, and trails.

Bike Plus

Bike Plus is a citywide effort to modernize the City's bikeways plan. The 2024 Bike Plus plan includes a long-range vision for future bike infrastructure, as well as a short-term goal to implement key bikeways in the next five years. The long-term plan envisions 500 miles of new bikeways built throughout Columbus in the coming decades. The near term network aims to add 20 miles of new bikeways by 2029.

Equitable Transit-Oriented Development Action Plan

Developed in 2025, Columbus's Equitable Transit-Oriented Development Action Plan frames equitable transit-oriented development (ETOD) around the LinkUS initiative as a growth strategy that benefits everyone. ETOD focuses on developing housing, jobs, and services near transit lines to increase accessibility for all.

ETOD is a national best practice that helps guide development so that people of all incomes—especially existing residents who may have been harmed or ignored by previous infrastructure investments—experience the benefits of new development near transit. As historic transit and mobility investments are made in Central Ohio, this action plan focuses on what is developed alongside those investments—growth of companies and educational institutions, stability of families so they can thrive here, and opportunities for all.

10

Enable Carbon Free Vehicles

10.1 Increase Private Zero Emission Vehicle Adoption

Incentivize and reduce barriers to entry for drivers

Transportation is the second largest contributor to emissions in the City of Columbus, with over 65% of transportation emissions coming from passenger vehicles. To meet our emissions reduction goals, community-wide adoption of zero emission vehicles (ZEVs), particularly electric vehicles (EVs), is essential.

EVs are becoming more affordable as prices decrease and pre-owned purchasing options expand. Access to charging infrastructure remains critical to enabling broad adoption of electric vehicles.

The City of Columbus, in collaboration with local municipalities and private landowners, has established over 1,100 publicly available charging stations, with plans for further expansion. Targeted investments will increase access to charging in areas where it is most needed, including multifamily housing and underserved neighborhoods. The City of Columbus will continue to support programs that promote EV adoption, partnering with Smart Columbus and other organizations to reduce cost barriers. Achieving the 2030 target of 15% of all vehicle registrations being zero emission vehicles will require approximately 30% of new vehicle sales to be ZEVs.

TARGETS
15% ZEV registrations by 2030
100% ZEV registrations by 2050

GHG IMPACT	
2030 Reduction	239,529 MT
2050 Reduction	962,638 MT

LEADERSHIP	
Lead Agency	Smart Columbus
Supporting Agencies	Building and Zoning, Public Service, Columbus Water and Power

EXPECTED BENEFITS
Climate Justice
some
Environmental Quality
major
Human Health
moderate
Economic Prosperity
moderate

10.2 Implement Zero Emission Vehicle Fleets

ZEV fleets offer opportunities for cost and emission reductions

Fleet operations are the second-largest source of transportation emissions in Columbus, behind passenger vehicles. A well-planned transition to Zero Emission Vehicles (ZEVs) creates operational advantages for both public and private fleets, including lower vehicle maintenance and fuel costs, more predictable fuel scheduling, increased energy security, and reduced fleet emissions.

Local employers such as Ohio Health and Columbus Yellow Cab are providing leadership by pioneering vehicle electrification in their own fleets.

The City of Columbus has made significant investment in fleet electrification through the Green Fleet Action Plan and in partnership with Smart Columbus.

TARGETS
100% municipal light duty passenger ZEVs by 2030
50% rideshare and private fleets ZEVs by 2030
100% ZEV fleets by 2050

GHG IMPACT	
2030 Reduction	225,190 MT
2050 Reduction	338,602 MT

LEADERSHIP	
Lead Agency	Smart Columbus
Supporting Agencies	Columbus Recreation and Parks, Public Service, Columbus Water and Power, Finance, Technology

EXPECTED BENEFITS
Climate Justice
some
Environmental Quality
major
Human Health
moderate
Economic Prosperity
major

10.3 Promote Medium / Heavy Duty Zero Emission Vehicle Adoption

Explore innovative zero emissions alternatives to medium/heavy duty transportation

While the EV market has seen rising adoption and impact on the passenger and fleet vehicle market, medium and heavy-duty vehicles call for a wider array of fuel alternatives. Currently, the most common zero-emission vehicles (ZEVs) in these categories are electrified passenger buses and school buses.

COTA has been a leader in this space, leveraging both Compressed Natural Gas (CNG) and electric buses, with plans to expand its ZEV fleet through the LinkUS initiative. The City will continue to explore and support emerging ZEV options for medium and heavy-duty vehicles and plans to prioritize pilot projects in areas experiencing higher air pollution levels.

To achieve the 2030 target of 2% of all new medium and heavy-duty vehicle registrations being zero emission, the City will collaborate with public and private partners, track ZEV deployments, and promote best practices for sustainable fleet transitions.

TARGETS
2% medium/heavy duty ZEVs by 2030
100% medium/heavy duty ZEVs by 2050

GHG IMPACT	
2030 Reduction	6,147 MT
2050 Reduction	390,796 MT

LEADERSHIP	
Lead Agency	Smart Columbus
Supporting Agencies	COTA, Columbus Recreation & Parks, Public Service, Columbus Water and Power, Finance

EXPECTED BENEFITS
Climate Justice
moderate
Environmental Quality
major
Human Health
moderate
Economic Prosperity
major

11

Support Equitable Mode Shift

11.1 Implement Comprehensive Multi-Modal Transportation Networks

Investing in transformative high-capacity transit corridors

Columbus and the surrounding region are growing rapidly, expecting nearly a million more people over the next 25 years. To address this growth, COTA is modernizing and expanding the transportation system through LinkUS, a plan and effort approved by voters in 2024. As part of this service expansion, LinkUs will establish five bus rapid transit (BRT) lines using zero emissions vehicles. The first three LinkUs transit corridors will create access to more than 380,000 jobs.

Higher density, mixed-use development is also a key element of successful transit systems. The Zone In Columbus program, adopted by ballot in 2024, is modernizing zoning regulations to support sustainable growth by improving transit options, expanding housing opportunities, and fostering the development of job centers along key corridors. Zone In will work in tandem with LinkUS to provide Columbus residents with reliable and efficient access to jobs, education, healthcare and other services.

TARGETS
Implement **3 regional** High Capacity Rapid Transit lines by 2030
Implement **8 regional** High Capacity Rapid Transit lines by 2050

GHG IMPACT	
2030 Reduction	Indirect
2050 Reduction	Indirect

LEADERSHIP	
Lead Agency	Public Service
Supporting Agencies	MORPC, COTA, Franklin County

EXPECTED BENEFITS
Climate Justice
moderate
Environmental Quality
moderate
Human Health
major
Economic Prosperity
some

11.2 Reduce Single Occupant Vehicle Miles Traveled

Promote micromobility and carpooling opportunities

Reducing the amount of single occupant vehicle miles traveled (VMT) requires effective, easy to access, and reliable alternative methods of transportation.

The LinkUS program is addressing mobility needs throughout Columbus through COTA//Plus. COTA//Plus is a premium, on-demand micro-transit service designed to extend the reach of COTA's fixed-route and bus rapid transit (BRT) network. Operating within defined zones, the service offers flexible, app-based or phone-scheduled rides, especially in areas where traditional transit may not be easily accessible.

The City is also supporting micro-mobility by continuing to offer access to electric bikes and seated and standing scooters for residents. These flexible means of alternative transportation help fill the last mile gap while keeping cars off the road for short distance trips.

Another way to reduce vehicle miles traveled from single occupant driving is increasing the number of people in the vehicle. Incentives for HOV lanes and preferred carpool parking spaces can be positive reinforcement to support this transition. Companies and organizations can partner to provide guaranteed rides home for any unforeseen circumstances that may arise.

TARGETS
15% VMT reduction by 2030
40% VMT reduction by 2050

GHG IMPACT	
2030 Reduction	254,849 MT
2050 Reduction	541,598 MT

LEADERSHIP	
Lead Agency	Public Service
Supporting Agencies	COTA, ODOT, Columbus Recreation and Parks, MORPC, Development

EXPECTED BENEFITS
Climate Justice
some
Environmental Quality
major
Human Health
moderate
Economic Prosperity
some

11.3 Increase Transit Use

Efficient mass transit systems will reduce traffic congestion and emissions.

COTA is modernizing and expanding the transportation system through LinkUS, adopted by ballot in 2024. This transportation and growth plan—collaboratively created with the City of Columbus, the Franklin County Board of Commissioners, the Mid-Ohio Regional Planning Commission (MORPC) and the Columbus Partnership—will expand COTA transit service. Along with establishing rapid transit lines, LinkUS will increase fixed route bus service by 45% and will establish 24-hour daily service.

TARGETS
20% increase in passenger miles traveled by 2030
50% increase in passenger miles traveled by 2050

GHG IMPACT	
2030 Reduction	18,356 MT
2050 Reduction	36,581 MT

LEADERSHIP	
Lead Agency	COTA
Supporting Agencies	Public Service, MORPC, Franklin County, ODOT

EXPECTED BENEFITS
Climate Justice
some
Environmental Quality
moderate
Human Health
moderate
Economic Prosperity
moderate

11.4 Support Active Transportation Infrastructure

Embrace alternative modes of transportation

In 2024, Columbus City Council adopted the Columbus Bike Plus Plan. Bike Plus is a plan to create a safe, connected and comfortable network for people to bike, scooter, skate, and roll in the city. The City's long-term plan for bikeways includes an additional 190 miles of on-street bikeways, 270 miles of shared use paths, and 28 miles of urban trails and greenways, for a total of 487 miles of new bikeways. These additions, along with other transportation improvements like crosswalks, will make it more convenient and enjoyable to get around Columbus without a car.

TARGETS
Build **20 miles** of pathways for active transportation by 2030
Build **500 miles** of pathways for active transportation by 2050

GHG IMPACT	
2030 Reduction	Indirect
2050 Reduction	Indirect

LEADERSHIP	
Lead Agency	Public Service
Supporting Agencies	COTA, Columbus Public Health, Columbus Recreation & Parks

EXPECTED BENEFITS
Climate Justice
moderate
Environmental Quality
moderate
Human Health
major
Economic Prosperity
some

WASTE

GHG emissions from the waste sector are directly tied to methane emissions, which are 25 times as harmful as CO_2. As the population of Columbus is projected to continue growing, more materials end up as waste, and landfill space becomes more constrained. This waste also ends up as litter in our streets and waterways, polluting neighborhoods and our natural places. It will be the most efficient use of public dollars to reduce the volume of waste and amount of physical space needed to contain it by focusing education, policies, and infrastructure to reduce, rescue, reuse, and recycle materials.

STRATEGIES

12. Reduce waste generated

13. Increase waste diversion rate

WASTE
PROGRESS REPORT

Refuse Collection

In 2023, the Division of Refuse Collection increased recycling collection from every other week to weekly collection. Since this change was instituted, more than 130,000 pounds of recyclable material have been collected. Diverting waste from landfills reduces the amount of methane, a powerful greenhouse gas, that is produced as well as saving the energy required to create new, raw materials.

Columbus has also opened two Waste and Reuse Convenience Centers, one in 2023 and another in 2024. These collection centers make it easier for Columbus residents to drop off trash, bulk items, recyclables, food scraps, yard waste materials, and some items that cannot be disposed of in residents' city-issued trash containers. Furniture, clothing and bicycles can also be donated at both Convenience Centers.

Food Scrap Drop Off Sites

As of 2025, the Division of Refuse Collection has opened nine total sites for food scrap drop-offs. The sites, conveniently located at Columbus Recreation and Parks facilities, support the City's Climate Action Plan goals to reduce greenhouse gas emissions.

12

Reduce Waste Generated

12.1 Reduce Landfilled Organic Waste

Preventing food and yard waste from going to the landfill

Every day, over one million pounds of food are landfilled in Central Ohio, while nearly 11% of Columbus residents face hunger. When organic materials such as food and yard waste end up in landfills, they release a strong greenhouse gas called methane. In a 2019 waste characterization study from SWACO, it was found that food waste accounted for 15% of landfilled material, with compostable fibers accounting for 8%, and yard waste for 3%. In total, 26% of the materials ending up in our landfills could instead be composted.

Composting, reusing food to feed animals, and using anaerobic digestion before sending organic materials to the landfill are all measures that reduce greenhouse gas emissions. The Columbus and Franklin County Local Food Action Plan is aligned with the City of Columbus through goals of reducing food waste, taking action on climate change, and food security. By implementing both plans, preventing food waste, and donating food, Columbus will address food access inequities and public health, all while reducing greenhouse gases.

The City of Columbus Com-Til program has been in operation since 1980. Instead of generating methane or burning off valuable organic matter, the City of Columbus recaptures the nutrients and returns them to the earth, feeding the soil that feeds us. The Com-Til compost facility is just one part of Columbus's 100% Beneficial Biosolids Reuse management program. The "waste" residents send to the facility is sent around the state to aid in restoration and resilience, including growing corn and soy, reclaiming abandoned mine sites, and generating renewable energy.

TARGETS
50% reduction in organic waste by 2030
90% reduction in organic waste by 2050

GHG IMPACT	
2030 Reduction	59,169 MT
2050 Reduction	122,090 MT

LEADERSHIP	
Lead Agency	Public Service
Supporting Agencies	SWACO, Public Health, Sustainable Columbus, Columbus Water and Power

EXPECTED BENEFITS
Climate Justice
some
Environmental Quality
major
Human Health
moderate
Economic Prosperity
moderate

12.2 Reduce Recyclable Waste Sent to the Landfill

Ensure communities can access recycling services

A significant amount of the trash sent to the landfill can easily be recycled by ensuring that more residents have access to recycling programs and participate in them. Metal, glass, paper and cardboard can all be recycled. When these items are thrown away, the materials they are made of are wasted. By diverting these resources from the landfill, they can be recycled into new products, extending the materials' lifespan and lessening the need to produce new materials.

As an industry, recycling in Ohio supports over 3,100 local businesses, gainfully employing more than 98,000 people. More than 90% of the materials sent to the Rumpke Recycling and Resource Center in Columbus stay in Ohio, supporting local economic development.

Programs to educate and increase awareness of recycling programs for residents and businesses in all communities will increase participation and proper use of the different waste and recycling streams. This ensures reducing, reusing, and recycling items instead of sending valuable materials directly to the landfill.

TARGETS
40% reduction in recyclable waste land-filled by 2030
95% reduction in recyclable waste land-filled by 2050

GHG IMPACT	
2030 Reduction	68,113 MT
2050 Reduction	185,441 MT

LEADERSHIP	
Lead Agency	Public Service
Supporting Agencies	SWACO, Sustainable Columbus

EXPECTED BENEFITS
Climate Justice
some
Environmental Quality
major
Human Health
moderate
Economic Prosperity
some

13

Increase Waste Diversion

13.1 Support Circular Economy Organizations

Repurpose materials for new life

A circular economy keeps materials and products in circulation and out of the landfill, creating more value, jobs, and opportunities, reducing landfill space used, and reducing our need for new, raw materials. SWACO has identified a value of $23 million from the discarded materials that end up in the landfill. This opportunity will be leveraged to help entrepreneurs, artists, and all community members think differently about waste and how we can reuse it.

Columbus can be a national leader in circular innovation, where materials are reused and shared responsibly among businesses and communities to create a more resilient future. By maximizing the economic and environmental benefits of a vibrant circular economy in Columbus, we can align public and private efforts across the materials lifecycle.

Fostering waste reuse habits in our communities and supporting businesses that participate in the Central Ohio circular economy will have a lasting impact on job creation and waste reduction. Coordinated public education campaigns can promote diverting waste from landfills. Partnerships between those generating reusable waste and those that can reuse it and enabling innovation by fostering start-ups that drive development of the circular economy will be crucial to establishing a strong market.

TARGETS
1,000 green jobs created related to the circular economy by 2030
100% increase in circular economy organizations from 2030 to 2050

GHG IMPACT	
2030 Reduction	Indirect
2050 Reduction	Indirect

LEADERSHIP	
Lead Agency	SWACO
Supporting Agencies	Public Service, Sustainable Columbus

EXPECTED BENEFITS
Climate Justice
moderate
Environmental Quality
major
Human Health
some
Economic Prosperity
major

IV IMPLEMENTATION

Responsibilities and Partnership

Effective implementation will be required to achieve the ambition set forth in the Climate Action Plan. Sustainable Columbus will oversee the management of the CAP as a living document. They will support all lead agencies and implementing partners, help outline shifts where new technologies may be available or more affordable, regulations change, or additional partners are engaged.

Accountability will be key to success. Through the Sustainable Columbus Committee, Work Groups have been established for each sector of the CAP (Climate Solutions, Sustainable Neighborhoods, Buildings, Transportation and Waste). These groups will meet as needed and dictated by the work needed to report progress, share lessons learned and work through challenges together.

In addition to the sector Work Groups, Sustainable Columbus will also provide oversight to ensure implementation is reaching and benefiting all community members. All agencies and team members working on implementation must continue to build inclusive and authentic relationships with diverse community member representation, understand their critical needs and involve them in the decisions being made.

Lead Agency
- Serve as the central contact for tracking climate action progress.
- Provide data and information on climate action progress metrics.
- Coordinate with agencies implementing climate action.
- Coordinate with and report to Sustainable Columbus.

Supporting Agencies
- Provide human and/or physical resources to the action
- Participate in Work Group meetings
- Provide feedback and recommendations for CAP updates and revisions

Monitoring and Reporting

Future Updates

The timeline on the following page outlines the future schedule for reporting. These yearly data collection efforts will provide transparency for monitoring progress, and collectively provide the information needed to adjust and retool any actions that are ahead or behind targets. Sustainable Columbus will implement a system and dashboard to demonstrate progress to the community for each action in relation to the targets outlined in the CAP. This will form the basis for continual, transparent progress updates to the community.

CAP updates are intended to be fast, reactive adjustments to the trends from tracking metrics in previous years. Full CAP revisions will include a thorough review of all actions and targets, and realign as needed with any regulatory shifts, technology improvements or cost changes.

As a plan for the community, proactive engagement should continue throughout the implementation and reporting phases. Outreach efforts to share progress reports will be needed to gain the groundswell of support from residents, businesses, organizations and other champions to reach the CAP goals.

CLIMATE ACTION PLAN TIMELINE

2022 GHG Inventory

GHG Inventory **2023**

2024 GHG Inventory

CAP Update **2025**

GHG Inventory **2027**

GHG Inventory **2029**

2030 CAP Revision

CAP Update **2035**

2040 CAP Revision

2050
100% GHG Reduction