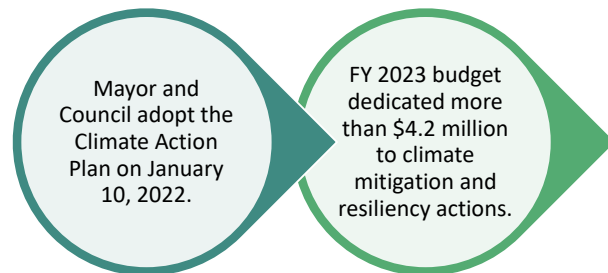


Annual Report 2022

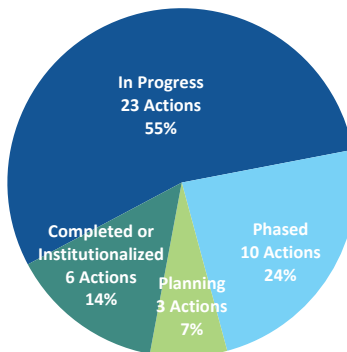
The Mayor and Council adopted Rockville's first Climate Action Plan (CAP) on January 10, 2022 with goals to reduce greenhouse gases, prioritize equity, and build resiliency. The CAP sets a goal to reduce greenhouse gas emissions by at least 50 percent (from 2005) by 2030 and approach carbon neutrality by 2050. Since plan adoption, the Maryland General Assembly established a more ambitious goal to reduce greenhouse gas emissions by 60 percent (from 2006) by 2031 and net zero by 2045. Rockville's most recent greenhouse gas inventory (see below right) shows a 34% reduction in carbon emissions, reflecting trends and accomplishments at the local, state, and federal level from 2005 to 2020, in the period prior to plan adoption. Successful CAP implementation builds on this progress with participation from the community and by positioning Rockville to leverage new significant state and federal funding to further climate mitigation, equity, and resiliency goals.

Rockville's CAP comprises 42 actions in seven categories involving energy efficiency, renewable energy, transportation, land use management, materials and waste management, resiliency, and public engagement and oversight. This first 2022 annual report fulfills CAP Action C-26 to track and report progress to foster public transparency and accountability. In the first year since plan adoption, the City has made unprecedented new investments in related programs, plans, and projects. The report summarizes greenhouse gas emissions and CAP metrics trends, 2022 accomplishments, and next steps. To learn more about the plan and what you can do to address climate change, visit www.rockvillemd.gov/climate.

Overview



Status of Climate Actions*



*Status Definitions (Status, # of Actions, % of Total Actions)

Completed/Institutionalized Actions: 6 actions are completed or institutionalized.

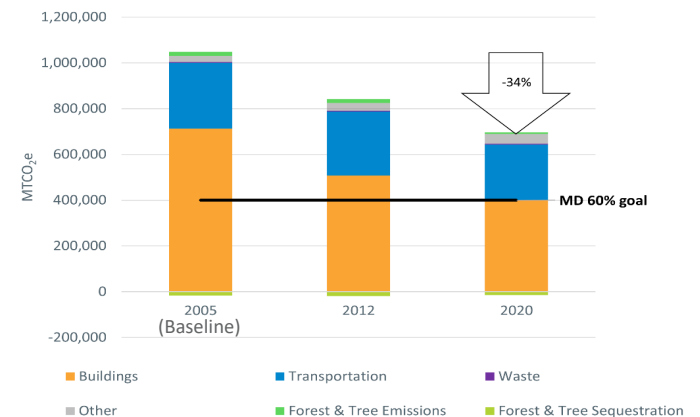
In Progress: 23 actions are initiated but not complete.

Phased: 10 actions are initiated but need further resources for expansion to meet goals.

Planning: 3 actions require further planning for resource allocation and implementation.

Rockville Greenhouse Gas Emissions Trends

COMMUNITY GREENHOUSE GAS INVENTORY



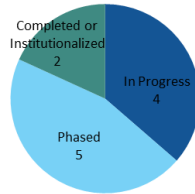
The Metropolitan Washington Council of Governments (MWCOC) released 2020 greenhouse gas emissions inventories for 24 local governments in December of 2022. Key findings include:

- Rockville's community-wide greenhouse gas (GHG) emissions decreased by 34% between the 2005 baseline year and 2020; despite a 21% growth in population.
- Per capita emissions reduced from 17.3 metric tons of carbon dioxide equivalent (MTCO₂e) in 2005 to 9.6 MTCO₂e in 2020.
- The main drivers of emissions reductions were a cleaner electricity grid, more efficient buildings and vehicles, decrease in vehicle miles traveled, and to a lesser extent, pandemic-related lifestyle changes.

Rockville Climate Action Plan Annual Report 2022 Highlights



Energy Efficiency
Action Status

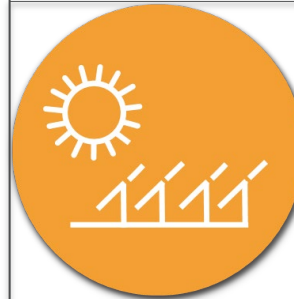


Energy Efficiency

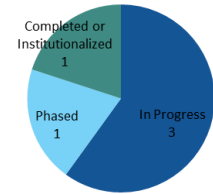
(9 Actions)

Increase energy conservation and efficiency and reduce fossil fuel use in all existing and new buildings and infrastructure.

- Montgomery County and Maryland approved Building Energy Performance Standards (BEPS) that apply to Rockville (C-01).
- Rockville opted into Montgomery County's point of sale home energy disclosure and radon testing law (C-04).
- The Maryland Energy Administration awarded Rockville grants to support LED light upgrades at City Hall (M-01) and LED streetlight conversions (M-02).



Renewable Energy
Action Status



Renewable Energy

(5 Actions)

Increase the generation, use and access to affordable, reliable and clean energy systems.

- The Maryland Energy Administration awarded Rockville technical assistance and grants to support future solar canopies over parking lots at 6 Taft Court and the Rothgeb Maintenance Facility (M-04).
- Rockville and the Environment Commission helped the Maryland Capital Area 2022 Solar and EV Co-op recruit 337 members (C-09, C-13).



Transportation
Action Status

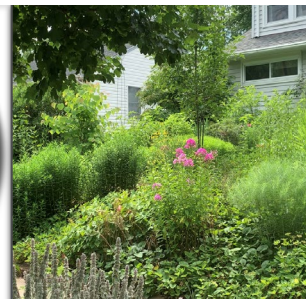


Transportation

(9 Actions)

Expand safe, efficient, affordable, and equitable multi-model transportation options that utilize clean and efficient energy sources.

- Launched the stakeholder engagement process for Rockville's Electrical Vehicle (EV) Readiness Plan (C-11).
- Incorporated 12 electric vehicles into the City fleet (M-06).
- Executed agreements with Pepco for future installations of 14 new charging stations on City property and rights-of-way (M-07).



Land Management
Action Status



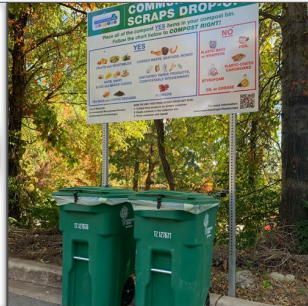
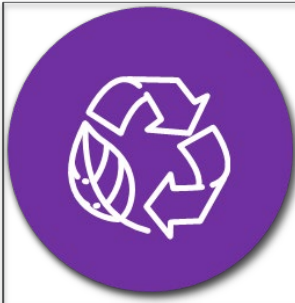
Land Management

(3 Actions)

Maximize the economic and social benefits of land while maintaining or enhancing natural systems and ecological health to ensure resiliency.

- Distributed 200 native trees and 300 wildflower seeds (C-17).
- Weed Warriors engaged 662 volunteers to remove non-native invasive plants from parks (C-17).
- The RainScapes program sponsored 21 tree canopy, rain barrel, conservation landscaping, and permeable pavement projects in 2022 (C-17).

Rockville Climate Action Plan Annual Report 2022 Highlights



Materials and Waste Action Status



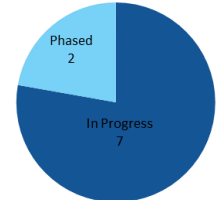
Materials and Waste (3 Actions)

Manage solid waste by reducing, reusing, recycling, composting, and sustainable purchasing.

- Launched the pilot residential food scraps compost drop-off station (C-18).
- Distributed more than 250 kitchen compost caddies and hosted a waste reduction virtual education session (C-18).
- Developed new multilingual recycling education materials (C-19).



Resiliency Action Status



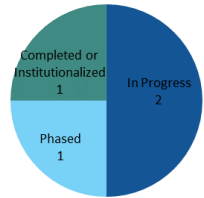
Resiliency (9 Actions)

Improve the capacity of our community, homes, businesses, and natural environment to prevent, withstand, respond to, and recover from climate change impacts such as rising temperatures, more frequent and intense heat waves, heavy rainfall and severe storms.

- Launched the Flood Mitigation Assistance Program (FMAP) to provide private property owners matching funds to implement flood mitigation projects (C-20).
- Awarded funding and technical support from the Army Corps of Engineers and the Maryland Department of Natural Resources to develop a Flood Resiliency Master Plan.



Public Engagement & Oversight Action Status



Public Education & Outreach (4 Actions)

Conduct inclusive and equitable public engagement and involvement and establish systems for monitoring and accountability to encourage participation and support plan success.

- Incorporated equity, climate mitigation and resiliency into the FY 2024 budget prioritization process (M-15).
- Increased Environment & Sustainability newsletter subscriptions to more than 2,400 and hosted six Climate Solutions education sessions, attended by 225 participants (C-25).

Rockville Climate Action Plan

Annual Report 2022

Trends and Metrics

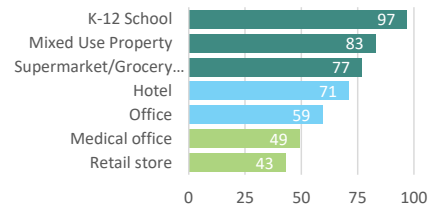
Building Energy (Action C-01)

Non-residential buildings (>50,000 square feet) report building energy benchmarking data to Montgomery County. 68 buildings reported ENERGY STAR scores for eligible property types in 2021 (reports lag by one year):

- A score ≥ 75 is eligible for ENERGY STAR certification for high performance;
- A score 50 -74 indicates performance at or above the national median;
- A score <50 indicates performance is below the national median.

Buildings account for 58% of GHG emissions.

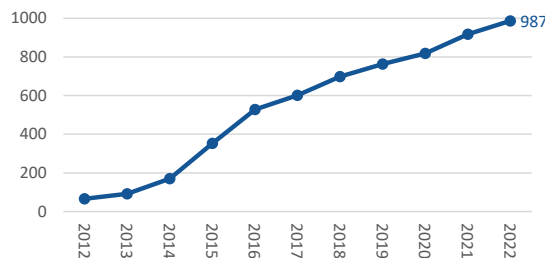
Average ENERGY STAR Score by Property Type (2021)



Solar Installations (Action C-09)

Over the last decade, the number of solar permits issued in Rockville increased nearly 15-fold; from 66 in 2012 to 987 in 2022. The annual Solar Co-op program launched in 2015 and continues to serve as a valuable resource for residential solar installations. *The CAP aims for 2,500 systems by 2030.*

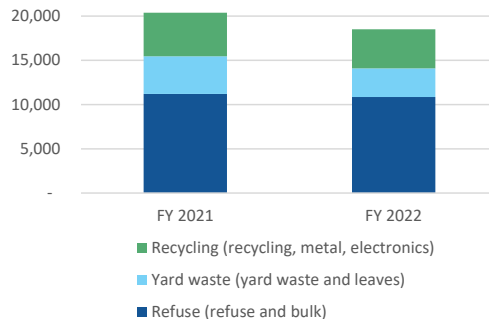
Solar Permits Issued (Cumulative)



Recycling and Solid Waste (C-19)

In fiscal year 2022, the total tons of solid waste collected decreased by 9%; mainly due to an ease in pandemic conditions. Recycling and yard waste composting diverted 41% of materials from landfill. The City launched a food waste compost drop-off and increased recycling education in 2022 to reduce waste and work towards a 50% waste diversion goal.

Solid Waste Collected (tons)



Electric Vehicles (EV) and Charging Stations (C-11, C-12, C-13, M-06, M-07)

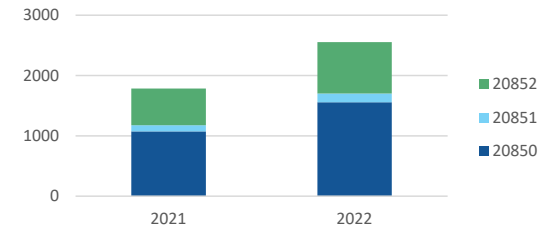
Vehicles: Electric and plug-in electric vehicles registered in Rockville zip codes (20850, 20851, 20852) increased 43% in the last year from 1,785 to 2,552.

EV Charging: Rockville has 111 public charging stations with 148 ports in 2022.

Fleet: City fleet has 12 EVs in service and 6 EVs pending delivery.

The EV Readiness Plan will prepare the City to accommodate more EVs.

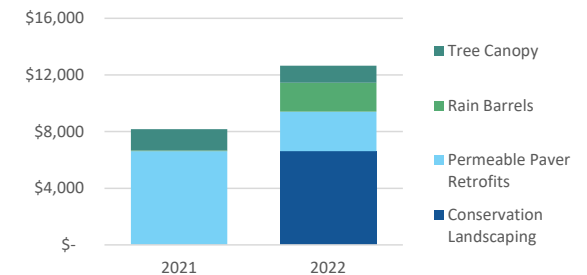
Electric and Plug-In Hybrid Vehicles by Rockville Zip Code (Cumulative)



RainScapes (C-17)

In calendar year 2022, the RainScapes Program issued \$12,654 in rebates to support 21 tree canopy, rain barrel, conservation landscaping, and permeable pavement projects; a 55% increase. *These projects reduce stormwater runoff and enhance the environment.*

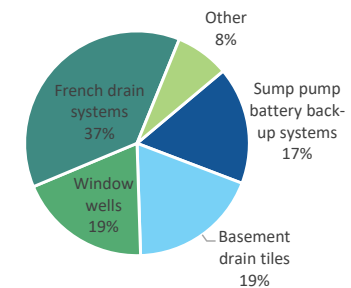
RainScapes Rebates Issued



Residential Flood Mitigation Projects (C-20)

Rockville launched the Flood Mitigation Assistance Program in September of 2022 and reimbursed 19 homes a total of \$29,587 to support flood mitigation projects. Trends will be monitored as the program continues. *These projects foster community flood resiliency.*

2022 Flood Mitigation Projects (% of Total Reimbursed Value)



CITY OF ROCKVILLE

CLIMATE ACTION PLAN

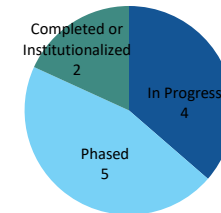
Annual Report 2022



Energy Efficiency

Goal: Increase energy conservation and efficiency and reduce fossil fuel use in all existing and new buildings and infrastructure.

Energy Efficiency Action Status



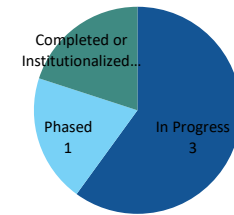
Action ID	Action	Status	Completed Tasks	Future Tasks
C-01	Advocate for Montgomery County to adopt a Building Energy Performance Standard (BEPS) for existing commercial and multifamily buildings	Completed or Institutionalized	Montgomery County and Maryland approved Building Energy Performance Standards (BEPS) that apply in Rockville. BEPS will require buildings to employ both electrification and energy efficiency to reduce carbon emissions.	Continue to track County and State BEPS regulations to be issued by the end of 2023. Plan for expanded City facility benchmarking and energy efficiency strategies to meet compliance deadlines (see Action M-1).
C-02	Expand low and moderate income (LMI) home repair and weatherization program to increase energy efficiency, resiliency, and renewable energy opportunities	Phased	In 2022, the Maryland Energy Administration (MEA) awarded grants to the non-profits, Building Change Inc. and Habitat for Humanity Metro Maryland, to provide energy services to homes in central Maryland. Rockville promoted the program to residents and referred Rockville Housing Enterprises (RHE) to these non-profits to access free energy audits, home upgrades and solar conversions. Habitat for Humanity assessed 4 initial RHE homes for eligibility and identified repairs needed before energy work can be completed.	Monitor and promote incentives from Maryland, Montgomery County, the Inflation Reduction Act (IRA), and the Infrastructure Investment and Jobs Act (IIJA) to help residents best leverage these funding sources. The IRA provides rebates and/or tax incentives for electric vehicles, home weatherization, home heating and cooling systems, home energy audits, geothermal water heaters, residential battery storage, rooftop solar, and solar water heaters. MEA will eventually be the applicant for two of the residential-focused IRA rebate programs - the HOMES Residential Energy efficiency Rebate Program and the High-Efficiency Electric Home Rebate Program. The Department of Energy will issue guidance to state energy offices in early 2023. The City will work with partners to connect residents with these new funding opportunities.
C-03	Progressively strengthen green/energy efficiency building codes for new construction to reach net zero or equivalent	Phased	The Mayor and Council provided testimony in support of the Climate Solutions Now Act of Maryland which supports increased building energy efficiency. Staff formed interdepartmental working groups to review changes in the 2021 International Code Council (ICC), the development of Maryland's Model Performance Code, and Montgomery County's assessment of energy conservation and green construction codes for consideration in future updates to Rockville buildings codes (Chapter 5).	Following the adoption of State buildings codes, local jurisdictions have twelve months to implement the new buildings codes. Staff will work with stakeholders to update Chapter 5 of the Rockville City Code, "Buildings and Building Regulations," including local amendments to the International Energy Conservation Code and the Green Building Regulations.
C-04	Opt into Montgomery County's point of sale energy disclosure (Chapter 40, Real Property, Section 40-13B)	Completed or Institutionalized	The Mayor and Council adopted an ordinance to opt into Montgomery County's point of sale radon testing and home energy disclosure requirements. The ordinance went into effect on January 1, 2023. In recognition of Radon Action month, the City provided 150 free radon test kits to residents.	Continue to provide outreach on requirements and work with Montgomery County on administration.
C-05	Expand home energy efficiency outreach program to increase participation in utility energy audits and utility rebates	Phased	Promoted Montgomery County Energy Connection and hosted Climate Solutions virtual education sessions on net zero homes (37 participants) and home electrification (49 participants) as part of Energy Awareness Week. Expanded website resources.	Continue to monitor Inflation Reduction Act incentives and promote when available (see action C-02). Continue outreach through the 2023 Climate Solutions lecture series and Montgomery County Energy Connection.
C-06	Coordinate with Montgomery County on electrification incentives for existing buildings	Phased	Montgomery County's FY 2023 budget includes a new \$1 million program to incentivize residential, multifamily, and commercial buildings to replace fossil fuel equipment and appliances with electric systems. The County issued a Request for Proposal (RFP) for technical contractor support and incentive administration for the countywide electrification incentive pilot program. City staff is participating in RFP selection workgroup.	Continue to coordinate with Montgomery County on electrification education and incentive programs which are expected to be available in 2023.

Action ID	Action	Status	Completed Tasks	Future Tasks
M-01	Complete energy assessments of city facilities and develop a strategic plan to reduce facility energy consumption	Phased	Completed energy conservation measures identified in a 2021 City Hall energy audit; including optimizing the building envelope, fresh air flow, and air handler/heat pump schedules and completing LED lighting upgrades on the second floor with MEA grant and Pepco rebates. MEA awarded Rockville a \$55,000 grant to implement the second phase of City Hall energy efficiency upgrades (1st/3rd floor lighting, window film, thermostat controls). The City applied for a MEA grant for Senior Center and Twinbrook LED lighting upgrades (\$150,000). The Department of Energy (DOE) issued notice that Rockville is expected to receive an allocation of \$134,050 for the Energy Efficiency and Conservation Block Grant (EECBG) Program from the Infrastructure Investment and Jobs Act. DOE will issue guidance in 2023 on how funding can be used to implement energy projects.	Implement the second phase of City Hall energy efficiency upgrades (1st/3rd floor lighting, window film, thermostat controls) and process grant and Pepco rebate documentation. Plan a strategy to comply with Montgomery County and Maryland Building Energy Performance Standards; including assessments of City Hall, 6 Taft Court, Senior Center, and the Swim and Fitness Center to identify sources of energy waste and the most cost-effective energy improvements that could either be incorporated into modifications to facility operations, future planned equipment replacements, building renovations, or a new energy retrofit project. Apply for EECBG funding.
M-02	Convert City-owned streetlights to energy efficient LED (light-emitting diode) (CIP TA22)	In Progress	MEA awarded Rockville a \$445,750 Streetlight and Outdoor Lighting Efficiency (SOLE) grant and Pepco approved \$224,875 in rebates to implement the first phase of the LED Streetlight Conversion Capital Improvements Project (CIP). Applied for \$124,600 MEA grant to offset costs for the second phase of the LED Streetlight CIP.	Implement first phase of the LED Streetlight Conversion CIP (TA22) that will replace approximately 1,799 non-decorative high pressure sodium fixtures with LED.
M-03	Advocate for a Pepco-owned streetlight LED conversion agreement that serves the public interest	In Progress	After the Mayor and Council submitted comments to the Maryland Public Service Commission (PSC) in 2021, staff attended several meetings with Pepco and affected municipalities to discuss the possible transfer of ownership of Pepco lighting infrastructure in 2022. The discussions mainly focused on Pepco's methodology to develop the cost associated with the equipment and the process of transferring streetlights to the municipalities. While final numbers are still not available, it appears that the cost will be very high. Due to the high cost and poor condition of most of Pepco's equipment, staff has concluded that ownership of the equipment is not in the City's best interest.	Instead of seeking ownership, the City will continue to advocate for Pepco to replace its streetlights with LED fixtures. Staff will also continue to track Pepco's proposed plans and PSC actions and comment when appropriate.



Renewable Energy

Goal: Increase the generation, use and access to affordable, reliable and clean energy systems.

Renewable Energy
Action Status

Action ID	Action	Status	Completed Tasks	Future Tasks
C-07	Advocate to increase the Maryland Renewable Portfolio Standard (RPS) by 2030	In Progress	The Mayor and Council advocated for the Climate Solutions Now Act of 2022, which was enacted into law on April 9, 2022 and accelerates the state's commitments to reducing greenhouse gas emissions, expand clean energy, and invest in underserved communities.	Monitor legislation in the Maryland General Assembly and the Public Service Commission.
C-08	Coordinate with Montgomery County on development of the Community Choice Energy (CCE) Program to aggregate green power purchasing	In Progress	The pilot CCE program allows Montgomery County to aggregate the electric loads of residents and small businesses in order to negotiate more favorable terms with an electricity supplier or enable the direct purchase of power from a renewable generation source. Throughout 2022, Montgomery County participated in a Maryland Public Service Commission (PSC) workgroup to develop the regulatory framework for the CCE pilot program.	Montgomery County will continue to participate in PSC workgroup to develop the regulatory framework and implementation plan to implement the CCE.
C-09	Promote private solar and geothermal installations (e.g., solar co-op, streamlined permitting, including expanding access for low-to-moderate income (LMI) residents)	Phased	In 2022, the Environment Commission invested 80 volunteer hours in promoting the Maryland Capital Area Solar and EV Co-op, which had 329 members. The Mayor and Council reduced permit fees for the installation of solar and EV chargers and streamlined the permitting process.	In recognition of Earth Month in April, the City is planning to waive residential permit fees for the installation of solar panels, electric vehicle charging stations and geothermal systems. The City and the Environment Commission will continue to promote the Capital Area Solar Co-op in 2023, including the new Montgomery County Green Bank Access Solar LMI financing program. Following the adoption of State building codes, the City will work with stakeholders to update building codes and solar requirements.
M-04	Identify and implement feasible opportunities for solar photovoltaic installations on City property	In Progress	Leveraged the 2021 solar/microgrid feasibility study, developed through MEA's technical assistance program, to apply for MEA grants for two solar canopies and eight EV chargers at the Rothgeb Maintenance Facility (\$250,000) and 6 Taft Court (\$144,000).	Coordinate with MEA and a solar developer to plan the first solar canopy and EVSE installations at the Rothgeb Maintenance Facility and 6 Taft Court through a solar power purchase agreement. Design and permits are anticipated in CY 2023 and construction is anticipated in CY 2024.
M-05	Purchase renewable energy certificates (RECs) for municipal electricity	Completed or Institutionalized	Montgomery County led a coalition of County agencies and municipalities to cooperatively purchase RECs. The City's FY 2023 RECs purchase offsets 40% of municipal electricity consumption.	Coordinate with Montgomery County on FY 2024 RECs purchase to offset municipal electricity consumption. ²

CITY OF ROCKVILLE

CLIMATE ACTION PLAN

Annual Report 2022



Transportation

Goal: Expand safe, efficient, affordable, and equitable multi-model transportation options that utilize clean and efficient energy sources.

Transportation Action Status



Action ID	Action	Status	Completed Tasks	Future Tasks
C-10	Work with WMATA, MDOT, and Montgomery County to maximize transit accessibility and ridership and enhance mobility options	In Progress	Public Works continued to evaluate sidewalk gaps, prioritizing those near bus stops for improvements, and develop feasibility studies for improvements.	The first round of sidewalk feasibility studies is anticipated to be completed in spring 2023 and will be followed by design and construction. The City will continue to coordinate with developer and MCDOT on the Pink Line in Phase I of the Great Seneca Transit Network to link the Shady Grove corridor with the Life Science Center. The City will also continue to coordinate with MCDOT and MDOT on 355 Bus Rapid Transit. Public Works will continue to upgrade bus stops as part of an ongoing CIP project.
C-11	Develop a Rockville Electric Vehicle (EV) Readiness Plan	In Progress	Rockville began working with the Metropolitan Washington Council of Governments (MWCOG) and a consultant to develop Rockville's first EV Readiness Plan. The City hosted a joint briefing for the Environment and Traffic & Transportation Commissions in July to inform plan development; launched a public engagement webpage (https://engagerockville.com/evplan) in November, and hosted an Open House in December to obtain public input. More than 242 residents, visitors, employees and property owners participated in online surveys.	Continue to coordinate with MWCOG and Montgomery County on regional EV planning efforts. Work with the consultant to analyze community and fleet EV charging needs and review permits and policies to identify barriers and strategies to facilitate equitable EV charging access. Develop a draft Rockville EV Readiness Plan for public review in summer 2023.
C-12	Require new developments and redevelopments to be electric vehicle-ready	Planning	Participated in Sustainable Maryland EV Readiness Cohort workshops on EV webpages and policies. The EV Readiness Plan consultants began compiling policy options and best practices for consideration in future zoning and building codes updates.	Work with the consultant to develop EV readiness code and permit recommendations for consideration updates to the zoning and building codes in 2023.
C-13	Promote a regional electric vehicle purchasing cooperative (EVPC)	Completed or Institutionalized	Rockville hosted a climate and sustainability outreach booth at Montgomery County's "Go Electric" event and promoted Montgomery County's pilot EV Purchasing Co-op that reached the goal of 1,000 pledges.	Continue to promote the next phases of Montgomery County's EV Purchasing Co-op and cross-promote electrification events.
C-14	Expand active transportation and shared micro-mobility network by implementing improvements in the Bicycle Master Plan and Vision Zero Plan	In Progress	The FY 2023 capital budget included new appropriations totaling \$7.7 million to support bicycle, pedestrian, and safety projects. The City received grant funding for designing new bicycle lanes on Martins Lane, tracking pedestrian and bicycle activity in the city, and for sidewalk gap and intersection improvement feasibility studies in the Twinbrook neighborhood.	Continue implementing bicycle, pedestrian, and safety projects as outlined in the capital improvement program.
C-15	Adopt a Pedestrian Master Plan	In Progress	Public Works continued to draft Rockville's first Pedestrian Master Plan. The plan will help guide the development, construction, and maintenance of safe, convenient, and equitable pedestrian facilities across the city.	The draft plan is anticipated to be released for public comment in early 2023.
M-06	Convert the city fleet to cleaner and more efficient fuel sources	In Progress	Leveraging the results of a MEA electrification analysis of the City's light duty and heavy duty fleet, the City adopted a Clean Fleet Resolution in 2022 and planned phased fleet EV replacements for light duty vehicles. Despite limited availability of light duty electric vehicles (EVs), the City increased the number of EVs from one to twelve vehicles, with six more on order. See also M-07.	Continue to implement fleet light duty vehicle electric replacements for FY 2023, 2024, and 2025, and expand charging infrastructure to serve the fleet. See also M-07.

Action ID	Action	Status	Completed Tasks	Future Tasks
M-07	Create a new Capital Improvement Project to expand electric vehicle charging infrastructure on City property to serve employees, fleet and the community	In Progress	The FY 2023 budget created a new Electric Vehicle Infrastructure CIP (GA23) to expand EV charging infrastructure on city property and possible rights-of-way adjacent to city facilities, to serve the fleet, and potentially employees and the community. Provided charging infrastructure to serve the fleet at City Hall (3 wall mounted Level 2), Rothgeb Maintenance Facility (3 portable Level 2) and the Water Treatment Plant (1 portable Level 2). Executed agreements with Pepco to install 14 new charging ports at Thomas Farm Community Center, Mattie J.T. Stepanek Park and City rights-of-way.	Transition this action to focus on implementing the Electric Vehicle Infrastructure CIP (GA23); including tracking grant funding and rebates and planning/installing EV charging infrastructure to align with vehicle replacement cycles. Continue to coordinate with Pepco to install 14 chargers.
M-08	Update City teleworking and transit benefit policies to encourage City employees to reduce vehicle miles traveled (VMT)	In Progress	Updated City telework policy and request form during CAP development in 2021. Launched employee electric vehicle and commute survey.	Explore additional steps to reduce emissions from employee commutes, such as advanced incentives or benefits for cleaner transportation choices. Analyze employees' electric vehicle charging survey results to inform charging expansion plans.



Land Management

Goal: Maximize the economic and social benefits of land while maintaining or enhancing natural systems and ecological health to ensure resiliency.

Land Management Action Status



Action ID	Action	Status	Completed Tasks	Future Tasks
C-16	Implement Comprehensive Plan to steer the most-dense development/redevelopment to mixed-use, transit-served locations to reduce VMT and conserve/restore environmental areas	In Progress	In November 2022, the Mayor and Council endorsed a list of 222 "near-term" action items from the Comprehensive Master Plan to be accomplished in the next 1 to 3 years. Most items are tied to a comprehensive analysis and zoning ordinance rewrite, which is advertised for public solicitation under RFP 14-23 Zoning Ordinance Rewrite.	Launch the zoning ordinance rewrite to modernize the city's zoning ordinance and make adjustments to encourage lower parking requirements, incorporate the use of electric vehicles, promote transit oriented and mixed use development, and employ other smart growth principles. Advance community node developments. Incorporate climate change in the Zoning Ordinance update and Small Area Plans. See also Comprehensive Plan Implementation Table.
C-17	Expand education and incentives to support tree planting and maintenance, environmentally friendly landscape conversions, and management of non-native invasive plants on private property	Phased	The RainScapes Program issued \$12,654 in rebates to support 21 tree canopy, rain barrel, conservation landscaping, and permeable pavement projects. The FY 2023 budget doubled funding for the RainScapes program to \$20,000 to meet increased demand. The City distributed 300 native wildflower seed packets and 200 native trees to residents. The City hosted two virtual environmental landscaping and organic lawn care webinars attended by 98 people.	Manage the annual RainScapes Program and native tree give-away programs. Continue to promote environmentally friendly landscaping in the Environment & Sustainability Newsletter and Climate Solutions talks.
M-09	Develop a Green Space Management Plan for public lands to assess and restore trees, forests, meadows, stream valleys and wetlands	Planning	The Rockville Weed Warrior Program engaged 662 volunteers to remove non-native invasive plants from Rockville parks in 2022. Staff researched plan models implemented by other jurisdictions that incorporate progressive, nature-based approaches to green space management to draft a preliminary project scope and cost estimate. Staff participated in Montgomery County's Nature-Based Climate Solutions workshops.	Continue to manage the Weed Warrior Volunteer Program and coordinate interdepartmental discussions on potential plan options, scope, budget needs, and grant opportunities. The proposed FY 2024 Budget includes a Planned Improvement Project (PIP) for future consideration in 2025 for consulting support to develop the Green Space Management Plan.



Materials and Waste

Goal: Manage solid waste by reducing, reusing, recycling, composting, and sustainable purchasing

Materials and Waste
Action Status

Action ID	Action	Status	Completed Tasks	Future Tasks
C-18	Develop a food waste composting program for residents	Completed or Institutionalized	The City launched the first pilot residential food waste compost drop-off station at the Rothgeb Maintenance Facility (14625 Rothgeb Drive) in November of 2022. 250 residents received free kitchen compost caddies as part of the program launch. The Climate Solutions speaker series hosted a home waste reduction and compost education session attended by 31 people. The drop-off station composted 7.7 tons of food scraps in the first two months of operation.	The City is planning to open a second food waste compost drop-off station at the Senior Center (1150 Carnation Drive) and distribute additional compost kitchen caddies to residents in 2023.
C-19	Expand recycling and waste reduction outreach program to increase recycling compliance and waste diversion	In Progress	Awarded new contracts for recycling processing and hauling services and developed multilingual recycling education materials. The City's Refuse and Recycling Division was awarded a \$25,000 grant from LGIT, the City's automobile/liability insurer, to offset costs of an updated and modernized telematics technology and software to manage recycling, refuse, yard waste, special collections routes and the cart inventory. The software digitizes routes, supports mobile work orders, and provides real-time reports of vehicle location, driver safety, recycling contamination.	Continue to distribute new multilingual recycling education materials to increase compliance and waste diversion. Use route management software to optimize service.
M-10	Develop a City sustainable procurement policy	Planning	Section 17-89, Environmentally preferable procurement, of the Procurement Ordinance (Chapter 17) states "the purchasing agent will develop an environmentally preferable procurement policy which shall provide preference, to the greatest extent practicable, to products and services that will enhance and protect the environment, protect the welfare of workers, residents, and the larger global community, and represent the best overall value to the City."	Host a meeting with the Environment Commission and Procurement to discuss best practices, opportunities and barriers for a sustainability procurement policy.

CITY OF ROCKVILLE

CLIMATE ACTION PLAN

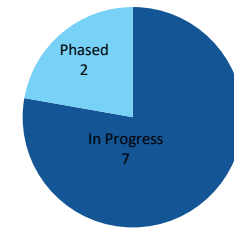
Annual Report 2022



Resiliency

Goal: Improve the capacity of our community, homes, businesses, and natural environment to prevent, withstand, respond to, and recover from climate change impacts such as rising temperatures, more frequent and intense heat waves, heavy rainfall and severe storms.

Resiliency Action Status



Action ID	Action	Status	Completed Tasks	Future Tasks
C-20	Incorporate climate resilient building and infrastructure design features in new buildings and retrofits	In Progress	The FY 2023 budget appropriated \$300,000 for a pilot Flood Mitigation Assistance Program (FMAP) to provide education and financial assistance to floodproof private properties. The program provides up to 50% of the total costs for approved measures, up to a maximum amount of \$5,000 per applicant. Examples of approved practices include custom window wells, quick dams, sump pumps with battery backup, and surface regrading. Launched in September of 2022, the program has reimbursed 19 homes a total of \$29,587 to support flood mitigation projects.	Continue to implement the Flood Mitigation Assistance Program. Consider flood resiliency measures in future building code and floodplain ordinance updates.
C-21	Partner with Federal Emergency Management Agency (FEMA) to update the Flood Insurance Rate Maps (100-year Floodplain Maps) used to implement the National Flood Insurance Program (NFIP)	In Progress	Reviewed and commented on draft FEMA Flood Insurance Rate Maps.	Coordinate with FEMA and Montgomery County on floodplain map updates. Prepare to update floodplain webpages and engage with property owners when new floodplain maps are released.
C-22	Work with Montgomery County and state agencies to provide cooling centers, resilience hubs, and other services to strengthen community resiliency	Phased	Rockville community centers serve as cooling centers as needed. MEA provided a technical consultant to evaluate microgrid feasibility at 6 Taft Court and the Rothgeb Maintenance Facility.	The FY23 budget includes funding to update Rockville's Continuity of Operations Plan. The 6 Taft Court CIP (GD19) includes plans to install and operate a City multi-purpose operational Emergency Operations Center (EOC) facility.
C-23	Work with Montgomery County and community partners to measure and map urban heat islands to mitigate exposure to extreme heat	In Progress	The National Oceanic and Atmospheric Administration (NOAA) awarded Montgomery County an urban heat mapping grant. Rockville provided a letter of support to partner in this effort and promoted participation in a mapping event held August 2022. Volunteers throughout the County used heat sensors mounted onto their cars to record and map temperatures as they traveled their neighborhoods on one of the hottest days of the year.	Continue to coordinate with Montgomery County on urban heat island mapping and mitigation efforts. Heat island mapping data is available for analysis and planning at: https://storymaps.arcgis.com/stories/389babe7ce654fdd87701488ae72e8b6
C-24	Increase tree planting, green, cool and photovoltaic roofs, and cool pavements on public and private property	Phased	In total, approximately 15 properties have green roofs (including the Rockville Police Station) and 987 solar permits have been issued. In 2022, the City planted 386 trees on public property and rights-of-way. See M-04, C-17 and C-09.	Continue to evaluate opportunities to increase tree planting, green, cool or photovoltaic roofs in future zoning and building code updates, future facility and street upgrades, and incentive programs.
M-11	Continue assessing the vulnerability of Rockville's critical infrastructure, facilities and services, and prioritize areas for improved climate resiliency	In Progress	The FY 2023 Budget includes \$180,000 for consulting support to update the City's Emergency Operations Plan (EOP) and Continuity of Operations Plan (COOP).	Initiate COOP and EOP planning efforts. Coordinate with Montgomery County OEMHS to integrate climate change during the next update to the County's Hazard Mitigation Plan in 2023. OEMHS is researching the next round of state Hazard Mitigation Grants to support its plan update.
M-12	Advocate for state and federal authorities to update stormwater infrastructure design, operations and maintenance standards to accommodate new rainfall/ storm event projections and help reduce projected flooding issues	In Progress	Monitored the Maryland Department of the Environment (MDE) for updates on the standard review process.	Continue to monitor the MDE's work on updating standards.

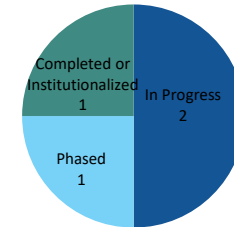
Action ID	Action	Status	Completed Tasks	Future Tasks
M-13	Assess Rockville's risk of flooding and develop a Flood Resiliency Master Plan to reduce or mitigate flooding impacts	In Progress	The FY2023 Budget includes \$1.5 million to develop a Flood Resiliency Master Plan (SA23), \$200,000 for the Storm Drain Analysis and Spot Repair: Potomac Woods (SB23), and \$450,000 for Stream Restoration Spot Repairs: FY21-FY25 (SB21). The Flood Resiliency Master Plan was awarded a \$75,000 grant from Maryland Department of Natural Resources and \$179,000 in technical support from Army Corps of Engineers (50 percent cost-share).	Implement repair projects as outlined in the CIP. Complete flood modeling phase and conduct public engagement for the Flood Resiliency Master Plan (SA23).
M-14	Develop and implement Heat Illness Prevention Plans for various City services and operations	In Progress	Implemented the Heat Illness Prevention Plan for Refuse and Recycling team in 2022.	Coordinate with other divisions to evaluate if other plans are needed.



Public Engagement and Oversight

Goal: Conduct inclusive and equitable public engagement and involvement and establish systems for monitoring and accountability to encourage participation and support plan success.

Public Engagement & Oversight Action Status



Action ID	Action	Status	Completed Tasks	Future Tasks
C-25	Work with community partners to conduct an inclusive public engagement campaign to reduce emissions and adapt to the impacts from climate change	Phased	Launched the Climate Solutions Speaker Series. 225 people attended six virtual presentations on organic lawn care, sustainable home gardening, net zero energy home, flooding, home electrification, and waste reduction. Partnered with Montgomery County on the Solar Co-op (see C-09), EV Co-op (see C-13), and electrification public engagement campaigns. The Environment Commission conducted in-person solar outreach at the Farmer's Markets. Sent 11 Environment and Sustainability email newsletters highlighting sustainable landscaping, electric vehicles, solar homes, flood mitigation, waste reduction, speaker sessions and other CAP topics and initiatives. The newsletter has over 2,400 subscribers and an open rate of 52%. The newsletter was redesigned to incorporate CAP graphics.	Continue to expand outreach campaigns. Incorporate more languages in outreach materials. Work with the Justice, Equity, Diversity and Inclusion Division and Public Information Office on additional public engagement strategies to involve underserved communities. See also C-03.
C-26	Develop metrics and performance indicators for climate actions to establish a data-driven assessment and reporting process	In Progress	The Rockville Performance Management Initiative included several new CAP and equity metrics among City performance measures reported in future budgets. Coordinated with MWCOG, Montgomery County and internal departments on data tracking and metrics for reporting. The Environment Commission is assessing effective methods of communicating metrics and progress. Developed initial template for tracking available metrics in the first annual report.	Continue to work with City departments and partners to explore standardized data sources, dashboards, maps or other communication formats to report progress. MWCOG anticipates the next round of greenhouse gas inventories for calendar year 2023 will be released in 2025 to align with the regional transportation plan and reflect post-2020 pandemic patterns.
M-15	Incorporate climate mitigation and resiliency considerations into the City's budget prioritization process	Completed or Institutionalized	Environmental sustainability and the Climate Action Plan were prioritized in the FY 2023 budget, which includes \$4.2 million for flood mitigation, electric vehicle infrastructure, LED streetlight conversion, and storm drain analysis and spot repairs. Additionally, a new Sustainability Program Manager in the Department of Public Works was created to implement several new CAP initiatives. The 2024 budget process systematically included new climate mitigation, resiliency, and equity criteria in operating enhancements and CIP requests. The City continued to leverage outside funding sources to implement CAP projects and was awarded more than \$2 million in State and Federal grants to support LED streetlight conversions, facility energy retrofits, solar canopies, bikeway and transportation improvements, and flood resiliency master planning.	Continue to prioritize CAP measures in the FY 2024 budget process, when feasible, and oversee CAP performance measures. Continue to monitor and seek Federal and State funding to implement CAP projects.
M-16	Develop an interdepartmental climate action team to implement and track progress	In Progress	Participated in Montgomery County Climate Leadership meetings, MWCOG Climate and Energy Policy Committee, MWCOG and Montgomery County EV Workgroups, and the Maryland Coalition of Counties and Cities for Climate Action. Formed interdepartmental teams to work on electric vehicles, equity workgroups, building codes, LMI housing weatherization, and budget action items.	Environmental Management will continue to coordinate with potential partners and from interdepartmental teams and workgroups for CAP implementation.