



Climate Change

LINKAGE TO COUNTY RESULTS AREAS

- A Greener County
- A Growing Economy
- Thriving Youth and Families
- Effective, Sustainable Government

PROGRAM CONTACTS

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Program Overview

Montgomery County has a goal of 100 percent reduction of greenhouse gas (GHG) emissions by 2035 and 80 percent reduction by 2027. In December 2020, the County released the Draft Climate Action Plan which details the effects of a changing climate and includes 87 actions to reduce GHG emissions and climate-related risks to the County's residents, businesses, and the built and natural environment.

Choices made throughout the County Government have the potential to negatively or positively impact our GHG emissions and climate resilience. Leading on climate change requires an all-of-government approach and all County departments have a role to play. The Climate Action Plan includes a section on Governance which details the actions that County departments will take to institutionalize climate change considerations in County Government operations. Implementing climate governance will also foster opportunities for creativity, collaboration, and innovation among staff and community partners to implement climate solutions.

With the FY22 budget, the Office of Management and Budget (OMB) introduced initial steps to link climate considerations into the budgeting process for County departments, including collecting information on climate change through its budgeting system, asking departments to identify Climate Ambassadors, and providing information on budget requests that support climate action. Highlights of the responses submitted by departments with their FY22 budgets are included in this climate change budget chapter. The County plans to develop and hone a more robust process in FY23 and beyond.

The Department of General Services (DGS) is leading efforts to reshape the County's real estate portfolio, through both a reduced need for office space because of teleworking and by implementing "net-zero" design standards for the county's new buildings and renovations for existing buildings. These initiatives will both save money and conserve County resources. An example is the recently completed Wheaton Library and Recreation Center, certified as LEED Gold for its energy efficiency and use of recycled and locally sourced materials. DGS is also installing photovoltaic panels at County sites and pursuing innovative environmental design concepts such as the use of solar glass. Microgrids have already been constructed at the Public Safety Headquarters and the Clarksburg Correctional Facility. Later this year, construction will begin on another microgrid at the Brookville Bus Maintenance Facility which will also serve as a charging station for the County's growing fleet of electric buses. During 2021, DGS will begin installing solar panels on a closed landfill, providing less costly clean energy for lower income households.

In FY22, the Department of Transportation (DOT) plans to expand public transportation options to encourage the use of

non-auto travel modes. The County's Ride On route system is undergoing a restructuring study and design to provide for more efficient, equitable, and sustainable operation to meet the changing needs of the community, and to incorporate use of the increased number of electric buses in the fleet. Expanded use of dedicated bus lanes will be examined for implementation along key transit routes. The e-bike and e-scooter "micromobility" pilot program will continue, with portions of the program converted to a permanent, ongoing program. Residents, employees, and visitors will be encouraged to use these and other shared micromobility devices - including Capital Bikeshare -- for short trips and to connect to transit. Additional parking "corrals" for micromobility devices will be installed in activity centers, and heightened interface with operators and additional outreach will be used to increase proper riding and parking of the vehicles. The Complete Streets Guidelines will be implemented, and the Shared Streets program will be continued to encourage active transportation and other community use of public rights-of-way.

FY22 will be the second year of operations for FLASH, Montgomery County's unique express bus service along US 29 (Colesville Road). It is anticipated the service will continue to be successful and ridership will increase as the County's employment and retail sites return to more normal operations, post-COVID-19. The successful Kids Ride Free program will continue as well, allowing all youth ages 18 and under to ride for free on our local buses, and the Seniors Ride Free program, offering free rides on local buses during off-peak periods. Employee commuting incentives will continue to be offered to enable employers to buy down the cost of transit and vanpooling for their employees through the FareShare Program. Use of Transportation Demand Management will be expanded beyond the current Transportation Management Districts by implementing the NextGen Transportation Demand Management legislation and Executive Regulations. The County is also building an extensive network of bikeway facilities, including protected bike lanes. Facilities related to the Purple Line, Bethesda Metro Station transit project, White Flint West Workaround and those in other Bicycle and Pedestrian Priority Areas (BiPPA) and master plan areas will be planned and/or constructed.

The County has had thousands of employees teleworking during the COVID-19 pandemic and based on that experience, is adopting new policies and procedures to formalize expanded telework for employees whose jobs can be done remotely. The County will continue to promote use of telework with private sector employers and employees, offering webinars and free technical assistance from nationally-experienced consultants to help these programs operate effectively.

To support the transition to electric vehicles (EVs), in FY22 the County will increase availability of EV charging stations in our public parking facilities and at other County facilities. In addition, the County will provide more opportunities for on-street EV charging in residential neighborhoods that don't have off-street alternatives for siting EV charging stations, and in pilot programs for on-street charging and/or streetlight charging in other locations, and a position is proposed to, in part, expand the County's charging infrastructure for residents. The County will continue to transition the County fleet to EVs, with plans to procure more electric buses to further the electrification of the bus fleet.

The Department of Permitting Services and the Department of Environmental Protection will develop codes and standards that improve the energy performance of both new and existing buildings. The goal is to get new commercial, multi-family, and residential buildings to achieve net-zero energy use within the next several building code cycles (building codes are updated every three years). Building Energy Performance Standards (BEPS) are under development that would require existing commercial and multi-family buildings above a certain size to meet minimum energy performance levels over time.

The Department of Environmental Protection is exploring several options to increase the amount of clean (low or no-carbon) electricity used in the County. This includes expanding the use of photovoltaic (PV) systems in the County and supporting State legislation that would authorize the County to create a Community Choice Energy (CCE) program, which would enable the County to become the default electricity supplier to residents and small businesses in the County. Under a CCE program, the County will seek to provide cleaner electricity at a cheaper price than that currently available from the utilities that serve the County.

The Department of Environmental Protection continues to implement programs to increase recycling and reduce the amount of waste needing to be disposed, including curbside pickup of food waste for businesses, a pilot program for curbside food waste pickup for residents with both programs allowing the food waste to be composted, and curbside pickup of electronics

for recycling.

FY22 Budget

An initial accounting shows that spending on climate change efforts total approximately \$196.2 million in all funds in FY22. The calculation is not exhaustive; more work is needed to determine the total amount spending by the County on efforts to reduce greenhouse gas emissions, mitigate the impacts of climate change, and adapt to a changing climate.

Spending in Support of Climate Change Efforts in the FY22 Budget		
Program	FY22 Amount	Fund
RideOn	\$126.01	Transit
Recycling Programs	\$35.66	Solid Waste Disposal
Electric Vehicles	\$18.3	Capital Budget
Transportation Demand Management	\$3.32	General Fund
Homeowner Energy Efficiency Program	\$2.8	Restricted Grant*
Capital Bikeshare	\$1.46	General Fund
Other	\$8.67	
Total	\$196.22	
*The \$2.8 million figure represents total program funding, not the annual appropriation.		

FY22 Initiatives

- Begin implementation of the County's Climate Action Plan.
- Create three new positions to expand the County's capacity on energy regulatory policy; private-sector EV adoption and building electrification; and community outreach related to climate change.
- Use the Climate Change Non-Departmental Account to support the development of a Building Energy Performance Standard; begin the development of a Community Choice Energy implementation plan (assuming adoption of State enabling legislation); support the development of more energy efficient building codes with a target of net zero; provide support for solar permitting and inspections; develop an EV charging strategic plan; conduct equitable community engagement that centers on the most vulnerable communities; and provide other support for the implementation of the Climate Action Plan.
- Plant more trees by increasing staffing to address the backlog of tree requests in the Tree Montgomery Program and to focus on expanding the tree canopy in underserved areas when the backlog is addressed.
- Install solar panels on the closed Oaks Landfill, generating 6.0 megawatts of electricity.
- Explore programs and incentives to increase adoption of PV systems in the County.
- Take steps to establish a CCE program (assuming adoption of State enabling legislation).
- Complete study to right-size the County vehicle fleet and develop a targeted approach to transition the County's fleet to zero emissions based on the vehicle technologies currently or soon to-be in the marketplace.
- Procure electric buses and electric administrative and motor pool vehicles.
- Complete Phase I of the Brookville Bus Depot electric bus charging station installation.
- Implement restructuring of Ride On bus routes to provide for more efficient, equitable and sustainable operation, and to incorporate increased numbers of electric buses.
- Examine expanded use of dedicated bus lanes for implementation along key transit routes.
- Increase the availability of electric vehicle charging stations at public parking facilities and other County locations. Examine opportunities for on-street charging and/or streetlight charging pilot program at selected locations in the County.
- Implement EV charging station wayfinding signage program to facilitate EV access and to reinforce awareness of the

general public about widespread availability of EV charging, as a way to reduce range anxiety and increase EV uptake.

- Adopt Complete Streets Guidelines and move forward with implementation.
- Continue Shared Streets to encourage active transportation and community use of public rights-of-way.
- Extend the e-bike and e-scooter pilot program, convert portions of the program to more permanent, ongoing status, install more parking corrals, and promote use of these micromobility options for short trips and to connect to transit in more areas of the County.
- Implement adjustments to operations for FLASH, Montgomery County's new express bus service along US-29 (Colesville Road) in response to experience from the first year of full operation.
- Enhance incentives for employers to buy-down the cost of transit and vanpooling for their employees through the FareShare program.
- Expand the use of Transportation Demand Management (TDM) beyond the current Transportation Management Districts by implementing the NextGen TDM legislation and Executive Regulation.
- Continue to build an extensive network of bikeway facilities including protected bike lanes, and facilities associated with the Purple Line, Bethesda Metro Station and White Flint West Workaround projects and those in other BiPPa and master plan areas.
- Initiate a major project to upgrade the Materials Recycling Facility used by the County to prepare collected materials for recycling. This project will increase the capacity of the facility to handle all collected materials with capacity for future growth.
- New contracts for recycling in the "northern" part of the county will include curbside pickup of electronics for recycling.

Ongoing Efforts

Department of Environmental Protection (DEP)

- Green Business Certification Program: A voluntary program that recognizes and encourages businesses to take steps to reduce their ecological footprint.
- The County's Benchmarking Law: Building owners are to use a standard metric to measure energy usage, identifying energy savings opportunities. DEP offers assistance to building owners with compliance.
- Energy Connection: A program whose goal is to be a trusted source of information about home energy efficiency and renewable energy options.
- Tree Montgomery Program: A program that plants shade trees for property owners, free of charge. Additional programs for tree planting are implemented in partnership with the Department of Transportation.
- County Recycling Programs: DEP collects recycling from single family properties and prepares those materials for recycling; Recent initiatives to educate residents about proper recycling have improved the recycling rate. A pilot program for curbside pickup of food waste for residents will allow for these materials to be composted.

Department of Transportation

- Ride On: The County's public bus system provides an affordable alternative to driving.
- Capital Bikeshare, e-scooters, and e-bikes: Capital Bikeshare offers stations throughout the County, providing a low-carbon alternative for short trips. The e-scooter and e-bike pilot program are another option for residents and visitors.
- Commuter Services: Facilitate and encourage the use of public transportation with programs like FareShare, the Commuter Choice Tax Credit, and Get In.
- Express bus programs: FLASH and Ride On Route 101 provide fast, reliable bus service along major County corridors.

Department of General Services (DGS)

- Office of Energy and Sustainability: Ensures County operations are environmentally sensitive and integrates sustainability into County decision making.
- Solar installations: Over 7.6 megawatts (MW) of electricity is generated from solar panels on County facilities. A 6.0 MW installation is planned for the decommissioned Oaks Landfill and 2.0 MW installation will be incorporated in to the Brookville Bus Depot electrification microgrid.
- Fleet: DGS is leading the initiative to transition to a zero emissions fleet of County vehicles and buses.

Office of Emergency Management and Homeland Security (OEMHS)

- Hydrologic Expertise: As climate change increases the intensity of rain events, a new position at OEMHS will help identify areas that will become prone to flooding and help the County prepare for, mitigate, and respond to the impacts.
- Grant Funding: OEMHS assists DEP and other County agencies pursue State and Federal grants to prepare for the effects of climate change.
- Working closely with county departments to prepare for the current and future impacts climate change has on weather-related disasters.
- Reducing the impacts climate change has on the county by identifying and mitigating risks.
- Identifying critical infrastructure that may be vulnerable to climate change and working with owners of the infrastructure to prepare and mitigate those vulnerabilities (including dams, roads, etc).

Department of Permitting Services

- Green Building Program Review: Enforces the County's requirement for new construction, additions, and alterations to conform to the International Energy Construction Code. New commercial construction and additions of 5,000 square feet or greater must conform to the International Green Construction Code.
- DPS handles nearly all applications and permits electronically, reducing the County's overall carbon footprint.

Department of Housing and Community Affairs

- Weatherization Assistance Program: Assists homeowners and low-income residents in reducing home energy use by providing energy inspections, air leak identification, insulation, and energy efficient lighting.

Department of Human Resources

- Working with Countywide Long-Term Telework Workgroup to re-design County Telework Policy in order to maintain value of cost reductions due to considerably more efficient uses of employee time and County workspace.
- Conducts virtual trainings and online training evaluations, contributing to greenhouse gas emission reductions by eliminating employee commutes to training and reduction in paper costs.

Department of Health and Human Services

- HUBs: The various public-facing HUBs within the County are building community resiliency. The HUBs have been instrumental in providing food, personal care supplies as well as household goods to residents in need.
- HHS Minority Programs: Through its focus on the social determinants of health, the minority programs are keenly aware of the impact of climate change on communities of color and are committed to better incorporating climate and the environment into its work. The Latino Health Initiative has conducted a series of Latino community conversations to assess the knowledge, attitudes, and practices of a sample of Latino community members regarding environment related practices associated to consumer waste and recycling.

Office of Agriculture

- Supports the farm community in its utilization of renewable energy through accessory solar and regenerative agricultural practices such as no till farming, crop rotation and others.
- Promotes Best Management Practices (BMP) such as cover crop to help sequester carbon.
- Soil Conservation: the District works with local farmers in promoting conservation practices that help to reduce greenhouse gases such as conservation tillage. Conservation tillage practices reduce trips across fields by equipment that produces greenhouse gases.

Community Use of Public Facilities

- Covers the personnel cost of an energy management position in MCPS to monitor community use of school buildings and control the HVAC settings in each school based on the weekly schedule. CUPF continuously fine tunes the MCPS energy management weekly schedule to reduce unneeded energy use.
- CUPF makes every possible effort to consolidate community use into buildings by not placing groups in an empty building when a building nearby already has scheduled use.

Correction and Rehabilitation

- Diversion community service work crews removes debris/waste; work crew has painted electric car ports at county facilities and use green chemicals to remove county graffiti.

Office of Procurement

- Works with departments to employ sustainable procurement practices and specifications to help reduce environmental impacts and total cost of ownership. Examples include: (1) language incentivizing meatless menu options as well local produce sourcing in cafeteria solicitation and (2) responsible disposal or donation of County surplus to maximize return and reduce waste for the County.

Public Libraries

- Partners with other agencies and community partners such as the Department of Environmental Protection to make items such as compost bins, thermal cameras, reusable and recyclable bags available to residents.
- Programs will be offered to assist business owners in strategies to "green" their businesses. In addition, programs will be offered to increase awareness of employment opportunities in green businesses such as solar, recycling, composting, sustainable lawn and landscape maintenance, LEED certified building practices, organic farming, green roofs and other sustainable business opportunities.