

# Montgomery County Climate Action Plan Annual Report

Showcasing Fiscal Year 2022 Accomplishments and Fiscal Year 2023 Work Plan

















**AUGUST 2022** 

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## **PURPOSE**

The Montgomery County Climate Action Plan (CAP) is a strategic plan to cut greenhouse gas (GHG) emissions 80% by 2027 and 100% by 2035 (compared to 2005 levels) and to reduce climate-related risks to the County's residents, businesses, and the built and natural environment.

This report has two purposes. First, it highlights efforts made by County departments and agencies, residents, and businesses to combat the climate emergency during the first year of the CAP, Fiscal Year 2022 (FY22). Second, it looks to the year ahead by including a work plan of climate initiatives that are planned for the Fiscal Year 2023 (FY23).

This annual report gives County departments and agencies the opportunity to course-correct as technology evolves, challenges surface, and additional funding becomes available, enabling the CAP to be a living document. In addition to an overview of past and future climate actions, the report also includes needed adjustments to CAP actions, a summary of the approved budget and staffing, a legislative and regulatory policy agenda, and racial equity and social justice steps the County will take while implementing the CAP.

## FY22 ACTION & FY23 PLAN HIGHLIGHTS

## Clean Energy

#### FY22 Highlights:

- The **inaugural Capital Area Solar Coop** concluded in August 2021 to install solar panels on single-family homes in the region, including 76 projects in Montgomery County, with 629 kilowatts (kW) of installed capacity to come online by the end of the calendar year 2022.
- County Council unanimously passed **Montgomery County Green Bank Fuel Energy Tax Revenue legislation**, which provides 10% of the Fuel Energy Tax to the Green Bank to further its work.
- The Green Bank supported 2 **community solar** projects: a 273-kW system at Paddington Square with Sunlight General that offers 30% of the 91 subscriptions for low-and-moderate income households; and a 412-kW system in Silver Spring in partnership with Sandy Spring Bank.
- A total of 1,027 residential solar projects were constructed in the County and brought online in FY22.<sup>1</sup>
- 7.5 megawatts of solar-rated capacity (or "nameplate capacity") was added to the approved PJM GATS solar generators. The PJM GATS platform connects buyers (consumers) and sellers (producers) of electricity across the region.<sup>2</sup> This represents nearly 11 million kilowatt hours of electricity generation, equivalent to 8.6 million pounds of coal being burned!<sup>3</sup>

**Racial Equity & Social Justice:** The Montgomery County Green Bank launched **Access Solar**, a low- and moderate-income solar program for homeowners for households earning under \$97,500, with the Solar Co-op.

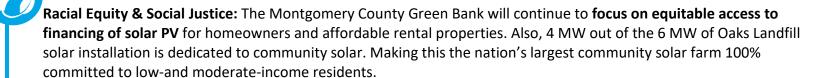
<sup>&</sup>lt;sup>1</sup> Data sourced from DPS Residential Solar Permits database

<sup>&</sup>lt;sup>2</sup> Data sourced from PJM GATS Data Platform

<sup>&</sup>lt;sup>3</sup> "Nameplate capacity" converted to electricity generation using <u>NREL's PVWatts program</u>. Solar electricity converted to coal equivalents using EPA Calculator)

#### **FY23 Plan Highlights:**

- The Department of General Services will **complete the Brookville bus depot microgrid**, the first microgrid in the region for powering electric buses. DGS will expedite Phase 2 to accommodate an additional 70 electric Ride On buses.
- New solar installations will include:
  - Solar production initiated at 4 new MCPS schools, and design is underway at an additional 4 locations
  - Solar installations on **Montgomery Parks' Meadowbrook and Wheaton Maintenance Yards** and rooftop solar array at **Black Hill Maintenance Yard**.
  - Completion of the **6MW Oaks Landfill community solar** installation.
  - Microgrid project at the **Animal Shelter** building.
  - Kick-starting a **solar canopy pilot & EV charging station in an MCPS parking lot**; this project will be complete in FY24 through a Maryland Energy Administration grant.
  - Demonstrate a solar parking lot system at MCPS.
  - MCPS will purchase off-site ground-mounted solar in the PJM region.
- The Montgomery County Green Bank will continue work on **solar installations across all areas** commercial solar, community solar, and homeowner solar using a variety of investment structures, including power purchase agreements, commercial loans, and Commercial-Property Assessed Clen Energy.
- Work will continue on the development of regulations governing the County's **Community Choice Aggregation** program at the Public Service Commission.

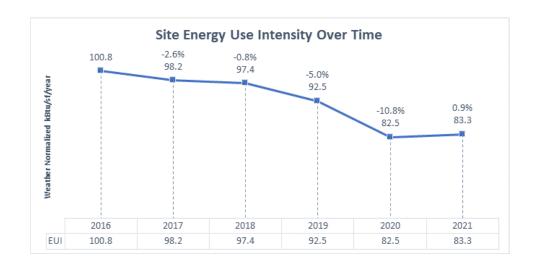


# **Buildings**

#### FY22 Highlights:

- County Council unanimously passed Building Energy Performance Standards legislation, which requires minimum energy
  performance thresholds to be set for existing covered buildings and drives them to improve their energy efficiency over a set
  time period, thus reducing carbon emissions.
- The Montgomery County Green Bank supported over **\$10 million in clean energy projects** for commercial and multifamily properties.
- 86% of the 644 properties covered by the **Energy Benchmarking** law have reported energy benchmark data for the calendar year 2021. The <u>Energy Benchmarking</u> law requires covered buildings (non-residential properties 50,000 gross square feet and greater) to track annual energy use and use a standard metric to compare the building's performance against past performance and to its peers nationwide.<sup>4</sup>
- Trends in Site Energy Use Intensity: Among properties that have benchmarked consistently since the calendar year 2016, site
  energy use per square foot (known as site energy use intensity or site EUI) has decreased by 17.3% compared to 2016 or an
  average of 3.5% per year. This reduction includes changes in building occupancy and operation caused by COVID-19. The
  chart below shows site EUI for each year as well as the year-over-year change in site EUI for these consistently reported
  properties.

<sup>&</sup>lt;sup>4</sup> Preliminary CY 2021 benchmarking data, subject to change. CY 2021 dataset will be available in October 2022 at: <a href="https://www.montgomerycountymd.gov/green/energy/benchmarking.html#discloseddata">https://www.montgomerycountymd.gov/green/energy/benchmarking.html#discloseddata</a>.



- Utility Bill Savings: Between 2016 and 2019, before the COVID-19 public health emergency forced some commercial building operators to change their operations, consistently reported properties saw an 8.2% decrease in site EUI or an average of 2.7% per year. While energy benchmarking alone does not require property owners or managers to implement energy upgrades, results from Montgomery County mirror EPA research<sup>5</sup> that shows persistent energy savings in benchmarked properties. This reduction in energy use is equivalent to an estimated average utility savings of roughly \$9,700 per property per year.
- **Energy Savings:** The reduction in energy use between 2016 and 2021 for consistently reported benchmarked properties (an estimated 138 million kWh electricity and 2 million thermos of natural gas) is roughly equivalent to **110,000 MTCO2e** (metric tons of carbon dioxide equivalents, a unit used to compare GHG emission potency).<sup>6</sup>

#### FY23 Plan Highlights:

• The Department of Environmental Protection will **launch a new Electrification Incentive Program in partnership with the City of Takoma Park** to provide technical assistance and incentives for electrification in existing residential homes.

<sup>&</sup>lt;sup>5</sup> https://www.energystar.gov/sites/default/files/buildings/tools/DataTrends Savings 20121002.pdf

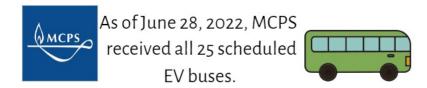
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- The Department of General Services will complete the **Holiday Park Senior Center net-zero building retrofit**. This project is the County's first net-zero conversion of an existing building and will include the installation of solar glass windows.
- The **Building Performance Improvement Board** will be selected and appointed. The Board will advise the Department of Environmental Protection on Building Energy Performance Standard regulations to be issued by December 1, 2023.

# Transportation

#### **FY22 Highlights:**

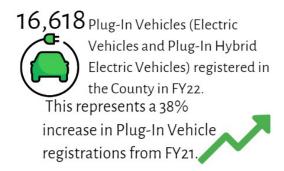
- The first 25 electric MCPS school buses have arrived as part of a plan to replace 326 diesel buses with electric school buses over four years.
- The Montgomery County Department of Transportation removed the Mid-County Highway from the region's 2022 Transportation Long Range Plan, Visualize 2045.



- Free fares have been made permanent on Ride On for those under age 18 with **Kids Ride Free** and for Seniors and persons with disabilities.
- Ride On service levels were restored to 80% of pre-Covid levels by January 2022, with plans to reach 90% of pre-Covid service levels by July 2022. Ride On annual ridership in FY22 was 10,078,000.<sup>2</sup>
- The Montgomery County Department of Transportation and Department of Environmental Protection launched the EV
   Purchasing Co-op Pilot and received over 1,000 pledges from residents and local businesses to purchase an EV for their next vehicle.
- Montgomery Parks completed the **Hadon Trail Connection**, adding additional paved trails to connect the Long Branch Trail on Haddon Drive.
- Montgomery Parks launched the Open Parkways program to provide more outdoor space for recreation and exercise by closing portions of the parkway to vehicles on weekends.
- As of June 2021, **1.5% of passenger vehicles registered in the county were plug-in vehicles**. DEP estimates that plug-in vehicles made up 9.5% of new vehicle registrations in the last year.<sup>7</sup>
- Electric Vehicle Charging:

<sup>&</sup>lt;sup>7</sup> Data concerning EV registrations and EV charger installation provided by Brian Booher, DEP

- Construction was recently completed on Electric Vehicle charging stations in South Germantown Recreational Park and Big Pines Local Park.
- Public and private entities throughout Montgomery County added 160 Level 2 Electric Vehicle (EV) public charging stations and 38 Direct Current Fast Charging (DCFC) Electric Vehicle (EV) public charging stations, with a cumulative total of 456 Level 2 EV charging stations and 92 DCFC EV charging stations distributed throughout the County by the end of FY22.8





**Racial Equity & Social Justice:** The Montgomery County Department of Transportation completed a **Fare Equity Study**. A fare structure of half-price for most routes was adopted by Council, making most Ride On fares \$1. An extensive outreach campaign will be conducted prior to implementation.

#### **FY23 Plan Highlights:**

• The next 10 **electric Ride On buses** will be put into service. Ride On will operate a total of 14 electric buses in FY23. The Department of General Services will procure an additional 100 electric Ride On buses over 3 years, including approximately 45 electric buses in FY23.

<sup>&</sup>lt;sup>8</sup> Ride On ridership data sourced from MCDOT Dashboard; FY22 ridership represents a decrease of 38.2% from FY21 Ride On Ridership.

- MCPS will continue testing and increasing its **electric school bus fleet**. MCPS will use electric buses on summer school routes and increase the number of drivers who are familiar with the buses.
- The Montgomery County Department of Transportation will install **EV charging stations at County parking garages** to the maximum extent possible, adding to the County's inventory of charging locations.
- The Department of General Services awarded a contract for the installation of **publicly accessible EV charging stations** at approximately 65 libraries, recreation centers, and swimming pools throughout the County. The installation work will get underway in FY23.
- Preliminary design continues to advance for both **Veirs Mill Road and MD 355 Bus Rapid Transit (BRT).** Construction is fully funded for the MD 355 BRT Central Phase and Veirs Mill Rd BRT in the 6-year CIP.



**Racial Equity & Social Justice:** Building on an FY22 effort to conduct an equity review of sidewalk projects, the Montgomery County Department of Transportation will undertake a deeper dive analysis of the equity implications of its transportation projects. Also, the Montgomery County Green Bank will launch an **EV charger installation program for affordable rental properties** supported by a philanthropic grant from General Motors that would help install over 25 EV chargers in these properties.

# **Carbon Sequestration**

#### FY22 Highlights:

- The Office of Agriculture educated farmers and landowners on **no-till practices**, following nutrient management plans, and cover crops.
- The Department of Environmental Protection launched the single-family residential curbside recycling collection of food scraps pilot.
- Montgomery Parks' held its first ever urban wood sale. The **urban wood reuse program** turns hazardous trees removed from parkland into lumber and other reused wood products in park operations.
- The Department of Environmental Protection RainScapes program installed over 150 projects on private properties, including conservation landscape and rain garden projects. These practices sequester more carbon than lawns.
- Tree Plantings:
  - Tree Montgomery planted 1,700 trees on more than 380 separate properties in FY22, for a cumulative total of 7,450+ shade trees planted through the Spring 2022 Planting Season.<sup>9</sup>
  - o The Montgomery County Department of Transportation planted **1,660+ trees in the right-of-way** in FY22.<sup>10</sup>
  - Reforest Montgomery planted 793 trees through reforestation projects in FY22 in which multiple trees were planted at a rate of at least 100 trees/acre.<sup>11</sup>
  - o Montgomery Parks planted 1,500 trees and 1,125 shrubs on parkland.

<sup>&</sup>lt;sup>9</sup> Data provided by Tree Montgomery and sourced from the <u>Tree Montgomery website</u>

<sup>&</sup>lt;sup>10</sup> Data provided by Brink Linkletter, MCDOT

<sup>&</sup>lt;sup>11</sup> Data provided by Mia Rothberg, Montgomery Planning



Racial Equity & Social Justice: Montgomery Parks is increasing focus and prioritization on parks located in Equity Focus Areas to ensure that they are being/have been visited on a regular basis for assessment of tree planting/canopy coverage needs.

#### **FY23 Plan Highlights:**

- With \$1.5 million received from federal appropriations, the Department of Environmental Protection will conduct **additional tree planting, including reforestation.** Due to the new hire of a tree planting staff in FY22, the Department expects additional plantings through the Tree Montgomery Program and anticipates applying for funds from the State of Maryland's 5 Million Tree Initiative for forest reforestation efforts.
- The Department of Environmental Protection will continue to expand its RainScapes program on private properties through the installation of conservation landscape and rain garden projects (over 150 new projects). These practices sequester more carbon than lawns.
- The Department of Environmental Protection applied for and was **awarded funding** from the Chesapeake Bay Trust' Urban Trees Award Program for \$135,000 to **plant 250 trees on 18 public sites in frontline communities**.
- Montgomery Parks' planned plantings for FY23 include-- Watts Branch Stream Valley Park: approximately 250 trees across 5.2 acres; Rock Creek Stream Valley Park: 5 large caliper trees; Rosemary Hills Local Park: 2 large caliper trees; Lynnbrook Park: 5 large caliper trees; additional projects will be added throughout the year.
- The Montgomery County Department of Transportation will have additional funding for tree planting, enabling it to increase the rate of tree planting efforts in the right-of-way.
- The Department of Environmental Protection will conduct an inventory of potential restoration opportunities at stormwater maintenance facilities that are currently maintained in turf for **conversion to meadow habitat**.
- The Department of Environmental Protection, working in partnership with World Resources Institute, will update a complement to the GHG inventory focusing on emissions and sequestration associated with trees and forests.



**Racial Equity & Social Justice:** The Department of Environmental Protection, through Tree Montgomery and several grant awards, will **target frontline communities for shade tree plantings** to increase the benefits of shading-built surfaces and AC units.

# **Climate Adaptation**

#### FY22 Highlights:

- The Department of Environmental Protection completed the construction of **Glenmont Forest Green Streets**, with 53 rain gardens, bio-retention gardens, and tree boxes installed.
- The Department of Environmental Protection and the Office of Emergency Management and Homeland Security installed 22 early warning flood sensors in FY22, with another 13 to be installed in FY23. These early warning flood sensors can alert residents sooner about high water or flooding events.
- The Office of Emergency Management and Homeland Security released 7 **Hyperthermia Alerts** on days with forecasted temperatures or heat indices of over 95 degrees. Hyperthermia Alerts remind community members of precautions they can take on high heat days to keep themselves and their neighbors safe.
- The Department of Environmental Protection, Department of Transportation, and Department of General Services is working
  with Naval Support Activity Bethesda (NSAB) to prepare a Military Installation Resiliency Review (MIRR) planning study. The
  MIRR will identify off-base climate vulnerabilities impacting NSAB's onsite water, transportation, and energy operations and
  propose mitigation actions. The study is funded through a Department of Defense Office of Local Defense Community
  Cooperation grant.
- The Department of Environmental Protection continued developing the final design for the **Wheaton Dam Flood Mitigation project** and secured funding from the Maryland Department of Natural Resources (\$110,000) to expand and enhance forested buffers and existing tree canopy on 7.7 acres around the Wheaton Regional Stormwater Management Facility and Wheaton Branch, a tributary to Sligo Creek and the Anacostia River.

**Racial Equity & Social Justice:** Montgomery Parks opened **Nolte Community Garden**, which provides 19 accessible gardening beds atop the foundation of a demolished Park Activity Building. This garden addresses equity goals by engaging seniors and food insecure families in this part of Silver Spring.

#### **FY23 Plan Highlights:**

- The Department of Environmental Protection and the Office of Emergency Management and Homeland Security will conduct an NOAA-funded **Urban Heat Mapping Campaign** with community volunteers. Through assistance from a **Thriving Earth Exchange** scientist, the County will analyze the data gathered to identify communities to target for shade tree plantings on private property and along streets.
- The County will continue to **develop a comprehensive Flood Management Plan**. This multi-year, multi-stage process will lead to specific watershed studies to identify the causes and potential solutions to flooding in the County. The effort will also result in recommendations related to the structure and resources of the County government for flooding preparation, response, and recovery.
- The Department of Permitting Services anticipates receiving the **preliminary flood maps** for Montgomery County from FEMA, which will update the flood insurance program.
- The Department of General Services will complete the **Scotland Resilience Hub** in October 2022.
- Department of Environmental Protection will release a Request for Proposals for Watershed Implementation grants in partnership with the Chesapeake Bay Trust; the RFP will include an expanded request for green infrastructure implementation projects.
- The Department of Environmental Protection will complete the design and permitting for the **Wheaton Dam Flood Mitigation** project by January 2023, and construction is expected to be completed in late 2024.
- The Department of Environmental Protection will be applying to the United States Army Corps of Engineers for **Planning Assistance to the State** funding to study the causes of flooding and potential solution to these flooding problems in several watersheds.
- The Department of Environmental Protection is participating in the State of Maryland A-Storm Stakeholder Consultation group and the Technical Advisory Committee. This participation is in response to the Maryland General Assembly passing

legislation in 2021 (Senate Bill 227/House Bill 295) that requires MDE to incorporate updated flooding and climate change data into Maryland's stormwater management law in consultation with stakeholders, including local governments. Specifically, it requires MDE to: identify the most recent precipitation data available; investigate flooding events since 2000 to identify potential areas of concern; revise Maryland stormwater quantity management standards for flood management every five years, and update other parts of the stormwater regulations as necessary every five years.

• The **Edgewood Community Garden** will open in the Spring of 2023; the community garden will help provide healthy, accessible food to this part of the County.

Racial Equity & Social Justice: The Department of Environmental Protection will launch a pilot program to provide climate resilience funding for low- and moderate-income housing to fill funding gaps in existing programs that these households may benefit from. Funds will have a broad scope of possible uses to help people stay in their homes and insulate these existing homes from climate vulnerabilities. Also, the Montgomery County Green Bank will work with the County and property owners to understand the needs of affordable rental property owners to meet climate-adapting improvements and determine initial strategies for responding.

## Governance

#### **FY22 Highlights**

- The Office of Emergency Management and Homeland Security held the **Emergency Operations Center Spring Functional Exercise**, with an exercise scenario focused on a derecho, extreme heat, and extreme flooding.
- The Department of Environmental Protection, the Office of Innovation, and the Office of Human Resources sponsored 5
  climate training programs for 75 County government staff from 20 departments and developed a comprehensive set of
  resources for the new Climate Change Ambassador Training Program to build understanding and engagement among
  county government staff about climate change.
- The Department of Finance and the Department of Environmental Protection worked in partnership with the Montgomery County Green Bank to **expand the scope of the Commercial Property Assessed Clean Energy program,** which ultimately led to Council passage of Bill 46-21, Commercial Property Assessed Clean Energy Financing Amendments.

**75** Climate Ambassadors

from

20 different County Departments



Racial Equity & Social Justice: The Emerald Cities Collaborative completed the "High Road Economic Inclusion Framework for an Equitable Climate-Ready Economy" with recommendations on a) training a diverse and inclusive workforce that meets the demand for the thousands of green jobs generated by the CAP and ensures that these jobs are accessible and lead to career pathways and b) aligning and leveraging local anchor institutions' procurement to drive the County's climate goals by procuring local, organic food from our Agricultural Reserve.

#### **FY23 Plan Highlights:**

- The Office of Emergency Management and Homeland Security will kick off the **Hazard Mitigation planning** process.
- The Behavioral Health and Crisis Services Division of the Department of Health and Human Services will draft an addendum to its strategic plan to incorporate climate change considerations more directly into behavioral health and crisis services.
- The Montgomery County Green Bank will **explore financing structures and products** that could be developed to meet new and emerging needs as well as revise current products as the market needs may dictate.
- The Office of Management and Budget will **further develop the role of climate in the budget process** by adding to and refining the information submitted by departments as part of the justification for their capital and operating budget requests.
- The Office of Human Resources will expand resources on managing the hybrid work environment, calculate the impact of the County's Telework Program on GHG emissions, and provide individual consults and workshops to expand access to telework where appropriate.

# Public Engagement, Partnerships, and Education

#### **FY22 Highlights**

- The MCPS Board of Education unanimously passed Policy ECA, **Sustainability**, committing MCPS to cut greenhouse gas emissions 80% by 2027 and 100% by 2035 compared to 2005 levels, in line with the CAP. Over 1,000 participants engaged in information sessions, and over 100 written comments were received, with the majority in support of the new policy.
- The **Climate Change Communication Coalition** (C4) was formed with representatives from 12 departments and agencies. C4 initiated a campaign soliciting feedback from the public on the CAP, particularly as it relates to resonant themes that can be used in outreach.
- 91 of 209 MCPS schools have achieved the Maryland Association of Environmental and Outdoor Education Green Schools
  Status.<sup>12</sup> About 80% of MCPS schools participated in some fashion in new waste reduction programs, including 42 schools
  with share tables, 13 schools composting, and other schools recycling new items (markers, batteries, etc.).
- The Maryland Coalition of Counties and Cities for Climate Action has launched and is meeting regularly to advance climate
  progress at the State level.
- Montgomery Parks hosted the **2022 Greenfest celebration** in person for the first time in two years at Brookside Gardens, through a coalition of public, non-profit, and university partners, with 5,000 attendees.

Racial Equity & Social Justice: The Department of Environmental Protection organized climate storytelling workshops, facilitated by Climate Stories Project, in which community members develop, record, and share their own climate stories—their personal and community relationships with climate change. This project focused on amplifying the voices of under-represented and frontline community members. Community-based partners include the African American Health Program, Latino Health Initiative, Community Advocacy Institute, African Affairs Advisory Group, Caribbean American Advisory Group, and others.

<sup>&</sup>lt;sup>12</sup> Information sourced from Maryland Association for Environmental and Outdoor Education (MAEOE) handout

#### **FY23 Plan Highlights:**

- The Department of Environmental Protection, the Office of Emergency Management and Homeland Security, and the Department of Health and Human Services will expand engagement with residents with a primary language other than English living along the US 29 corridor to increase Alert Montgomery emergency notifications.
- MCPS will begin the implementation of its new Sustainability Policy (ECA).
- The **Climate Change Communication Coalition** will launch the umbrella campaign for outreach around five areas of GHG reduction: using less energy at home, planting trees, reducing food waste, purchasing flood insurance, and transportation choices.
- Montgomery Parks will begin construction of the Black Hill Sustainable Education Every Day classroom, net-zero water and net-zero energy modular learning space that encourages creative education through the building's living and technical components.

Racial Equity & Social Justice: The Department of Environmental Protection is working with various County staff and the Montgomery County Racial Equity (MORE) Network on the implementation of the Community Justice Academy with Community Ambassadors who will co-create integrated health, equity, and quality-of-life solutions that center on the needs and desires of low-income and Black, Indigenous, and Other People of Color communities in the County. The Department of Environmental Protection will also launch a Community Justice Fund to advance small projects co-conceived and co-created by Community Ambassadors in cooperation with their respective community members and County staff.

## LEGISLATIVE AND REGULATORY POLICY AGENDA

#### **FY22 Legislative and Regulatory Accomplishments:**

JULY 2021

#### Code Changes to Bill 13-21 Relating to Vehicle Charging Facilities

Council adopted code changes to section 49-11 to allow for homeowner-installed vehicle charging facilities within the public right of way.

SEPT **2021** 



#### 2018 International Green Construction Code

Sets more stringent requirements for new commercial construction projects and major building additions, including energy efficiency improvements, onsite energy generation and improved indoor air quality. Unanimously passed by Council.

FEB 2022



#### Montgomery County Green Bank Fuel Energy Tax Revenue, Bill 44-21

Provides 10% of the Fuel Energy Tax to the MCGB to further its work. Unanimously passed by Council.

MAR 2022



#### Commercial Property Assessed Clean Energy (C-PACE) Financing Amendments, Bill 46-21

Expands financing opportunities for property owners to make their buildings more climate-resilient and energy efficient, helping to improve operating costs and reduce greenhouse gas emissions. Unanimously passed by Council.

APR 2022



### **Building Energy Performance Standards, Bill 16-21**

Sets a minimum energy performance threshold for existing covered buildings and drives them to improve their energy efficiency over a set time period, thus reducing carbon emissions. Unanimously passed by Council.

JUNE 2022



## MCPS Policy ECA, Sustainability

The policy commits MCPS to cutting greenhouse gas emissions 80% by 2027 and 100% by 2035 compared to 2005 levels, in line with the CAP. Unanimously adopted by MCPS Board of Education.

JULY 2022



#### Climate Assessments Legislation, Bill 3-22 – PASSED in FY23

Requires a climate assessment for pending policy pending, helping to ensure that all legislative decisions are made with awareness of how they will impact the County's climate goals. Unanimously passed by Council.

#### FY23 Legislative and Regulatory Plans (new plans may develop throughout FY23)



#### **Clean Energy Actions**

**Leaf Removal Legislation, Bill 18-22** - The County Executive transmitted legislation to Council to ban the sale and use of gas-powered leaf blower equipment. The bill was introduced in June 2022.

**State-Level Advocacy:** The DEP will continue to engage in the 100% Renewable Portfolio Standard Study Work Group convened by Maryland's Department of Natural Resources.



#### **Building Actions**

**Comprehensive Building Decarbonization Legislation, Bill 13-22** - The bill would require the County to issue all-electric building standards for all new construction, major renovations, and additions by Jan. 1, 2024. Introduced in June 2022.

**State-Level Advocacy:** The County will continue to advocate to the MD General Assembly and Public Service Commission that natural gas no longer be incentivized through the EmPOWER Maryland program and for building codes to encourage and/or require electrification.



#### **Climate Adaptation Actions**

**Individual Water Supply and Sewage Disposal Systems Legislation, Bill 40-21** - Introduced in 2021, this legislation addresses onsite septic treatment.

**Montgomery County Green Bank Enabling Legislation Amendments** – The DEP is drafting amendments to the MCGB's enabling legislation to allow the Green Bank to engage in climate resilience activities.



#### **Transportation Actions**

Motor Vehicles and Traffic - E-Scooters, Bill 36-21 - Introduced in 2022 and under review by Council.

**Complete Streets Design Guide** - Completed by the Montgomery County Department of Transportation and Montgomery Planning, the guide has been approved by the Planning Board. Updates to the County Code and regulations are under finalization for transmittal to Council in early FY23.

**Pedestrian Master Plan** – The Planning Department will submit the Pedestrian Master Plan to the Planning Board later this calendar year, and it will be taken up by County Council in early 2023.

**Transportation Demand Management** – MCDOT will move forward with these executive regulations in FY23.

**State-Level Advocacy:** MCDOT participated in a discussion with County representatives to the State Legislature about a Vehicle Carbon Gas Tax or VMT Tax. The delegation is aware of the County's interest to advance this issue in the next legislative session.



#### **Carbon Sequestration Actions**

Conservation Law Amendments - M-NCPPC Planning introduced an amendment to strengthen the Forest Conservation Law in April 2022. The Montgomery County Planning Board approved the draft with minor changes, and it was transmitted to the County Council May for a July 2022 introduction. The bill would increase forest planting and forest conservation requirements for projects subject to the Montgomery County Forest Conservation Law.

**Reduction of Edible Food Waste** - The Department of Environmental Protection and the Department of Health and Human Services are drafting legislation that aims to reduce edible food waste throughout the county.

**Additional Tree Protections** - The Department of Environmental Protection will review the potential for new legislation to protect additional trees any time there is redevelopment, perhaps using the model of the Roadside Tree Law.

## **FY23 BUDGET AND STAFFING**

#### **Operating Budget**

Climate actions are funded in the County's annual operating budget within the Climate Change Planning Non-Departmental Account (NDA) as well as in the County departments' budgets. The County's <u>FY23 Operating Budget Chapter on Climate Change Initiatives</u> includes **over \$23 million in new funds** for:

- Clean energy efforts, including \$18.6 million in new funding for the Montgomery County Green Bank
- Addressing Flooding Issues
- Enhancing Climate Adaptation and Preparedness
- Conducting Equitable Community Engagement
- Implementing Building Energy Performance Standards
- Supporting Greenhouse Gas Reduction and Adaptation Measures in Low Income Housing
- Enhancing the County's Climate Governance Capacity
- Accelerating Nature-based Carbon Sequestration
- Supporting Greenhouse Gas Reduction in New & Existing Residential Buildings
- Implementing Equitable Climate Economy Recommendations
- Supporting Greenhouse Gas Reduction in the Transportation Sector
- Undertaking Climate Communications Campaigns

#### Funding for new climate staff:

- 16 new climate staff positions across 6 County departments to enhance climate governance capacity
- 20 new part-time bus operator positions at MCDOT



Racial Equity & Social Justice: over \$1 million for programs supporting low-income and minority communities:

- a **Community Justice Fund** to advance small projects co-conceived and co-created by Community Ambassadors in cooperation with their respective community members and County staff.
- Efficiency & Climate Resiliency Pilot Program for low- and moderate- housing

Also, the **Green Bank must dedicate 20% of the funds** that it receives from the passage of the Montgomery County Green Bank Fuel Energy Tax Revenue Law **to Equity Emphasis Areas** in the County.

#### **Capital Budget**

The Approved FY23 Capital Budget and the <u>FY23-28 Capital Improvements Program</u> includes substantial investments for climate-related infrastructure development and construction projects. This includes **\$1.4 billion for climate resilience, transportation improvements, energy efficiency, and maintenance projects** as delineated below.

- \$710 million in mass transit improvements to reduce the climate impact of transportation in the County, including
  - o \$408 million for Bus Rapid Transit (BRT) planning and implementation
  - o \$152 million to begin to transition Ride On to a zero-emission fleet
- \$340 million for pedestrian and bicycle transportation facilities to encourage active modes of transportation and reduce short-distance car trips
- \$163 million to fund maintenance projects that increase the energy efficiency of county government, MCPS, Montgomery College, and M-NCPPC facilities through building envelope repair and replacement of obsolete mechanical and electrical systems
- \$174 million for projects that maintain and improve the County's resilience to extreme weather through stormwater management and maintenance and rehabilitation of waterways.
- \$12.5 million in added funding for projects to help achieve net-zero energy use in new or renovated facilities, including Holiday Park Senior Center, the White Flint Fire Station, the 6th District Police Station, and \$4.4 million to help achieve near net-zero energy use in the renovated Kennedy Shriver Aquatic Center



**Racial Equity & Social Justice:** County government incorporated racial equity & social justice considerations into the CIP development process, including using mapping to identify & address racial disparities, considering the structural barriers that disproportionately impact communities of color & low-income communities, and examining the intersection of racial equity and climate change.

#### **Other Funding Sources**

The County is a recipient of philanthropic, state, and federal grants that support climate action.

#### Federal funding sources include:

- US Department of Defense funding for climate resilience study at the NSA Bethesda facility (Walter Reed)
- US Department of Homeland Security grant for flood sensors installation
- National Oceanic and Atmospheric Administration grant for urban heat mapping
- \$1.5 million from FY22 Omnibus Appropriations for DEP tree planting and green infrastructure

#### State funding sources include:

- Maryland Energy Administration grant for MCPS to explore building decarbonization
- Department of Natural Resources Trust Fund grant for reforestation at the Wheaton Branch property

#### Other external funding sources include:

- \$85,000 Transportation Planning Board grant to improve pedestrian/cyclist accessibility of Germantown MARC station
- MWCOG's Transportation and Land Use Connections (TLC) grant to update county's lighting standards; and another TLC grant to study ways to improve pedestrian and bicycle access and safety in the Town of Kensington Connecticut Avenue corridor.
- \$169,000 Chesapeake Bay Trust grant for tree planting

In FY23, the County will explore grant funding opportunities being made available through the Bipartisan Infrastructure Law and the Inflation Reduction Act.

## GREENHOUSE GAS (GHG) EMISSIONS INVENTORY

Montgomery County's GHG Emissions Inventories are conducted every 2 to 3 years by the Metropolitan Washington Council of Governments (MWCOG). GHG Emissions Inventories have been completed for 2005, 2012, 2015, and 2018. The GHG emissions inventory for calendar year 2020 is currently underway.

Between 2005 and 2018, GHG emissions in Montgomery County decreased by 19%. In 2018, residential and commercial energy consumption accounted for 50% of measured emissions and transportation-related emissions accounted for 42%. As of 2018, the building sector was the most significant driver of GHG emissions reductions in the County; building sector emissions are down by 3% since 2015 and 30% since 2005. The largest sources of decreases in emissions between 2005 and 2018 are changes in the region's electricity fuel mix; decreased commercial energy use per square foot; and decreased on-road emissions per mile; these reductions were partially offset by growth in population; growth in commercial floor areas; and increased use of refrigerants.

#### Next steps for the 2020 GHG Emissions Inventory:

The typical timeline for MWCOG to complete a GHG inventory is 1.5 years following the end of the calendar year being assessed, as community-wide data takes time to collect and process. The 2020 GHG Inventory is expected to be publicly released by December 2022. A short-term MWCOG timeline is provided below:

July 2022 - Draft GHG Data Summary spreadsheets and ClearPath (GHG inventory tool) entries complete

August - September 2022 - Local jurisdiction comment period and 1-on-1 jurisdiction calls

September – October 2022 – Edits to inventories as needed based on comments received

October – November 2022 – Contribution analysis model runs (i.e., drivers of GHG change)

September – December 2022 - Forest and trees sequestration test calculations and possible incorporation into final inventories

December 2022 - Final GHG Data Summary spreadsheets, fact sheets, and ClearPath entries complete

All Montgomery County, GHG Emissions Inventories are available at <a href="https://www.montgomerycountymd.gov/green/climate/ghg-inventory.html">www.montgomerycountymd.gov/green/climate/ghg-inventory.html</a>

# **FY22 PROGRESS AT A GLANCE**

#### **PROGRESS LEGEND:**

Not started

Initial Steps Taken

Significant Progress

Completed or Institutionalized

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# **Clean Energy**

E-1	Community Choice Energy Program	• • •
E-2	Private Building Solar Photovoltaic Code Requirements	
E-3	Promote Private Solar Photovoltaic Systems	•••
E-4	Public Facility Solar Photovoltaic Installations and Groundwork	•••
E-5	Advocate for a 100% Renewable Portfolio Standard by 2030	000

## Buildings

B-1	Electrification Requirements for Existing Commercial and Public Buildings	
B-2	Electrification Requirements for Existing Residential Buildings	
B-3	Energy Performance Standard for Existing Commercial and Multifamily Buildings	
B-4	Electrification Incentives for Existing Buildings	
B-5	All-Electric Building Code for New Construction	
B-6	Disincentivize and/or Eliminate Natural Gas in New Construction	
B-7	Net Zero Energy Building Code for New Construction	• • •

# Transportation

T-1	Expand Public Transit	
T-2	Expand Active Transportation and Shared Micromobility Network	
T-3	Private Vehicle Electrification Incentives and Disincentives	
T-4	Constrain Cars in Urban Areas, Limit New Road Construction	
T-5	Zero Emission Public Buses and School Buses	
T-6	Electrify County and Public Agencies Fleet	
T-7	Expand the Electric Vehicle Charging Network	
T-8	Transportation Demand Management and Telework Strategies	
T-9	Traffic Management Systems	
T-10	Electric Vehicle Car Share Program for Low-Income Communities	000
T-11	Off-Road Vehicle and Equipment Electrification	
T-12	Advocate for a Vehicle Carbon Gas Tax or VMT Tax	000
T-13	Advocate for Rail Alternative Fuels	000

## **Carbon Sequestration**

S-1	Retain and Increase Forests	• • • •
<b>S-2</b>	Retain and Increase Tree Canopy	
S-3	Restore and Enhance Meadows and Wetlands	
S-4	Regenerative Agriculture	
S-5	Restore Soil Fertility, Microbial Activity, and Moisture Holding Capacity	
<b>S-6</b>	Whole-System Carbon Management and Planning	

# **Climate Adaptation**

A-1	Water Infrastructure Resilience	
A-2	Repair and Enhancement of Stormwater Conveyance Systems	•••
A-3	Temperature Monitoring and Alerts	
A-4	Extreme Weather Energy Efficiency Building Code	
A-5	Climate-Adapted Housing Incentives/Subsidies	000
A-6	Green/Cool/PV Roof and Pavement Code	
A-7	Green Public Spaces	
A-8	Harden Emergency Shelters and Install Resilience Hubs	
A-9	Mold Protection and Remediation	000
A-10	Green Infrastructure	
A-11	Climate Adapted Development Standards	
A-12	Stormwater Retention Credit Trading	000
A-13	Ban Stormwater Management Requirement Waivers	000
A-14	Update Floodplain Maps	
A-15	Water Supply Protection	
A-16	Flood Rescue Resources	
A-17	On-Site Water Reuse	000
A-18	Expanded Community Gardens	
A-19	Advocacy for Off-River Water Storage	
A-20	Study Potential for Buildings in the County to Flood and Possible Remedies	

## Governance

G-1	Build awareness among all Montgomery County Government staff about climate change	
G-2	Establish a Climate Change Academy to integrate Climate Change Training into the Professional Development of MCG staff	
G-3	Incorporate climate competencies into Montgomery County Government job descriptions and Performance Plans	
G-4	Identify and create new positions that are needed for the County government to prepare for and respond to climate	
	hazards, implement climate adaptation measures, and reduce greenhouse gas emissions	
G-5	Establish a cross-departmental Climate Innovation Lab to develop, fund, and implement climate and resiliency initiatives	
G-6	Designate Climate Ambassadors within each County department	000
G-7	Evaluate and update county planning, policy, and operations activities to account for the risks of climate change impacts and	
	prioritize the needs of vulnerable residents	
G-8	Evaluate and update county planning, policy, and operations activities to reduce greenhouse gases	
G-9	Incorporate climate considerations into the County's budgeting processes	
G-10	Develop financing strategies for implementing climate actions and incorporate climate considerations into County finance practices	•••
G-11	Develop climate, energy, health and racial equity metrics, and a data-driven assessment and reporting process	•00
G-12	Formalize the Climate Leadership Team to guide the implementation of climate plan actions	
G-13	Update the County's teleworking and transit benefit policies to encourage MCG staff to reduce vehicle miles traveled	
G-14	Establish Montgomery County Government Carbon Fund for Air Travel	000
G-15	Consolidate County climate data	000
G-16	Conduct climate vulnerability detailed assessments	

# Public Engagement, Partnerships, and Education

P-1	Undertake Vigorous Public Outreach Campaign Aimed at Empowering the Public with Information on How to Reduce	
	Emissions and Adapt to the Impacts of Climate Change	
P-2	Conduct an Outreach Campaign that Uses Evidence- Based Communications Strategies	
P-3	Form a Climate Change Communication Coalition	000
P-4	Enhance County Websites to Focus More Sharply on Climate Change	
P-5	Establish a Community Justice Academy in which Graduating Community Ambassadors Representing their Neighbors	
	Conceive and Co-Create Integrated Health, Equity and Quality-of-Life Solutions Directly Applicable to their Communities	
P-6	Use the Climate, Energy, and Air Quality Advisory Committee as a Resource to Advise the County on Performance Metrics	000
	and Plan Implementation	
P-7	Facilitate Ongoing Input from Community Members on the CAP's Implementation	000
P-8	Engage County Artists through Public Art Installations to Raise Awareness, Discussion, and Action on Climate Change	
P-9	Support the Efforts of Community Organizations, Businesses, Municipalities, and Associations that Promote and	
	Operationalize Equitable Climate Action	
P-10	Establish a Statewide Coalition of Local Governments and Youth Groups Focused on Advancing Ambitious State Climate	
	Policy by Collectively Advocating their Positions before the State Legislature, the Public Service Commission, and the Utility	
	Companies	
P-11	Establish Partnerships with Federal Agencies Located within the County's Boundaries on GHG Mitigation and Climate	
	Resiliency Efforts	
P-12	Advocate for the Continued Integration of Climate Change Education into the Existing School Curriculum	
P-13	Develop a standardized climate change curriculum across public schools and recommend the same for private schools and	
	home schools	
P-14	Provide professional development for educators on climate change topics	
P-15	Use school gardens or other outdoor learning facilities as a jumping off point to address a multitude of climate related topics	
P-16	Develop increased opportunities for students to participate in climate change learning experiences outside of the classroom	
P-17	Develop sustainability goals for schools to reach and provide incentives to do so	
P-18	Encourage climate change action at home	
P-19	Establish cross-departmental partnerships to facilitate implementation of climate goals at County schools	

# **CLIMATE ACTION DETAILED TABLES**

The tables on the following pages provide details of each CAP action that the County has accomplished in FY22 and plans to make progress on during FY23. In FY23, County departments and agencies will actively work **on 77 of 86 actions.** 

Clean Energy	FY22	FY22	FY23
Actions E-1: Community Choice Energy Program	Plans     Develop a CCE implementation plan.     Participate in the Maryland Public Service Commission workgroup to develop the regulatory framework for the program.	Accomplishments  DEP:  - The PSC's Community Choice Energy workgroup continued to meet bi-weekly in order to develop regulations that would govern the County's aggregation program. Topics covered during the year included the timing and process of transitioning customers to the program, the addition of new customers after the initial launch of the program, revisions to the SOS bidding process, and options for handling bad debts.  Based on discussion to date, PSC staff have	Plans  DEP: - Proposed regulations governing the aggregation program need to be finalized by the PSC's Community Choice Energy workgroup in FY23. DEP will develop the operating principles of the aggregation program, such as defining the price tier structure and will continue to work through CCE operational issues in anticipation of a planned launch of the program in October 2024.
E-2: Private Building Solar Photovoltaic Code Requirements	Adopt Appendix ZE (a net-zero energy stretch code) with the 2021 International Energy Conservation Code for both commercial and residential, including major alterations.	developed a draft structure of the regulations, which need to be finalized in FY23.  DPS: - Reviewing 2021 building codes (underway), including the International Energy Conservation Code, in preparation for adoption in FY23 Anticipates receiving Council approval of Chapter 17 regulations, which will enable DPS to launch the SolarApp, piloted in FY22, and includes an expedited third-party review process for solar installations Researched the ability to expand the program to EV charging and battery storage permits.	DPS: - Work to adopt the 2021 building codes, including the International Energy Conservation Code Expand SolarApp to EV charging and battery storage permits.
E-3: Promote Private Solar Photovoltaic Systems	<ul> <li>Continue to promote residential solar installations through the annual solar co-op program.</li> <li>Explore programs, incentives, and financing with the Green Bank</li> </ul>	DEP: - 2021 Solar Co-op Success: The inaugural Capital Area Solar Coop concluded in August 2021 with 235 signed contracts to install 2.1 MW of solar PV capacity on single-family homes in the region —	DEP: - DEP will continue to expand residential solar deployment in FY23 through the 2022 Capital Solar Co-op and other initiatives. The installs for the FY22 Capital Solar Coop participants will be completed in

and other partners to increase PV systems installations.

• Improve data collection of solar permitting and inspections.

76 of those are in Montgomery County totaling 629 kW of installed capacity to come online by the end of the calendar year 2022.

- In FY22, DEP made significant progress on developing recommendations for a renewable energy allowance in the Building Energy Performance Standard with stakeholder engagement and contractor support.
- The State Climate and Energy Policy Manager was onboarded in March 2022; this position will serve as the primary lead for the Clean Energy Action Plan.

# MCGB:

- <u>Community Solar</u>: Supported 2 community solar projects in the year: First, a 273 kW community solar system at Paddington Square with Sunlight General that offers 91 subscriptions with 30% for low-and-moderate income households; Second, a 412kW kW system in Silver Spring in a funding in partnership with Sandy Spring Bank.
- Commercial Solar: The Commercial Solar Power Purchase Agreement product supported 4 projects this year: 1 nonprofit, 3 faith-based institutions, 1 affordable housing property. Working with over 30 other faith-based entities to review opportunities for solar PV systems. Closed on a \$370,000 loan in partnership with City First Enterprises to fund a 159-kW solar array on Hampshire Towers, an affordable rental property in Takoma Park.
- Low- and Moderate-Income Solar: In March
   2022, launched low- and moderate-income solar
   program for homeowners, called Access Solar, for

early FY23.

- In Summer 2022, DEP will wrap up a stakeholder input process on how to incorporate a renewable energy allowance for Building Energy Performance Standards and release a recommendations report that will inform the BEPS Regulations.
- DEP will develop a Clean Energy Action Plan expanding on content from the CAP to outline changes we need to advocate for at the state level to decarbonize the County's energy supply to achieve our climate goals.

# MCGB:

- Continue efforts to work in all solar PV areas commercial solar, community solar, homeowner solar using a variety of investment structures, including power purchase agreements, commercial loans, and C-PACE.
- Focus on private commercial properties, nonprofits, faith-based entities, schools, affordable housing, and homeowners.
- Continue to focus on equitable access to financing of solar PV for homeowners and affordable rental properties.

		households earning under \$97,500, in conjunction with the Solar Co-Op. The program offers three options: a loan at 600 credit score; a	
		pre-purchase of SRECs to reduce by 10% the upfront cost of the system; and a Power Purchase Agreement (PPA) with Sunnova, a major PPA provider, which offered 3 pricing options, including a new option that aligned pricing with a discount to utility pricing for the term of the PPA.  - Condominiums: Continued to work with several condominiums on solar for their properties; engaged with several advocates to address condominium laws and regulations which need to be overcome to make these projects feasible.	
		OAG: - Held meetings with MCGB and Montgomery Countryside Alliance to inform county residents on what is available for solar - mainly accessory solar Partnered with DEP, MCRA, UMD, and NREL on agrivoltaic pilot project to be located at the Poolesville Golf Course. In planning stage, draft proposal of the pilot has been completed.	OAG: - Work with the Green Bank, DEP to inform farmers of what can be done for solar installation. Get agrivoltaic pilot project up and running.
E-4: Public Facility Solar Photovoltaic Installations and Groundwork	<ul> <li>Complete the Oaks landfill solar installation, generating 6 megawatts of electricity.</li> <li>Complete the Scotland Community Center resilience hub and solar installation.</li> <li>Complete Phase I of the Brookville Bus Depot microgrid</li> </ul>	DEP: - Identified agrivoltaic pilot demonstration site on Revenue Authority property adjacent to the Poolesville Golf Club; developed partnerships with the National Renewable Energy Laboratory and the Urban Ecosystem and Sustainable Built Environments Laboratory, Department of Environmental Science and Technology, at the University of Maryland to design the pilot and	DEP:  - Depending on cost and grant funding, the County hopes to break ground on the project sometime in FY23 and establish a contract with UMD's Urban Ecosystem and Sustainable Built Environments Laboratory to conduct research related to the agricultural and economic viability of agrivoltaics. While there is \$50,000 in the FY23 budget, supplemental funds will be needed. Funding

and electric bus charging station installation.

- Implement solar installations at selected MCPS schools.
- Launch agrivoltaic study project in the Agricultural Reserve.
- Implement solar installations at selected M-NCPPC locations.

conduct research on the agricultural and economic viability of agrivoltaics. Submitted Concept Paper for Department of Energy Foundational Agrivoltaic Research for Megawatt Scale (FARMS) grant. Cost estimates for the configuration are being estimated.

# **DGS & M-NCPPC Planning:**

- Oaks Landfill 6MW Solar Project is scheduled for completion in late 2022.

# MCGB:

- Stayed engaged with MCDOT as it looks to issue an RFP for a project that would use 4 garages for community solar.

# MCPS:

- Design work began on new solar installations on roofs, a demonstration solar parking lot canopy, and demonstration solar-powered parking lot lights. through DOE's FARMS grant and other sources will be sought.

# DGS:

- Evaluate potential of expanding Oaks Landfill 6MW Solar Project
- Microgrid project is underway at the Animal Shelter building; it will be completed in FY23.
- Microgrid project underway at Equipment Maintenance & Transit Operations Center; phase I-Solar PV will begin FY23.
- Phase 1 of Brookville bus maintenance facility microgrid project will be completed by the start of FY23. Expedite Phase 2 of the project in FY23 to enable up to 70 EV buses to be charged at this location; includes installation of 2 additional onsite generation units and 10-15 additional EV chargers.
- Issue solicitation for solar installations on County facilities.

# MCGB:

- Continue engagement with County departments to explore means that MCGB can offer support.

# MCPS:

- Anticipates 4 solar sites to be installed at schools in FY23 (including 1 solar expansion of an existing school).
- Initiate design for an additional 4 solar sites.
- Purchase off-site ground-mounted solar in PJM region.

	M-NCPPC Parks: - Purchased all materials for the installation of a 67kW rooftop solar array in Black Hill Regional Park on the maintenance yard building. The system will be constructed next fiscal year.	- Conduct pilot for solar canopy in a parking lot; this project will be completed in FY24 through a Maryland Energy Administration grant.  - Conduct pilot project for solar parking lot lights.  - Through a continued partnership with DGS: collaborate on a joint RFP for a batch of solar installations as a collaborative purchasing effort. Number of schools that will be included in the RFP is not finalized.  - Complete execution of FY22 RFP for Power Purchasing Agreement for solar at 8 schools.  M-NCPPC Parks:  - Installation of a 67 kW rooftop solar array at Blackhill Maintenance Yard will begin, with an estimated annual production of 80,000 kWh.  - Recently contracted out two rooftop solar installations on Meadowbrook and Wheaton Maintenance Yards. Construction will begin next fiscal year. The two systems combined are 122 kW rooftop arrays with an estimated annual production of 169,000 kWh.
E-5: Advocate for a 100% Renewable	<b>DEP:</b> - Onboarded the State Energy and Climate Policy	<b>DEP:</b> - DEP will continue to engage in the 100% RPS Study
Portfolio Standard by	Manager position (approved in the FY22 budget)	Work Group convened by Maryland's Department of
2030	in late March 2022, who will begin undertaking	Natural Resources.
(Note in FY22 Climate Work Plan)	advocacy on a 100% RPS in Maryland.	

Building	FY22	FY22	FY23
Actions	Plans	Accomplishments	Plans
B-1: Electrification Requirements for Existing Commercial and Public Buildings		PPS: - Reviewing 2021 building codes (underway), including the International Energy Conservation Code, in preparation for adoption in FY23	DGS:  - Convert Holiday Park senior center to a net-zero building. This project is the County's first net-zero conversion of an existing building and will include installation of solar glass windows. DGS will track the performance of the solar glass to capture learning from the costs and issues associated with converting this building to net-zero. Will apply lessons learned to other County facilities.  - Plans to implement approximately 20 lighting retrofit projects at County facilities.  - Plans to implement approximately 18 Monitoring Based Commissioning (MBCx) projects at County facilities and upgrade Building Automation Systems.
		MCPS: - Awarded Maryland Energy Administration grant to determine approaches for decarbonizing existing school buildings.	MCPS: - Look for most efficient equipment as MCPS completes HVAC projects on existing buildings Use Maryland Energy Administration grant to determine approaches for decarbonizing existing school buildings MCPS's Sustainability Initiatives capital project was approved in the FY23 budget. Projects will include retrofits to improve energy efficiency and upgrades to building automated systems.  DEP: - See Action B-5 for the FY23 update.
B-2: Electrification		DPS	- See Action B-5 for the FY23 update. <b>DEP:</b>
Requirements for			

Existing Residential Buildings		- Reviewing 2021 building codes (underway), including the International Energy Conservation Code in preparation for adoption in FY23	- The FY23 operating budget includes a new position that will focus on policies and programs to reduce GHG emissions from the residential sector. DEP will establish the position and begin recruitment in FY23 Also, See Action B-5.
B-3: Energy Performance Standard for Existing Commercial and Multifamily Buildings	<ul> <li>Complete building typology study to inform BEPS standards.</li> <li>Participate in public hearing and Council work sessions about the Building Energy Performance Standard bill; continue outreach to external stakeholders.</li> <li>Subject to the passage of the bill, draft regulations and identify state-level legislative solutions to overcome enforcement challenges.</li> <li>Subject to the passage of the bill, establish the BEPS Advisory Board.</li> <li>Develop position descriptions for BEPS program implementation.</li> <li>Continue exploration of expanding DC Building Innovation Hub into a regional entity.</li> </ul>	DEP: - Building Energy Performance Standards (BEPS) Bill 16-21 was signed into law on May 2, 2022, and will go into effect on August 1, 2022 DEP completed several studies related to BEPS regulations and implementation, including the BEPS Technical Report to inform standard-setting and a BEPS Solar and Renewable Energy Credit report to inform the treatment of renewable energy in BEPS compliance The Building Performance Improvement Board application period closed on June 10, 2022, and a review is underway Calendar year 2021 energy benchmarking reports were due on June 1. As of mid-June, 77% of covered properties have submitted reports, and DEP is undertaking compliance activities. Benchmarking scorecards were sent to compliant buildings DEP has continued to brief stakeholders and present to different audiences as the BEPS legislation has progressed and been adopted."  MCPS: - Evaluation of RFP submittals is underway.	DEP:  - The Building Performance Improvement Board will be selected and appointed in FY23. DEP will work with the Board to advise on BEPS regulations, to be issued by December 1, 2023.  - DEP will reach out to covered buildings with information about BEPS compliance, especially buildings that are new to energy benchmarking.  - DEP has a study underway related to utility incentives and how it may offset the cost of set improvements; the study will be completed in FY23.  MCPS:  - Several schools will receive gym lighting retrofits to LED bulbs during the summer of 2022.

B-4: Electrification	MCGB:  - Technical Assistance: Conducted 8 technical assistance efforts in a pilot program to support commercial property owners with energy assessments to determine current conditions and potential energy improvements for their properties; helps inform a strategy for FY23.  - Investments: Supported over \$10 million in clean energy projects for commercial and multifamily properties using a variety of its products, including its CLEER program, commercial solar power purchase agreement product, small business energy savings support product, and debt investment in co-lending arrangements with financial partners.  - C-PACE: Assumed administration of the C-PACE program for the County and has been actively marketing the opportunity to investors to join the County's program. Attracted 8 capital providers to support the County's C-PACE program.  Working on closing the first C-PACE loan on an energy retrofit project with a faith-based organization.  DEP:	- Award contracts for investment grade audits leading to energy services contracts and building retrofits.  MCGB: - Elevate implementation of commercial clean energy projects through the deployment of its financial and technical assistance resources Leverage new funding from the County to increase the provision of technical assistance to property owners to assess current property conditions and devise plans to undertake energy savings improvements Promote the use of its funding programs in partnership with private capital partners that provide affordable and flexible financing options for property owners to undertake planned improvements Coordinate with the County as the Building Energy Performance Standards are developed to assure Green Bank resources are aligned with the County program and can best serve to support the required property improvements of owners.
B-4: Electrification Incentives for Existing	DEP: - DEP has been involved in Rocky Mountain	<b>DEP:</b> - DEP is participating in the Rocky Mountain
Buildings	Institute's 2022 Electrify cohort in partnership	Institute's Electrify Cohort throughout the calendar
(Not in Climate Work	with the City of Takoma Park, Habitat for	year 2022 to develop a new program for
Plan 2022)	Humanity Metro Maryland, and the Montgomery	electrification primarily focused on residential
	County Green Bank to design a building electrification program.	homes. DEP is pursuing an RFP for an electrification contractor to assist the residential sector with

		- The FY23 budget includes \$1M for electrification incentives and additional staff support for electrification initiatives within DPS. The Electrify Cohort participants are developing a scope of work for an RFP to be released in early FY23.	electrification efforts.  - DEP will launch a New Electrification Incentive Program in FY23 to provide technical assistance and incentives for electrification in existing residential homes.  - DEP has an electrification study underway as directed by County Council by Bill 44-21; the study will be completed by May 2023. The study will assess what it costs to electrify existing buildings.
		MCGB: Working on a large-scale electrification project for an affordable housing property; will transition the property from a central plant that uses natural gas to in-unit electric mini-splits; project is expected to close in the summer 2022.	MCGB: Make technical assistance programs available to properties that are seeking to move to full electrification properties to understand the strategies and funding approaches that can support such transitions.
B-5: All-Electric Building Code for New Construction	• Evaluate the adoption of the net-zero energy appendices to the 2021 International Energy Conservation Code and evaluate opportunities to include decarbonization language in the code.	DEP: - County Executive Elrich and Councilmember Riemer partnered on Bill 13-22 (Comprehensive Building Decarbonization Bill), which was introduced in June 2022 and would require the County Executive to issue all-electric building codes for new construction, major renovations, and additions by January 1, 2024.	DEP: - DEP and DPS will support Bill 13-22 as it moves through the legislative process. New DPS positions approved in the FY23 budget will assist with implementing these all-electric building code requirements.
		DPS: - Reviewing 2021 building codes (underway), including the International Energy Conservation Code in preparation for adoption in FY23	DPS: - Work to adopt the 2021 building codes, including the International Energy Conservation Code - Assess how to start to introduce net-zero energy language in the next code cycle. DPS is signing a contract with the New Buildings Institute to help determine the best path forward relating to energy code amendments. Projecting out a path over the

			next two or three code cycles; determining what are the right measures to include for net-zero codes.  - Recruit two new positions approved in the FY23 budget. One position will focus on electrification and decarbonization; the second position will focus on green buildings and the International Green Building Code.
B-6: Disincentivize and/or Eliminate Natural Gas in New Construction	<ul> <li>Explore next steps to address state-level preemption issues that constrain the County's ability to ban natural gas in new construction.</li> <li>Develop alternative strategies to a natural gas ban that disincentivize fossil fuels or incentivize electrification.</li> </ul>	DEP:  - The Climate Action Plan, released in June 2021, notes that "local jurisdictions in the state of Maryland face an implied preemption that restricts natural gas bans at the local level." Since the CAP was released, more information has come to light during FY22. The Climate Team believes this statement in the CAP no longer reflects the current thinking on the topic of natural gas bans at the local level. As with any potential implied preemption, the courts will determine whether preemption exists.  Montgomery County will continue to work in support of Governor Hogan's Commission on Climate Change recommendation to electrify buildings, including all new construction by 2024, by supporting Bill 13-22 (Comprehensive Building Decarbonization Bill) and various education, outreach, and incentive efforts to support building electrification.	DEP: - In FY23, the County will support Bill 13-22 (Comprehensive Building Decarbonization Legislation) and various education, outreach, and incentive efforts to support building electrification. The County will also continue to advocate at the state level (General Assembly and Public Service Commission) that natural gas no longer be incentivized through the EmPOWER Maryland program and for building codes to encourage and/or require electrification.  DPS: - Recruit two new positions approved in the FY23 budget. One position will focus on electrification and decarbonization; the second position will focus on green buildings and the International Green Building Code.
B-7: Net Zero Energy Building Code for New Construction	Evaluate opportunities to reach net-zero energy in both commercial and residential construction through the 2021		DGS: - Continue to build new buildings with net-zero targets.
	codes. • The Department of General Services has embarked on	DPS: - The 2018 International Green Construction Code, which was adopted in September 2021, will	<ul><li>DPS:</li><li>- Recruit two new positions approved in the FY23 budget. One position will focus on electrification and</li></ul>

demonstrating commitment for net-zero buildings; the design standard for new buildings is that	advance energy goals through enforcement of new construction over 5,000 square feet.	decarbonization; the second position will focus on green buildings and the International Green Building Code.
they are net zero.  • MCPS will assess if schools that are currently under construction can be made net zero.		MCPS: -For new buildings, MCPS intends to minimize energy use intensity (EUI) per the new sustainability policy, called Policy ECA, Sustainability.
		M-NCPPC – Parks: - Incorporating net zero goals in new building construction.

Transportation	FY22	FY22	FY23
Actions	Plans	Accomplishments	Plans
T-1: Expand Public Transit	<ul> <li>Restore County-operated bus services to full budgeted level in FY22.</li> <li>Support project progress of Purple Line, Bethesda Metro South Entrance, Capital Crescent Trail, and Silver Spring Green Trail.</li> <li>Continue design efforts for Veirs Mill Bus Rapid Transit (BRT) and 355 BRT; begin preliminary engineering for US29 BRT Phase 2; and perform preliminary engineering for Great Seneca Science Corridor Transit Enhancements.</li> <li>Pursue grant funding and federal funding opportunities.</li> <li>Initiate transportation funding workgroup to identify funding resources for transit expansion.</li> <li>Reinstitute Flex demandresponse service.</li> <li>Implement new bus priority program, including acquiring State approvals for and implementation of dedicated bus lanes in three defined areas: Wheaton, Germantown, and US 29.</li> </ul>	MCDOT:  - Achieved goal of restoring Ride On service levels to 80% of pre-Covid levels by January 2022; plans in place to reach 90% of pre-Covid service levels by July 2022. Active recruitment through job fairs and media engagement and advertising resulted in a large operator training class enrolled for Q4.  - Preliminary design continues to advance for both Veirs Mill Road and MD 355 BRT.  Preliminary design for US 29 BRT Phase 2 is awaiting completion of the US 29 Mobility and Reliability Study Part 2, requested by County Council T&E Committee, to be completed and should start in FY23 Preliminary engineering for Great Seneca Science Corridor Transit Network is underway. Initiated Planning for the New Hampshire Avenue and North Bethesda Transitway BRT corridors.  - The approved FY23-28 CIP includes full funding for design and construction of both the MD355 Central BRT project and the Veirs Mill BRT project. The 6-year CIP also includes funding final design for the northern and southern portions of the MD355 BRT. MCDOT is preparing to submit the Veirs Mill Road BRT for consideration as a Small Starts Federal Transit Administration Capital Infrastructure Grant project by the end of the fiscal year.  - Transportation infrastructure funding workgroup established two subgroups: one group focused on evaluating capital funding needs and	MCDOT: - MD 355 BRT and Veirs Mill BRT design has started and will continue. Construction is fully funded for the 355 BRT Central Phase and Veirs Mill Rd BRT in the 6-year CIP Continued planning work on US29 Phase 2 BRT. Planning studies are underway for the New Hampshire Avenue BRT and North Bethesda Transitway projects Planning was completed, and design has started for the first 2 lines of the Great Seneca Transit Network. Construction of the first 2 lines is funded in the 6-year CIP Ride On Reimagine study underway, geared to make Ride On service more effective and will overlap with WMATA Bus Redesign Study in the county Move forward with finalization of a memorandum of understanding with MDOT SHA to implement bus lanes in Wheaton in the summer of calendar 2022. The latest draft of the MOU was routed to the Office of the County Atty on 7-1-2022 as a precursor to DOT approval/signature and routing to MDOT SHA for final approval. Process to be complete in early July 2022 Work with WMATA to plan and design a tactical bus lane in Silver Spring area and also planning on queue jump location opportunities Development of Program of Requirements for new net zero bus maintenance and storage facility to serve is electric buses underway.

- Initiate Reimagine Ride On system redesign plan and coordinate with and support WMATA bus network redesign plan).
- Conduct a study of potential for further reduced or free bus fares for all or for sub-markets of the population.
- Expand free fare hours of service on Ride On and Metrobus for seniors and people with disabilities.
- identifying suitable financing mechanisms, and the other group focused on best-practicesrelated policies and organizational structures to support more efficient and effective implementation of capital improvement projects to support transportation.
- Continues to work with MDOT SHA regarding the memorandum of understanding to implement bus lanes in Wheaton in summer of 2022. Started discussions with MDOT on potential bus lanes on University Boulevard, and with WMATA on design of transit priority improvements on Georgia Avenue.
- Reimagine Ride On hired lead consultant, VHB, and initial background work is in progress, including technical research and input from government stakeholders. Extensive public outreach program will begin in the summer of 2022.
- Fare Equity Study was completed, and a recommendation made from the County Executive to Council. Council voted to extend the free fare policy until July 2, 2022. A fare structure of half-price for most routes was adopted by Council, making most Ride On fares \$1. An extensive outreach campaign will be conducted prior to implementation.

Free fares have been made permanent on Ride On for those under age 18 with Kids Ride Free and for Seniors and persons with disabilities. All these groups now ride Ride On for free all day every day.

- Supporting the WMATA fare demonstration sale that reduced the cost of bus and rail passes and

- \$1 fares on Ride On will be implemented beginning August 1, 2022. Extensive public outreach campaign will be conducted prior to ensure the riding public is aware of the re-institution of fares at this half-price level.

		established a \$2 flat weekend rail fare.	
		- Worked closely with M-NCPPC staff on Corridor	
		Forward: The I-270 Transit Plan, which makes	
		recommendations for future transit expansion	
		along the I-270 corridor. The plan has now been	
		approved by Council.	
		- Advanced design of the Boyds Transit Center	
		- Completed construction of the MD 355 Crossing	
		Project, which includes a new eastern entrance to	
		the Medical Center Metro Station (More info in T-	
T-2: Expand Active	Advance implementation of	MCDOT:	MCDOT:
Transportation and	bikeway recommendations in	- Advanced implementation of bikeway	- Complete design of Fenton Street project.
Shared Micromobility	the Bicycle Master Plan through	recommendations in the Bicycle Master Plan	- Additional measures planned for Grove Street.
Network	capital projects and	through capital projects and development	- Continue build-out of Bethesda bike facilities.
	development approvals.	approvals.	(Construction funding continues through FY25.)
	Complement this low-stress	- Continued construction of Capital Crescent	- Start design of newly funded projects in Olney and
	bikeway network with	Surface Trail Phase 1 and Woodmont Cycle Track	East County.
	expansion of bicycle parking	and started construction of the Emory Lane and	- Host more adult bicycling classes and e-scooter
	resources, including corrals for	MD-115 Shared Use Path.	classes.
	dockless vehicles. Expand	- Started design of Forest Glen Passageway,	- Install additional parking corrals for e-scooters and
	service areas and continue to	completed design of the Montgomery Ave Two	bicycles.
	pilot test personal mobility	Way Separated Bike Lane, and completed 35%	- Move towards a more permanent micromobility
	options (including shared e-	design of Amherst Avenue. MCDOT continued	program, subject to the passage of the bill currently
	scooters & bikes) with view to	design of: the Grosvenor Bicycle and Pedestrian	before the Council. The service areas for shared
	move beyond the current pilot	Priority Area (BiPPA), Good Hope Road Shared	micromobility will also be expanded in coordination
	program to a longer-term	Use Path, Bradley Blvd, Capital Crescent Trail	with vendors. Time constraints on the span of
	program structure and financial	Tunnel, Dale Drive Shared Use Path, Fenton	service permitted for shared micromobility vehicles
	plan.	Street Bikeway, Fenton Street Bikeway, and	will be re-examined and may be removed.
	Sponsor Learn-to-Ride bike	Forest Glen Sidewalk. Franklin Ave Sidewalk,	- Begin repairs to Capital Bikeshare stations to bring
	and e-scooter classes; sponsor	Heritage Triangle Shared Use Path, MacArthur	the facilities to a state of good repair.
	Bike-to-Work Day, Walk & Ride	Blvd Segment 3, Marinelli One Way Separated	- Look at first mile/last mile issues that prevent some
	Challenge, Car-Free Day, and	Bike Lanes, MD 355 Clarksburg Bike Path, Seven	residents from being able to take public
		Locks Bikeway Facility Planning Refresh,	transportation.

other initiatives focused on promoting non-auto modes.

- Continue aspects of the Shared Streets program to encourage active transportation and community use of public rights-of-way.
- Transmit the proposed Complete Streets Design Guide to Council for adoption and begin efforts to amend the County Code and county regulations to be consistent with the Guide.
- Coordinate with
   Transportation Planning Board consultant and Town of
   Kensington on Transportation
   Land-Use Connections grant for
   Kensington Connecticut
   Avenue Corridor Bike/Ped
   Access and Safety Study.
- Continue and increase marketing and outreach efforts for recently established Bike Match MoCo program.

Tuckerman Lane Sidewalk/Bikeway, Veirs Mill Road BiPPA, Washington Grove Connector.

- Completed the MD355 Crossing Project, with an underpass providing safe, efficient crossing for pedestrians and cyclists between NIH and Naval Support Activity Bethesda/Walter Reed, and directly connecting with the Metro station. Project includes a shallow pedestrian underpass below MD 355 (Rockville Pike) and new highspeed elevators providing additional access to the Metro station.
- Completed a pilot of the Grove Street Neighborhood Greenway.
- Continued Construction of White Flint Metro Access Improvements Phase 1. Conducted public hearings for 3 additional sidewalk projects.
- Working with County representatives, municipalities, and private e-scooter/e-bike operators to expand service areas covered by the micromobility pilot. Micromobility services were successfully expanded to the Germantown area in Q2.
- Proposed & received funding for placement of additional micromobility corrals in pilot areas.
- Continues to sponsor Learn-to-Ride bike and escooter training classes, which are being well-attended. Sponsored 6 Pit Stops around the County as part of the annual region-wide celebration of Bike to Work Day. This event encourages residents and employees in the County to consider cycling as an option for commuting and other travel. This year's event was a huge success, with large numbers of attendees happy to be back in person at this

- Building on an FY22 effort to conduct an equity review of sidewalk projects, MCDOT will undertake a deeper dive analysis of the equity implications & distribution of benefits and outcomes of its transportation projects.

event. Information on Capital Bikeshare e-bikes and other shared micromobility options for ebikes and e-scooters was featured. - Coordinating with regional micromobility programs around the region to support firstmile/last-mile mobility and safe operations. MCDOT presented the latest updates on our micromobility programs at a regional Shared Micromobiity Workshop sponsored by MWCOG at the end of FY22. - Shared Streets "Block Permit" program remains available as a free service to residents for ondemand temporary street closures to thru traffic. - The Complete Streets Design Guide, completed by MCDOT and Montgomery Planning, has been approved by the Planning Board. Updates to the County Code and regulations are under finalization for transmittal to Council in early FY23. - The Planning Board reviewed the Capital Crescent Trail under MD-355 and the Capital Crescent Surface Trail Phase 2 on October 14, 2021. - Coordinated with the Town of Kensington and consultants Mead Hunt on a Connecticut Avenue Bike/Ped Mobility Study being conducted under a Transportation Planning Board (TPB) Technical Assistance award. Data gathering and field reviews were conducted, and initial design recommendations were made and distributed for comment by the project's Technical Advisory Committee. A survey was conducted to obtain feedback from the public. Findings and

preliminary recommendations were presented at

a public meeting to solicit feedback. A final report will be available with findings and recommendations and a preliminary engineering design for several of the recommended options.

- Received 229 new applications for bikes needed, and 160 bikes were donated, all of which have been distributed to individuals on the waitlist. There are 356 applicants remaining on the waiting list to receive donated bikes.
- Selected the Capital Crescent Trail Tunnel and associated bike parking facility as the project to apply for funding from FTA's RAISE grant program. The grant application was submitted in Q4.
- Won a competitive award of \$85,000 from the Transportation Planning Board (TPB) for the preliminary engineering of the Walter Johnson Road shared-use path connection to the Germantown MARC Station within Montgomery County. Award comes from TPB's "Transit Within Reach" program and will improve the ability of pedestrians and cyclists to access the MARC station.

# M-NCPPC - Planning:

- Complete Streets Design Guide, developed through a cooperative effort of MCDOT and M-NCPPC, has been approved by the Planning Board. Updates to the County Code and regulations are in development and expected to be transmitted to Council in Spring 2022.
- The Planning Board reviewed the Capital Crescent Trail under MD-355 and the Capital

# M-NCPPC - Planning:

- Pedestrian Master Plan will go to Planning Board later this CY and will be taken up by County Council in early 2023.
- The Complete Streets Design Guide will be presented to County Council in early FY23. In the Fall, the County Council will conduct a public hearing and review of county code changes.

Crescent Surface Trail Phase 2 on October 14, 2021.

- Completed the Pedestrian Level of Comfort map, a component of the Pedestrian Master Plan underway and completed the Pedestrian Audit Toolkit, and hosted a training session for community members in September.
- Planning Board reviewed 2 Fenton Street Cycle Track projects on January 27, 2022.
- Complete the Pedestrian Master Plan Existing Conditions Report.
- MCDOT and the Planning Department won a grant from MWCOG's Transportation and Land Use Connections program to update the county's lighting standards.

- Work with MCDOT to do an add-on to the Complete Streets Design Guide (could be a separate chapter or amendment) to put design guidance on shared streets for how those can be built out in the County.
- Develop guidance on protected intersection design for regulatory projects.
- With MCDOT, Planning has a bikeway branding effort to market the County's bicycle infrastructure to increase bicycling in the County.
- Montgomery Planning will submit its Access Management Study to the Planning Board on July 28. The Access Management Study examines existing practices in Montgomery County managing property and corridor access and provides recommendations to improve access management based on best practices and consistent with Vision Zero and a Complete Streets framework. Its recommendations will provide a systemic way to improve the safety and efficiency of moving people and goods while reducing conflicts between all modes using and crossing roadways, including pedestrians, bicycles, and vehicles in all urban, suburban, and rural areas. Follow-on work efforts could include modifications to the County code by M-NCPPC and MCDOT.

# M-NCPPC - Parks:

- Recently completed the Hadon Trail Connection, which added additional paved trails to connect the Long Branch Trail on Haddon Dr. This is one of several projects planned in the Long Branch Stream Valley Park corridor with a goal of creating a continuous and updated Long Branch Trail.

# M-NCPPC - Parks:

- 2022 Parks, Recreation, and Open Space Plan, approval set for July 2022, recommends improving active transportation using parks and trails to connect people to their work locations.
- Wheaton Regional Park Master Plan is in process. Current draft of Wheaton Regional Park Master Plan

			includes recommendations for trail improvement that help expand active transportation.
T-3: Private Vehicle Electrification Incentives and Disincentives	<ul> <li>Launch Electric Vehicle (EV) Group Buy effort.</li> <li>Promote EV charging equipment rebates and power cost reductions to increase appeal of EVs.</li> <li>Explore options for hosting "EV exposure events."</li> <li>Expand availability of EV charging in public parking facilities</li> </ul>	DEP & MCDOT:  - MCDOT and DEP launched the EV Purchasing Co-op Pilot in January 2022 and received over 1,000 pledges from residents and local businesses through May 2022 to purchase an EV for their next vehicle. With support from its contractor, Electrification Coalition, the County recruited and trained local auto dealerships to join an "Electrified Dealers" network. In June 2022, the County connected residents who took the pledge and opt-in with dealerships. Goal was to get 1,000 residents and 50 businesses in Montgomery County to sign a pledge to make their next car (or fleet purchase) an EV DEP onboarded the Zero-Emissions Vehicle Senior Planning Specialist position (approved in the FY22 budget) in March 2022. DEP's new ZEV Senior Planning Specialist is fully active in these programs MCDOT and DEP coordinated with local	DEP:  - Phase 2 of the Electric Vehicle Purchasing Co-op will launch in FY23, including the possibility of negotiating discounts through the dealership network (subject to supply chain issues getting resolved).  - DEP will research what kind of incentives private commercial vehicle fleets could make use of, including exploring potential financial options for fleet electrification.  - MWCOG is leading a region-wide EV charging planning effort that will get underway in FY23; the County is contributing staff support towards this effort.
		partners, including EV Owners Association of DC (EVADC), on the Go Electric event in March 2022, which featured demonstrations of EV models by owners. The County planned additional electric vehicle showcase events in April-May 2022.  - Coordinated with Poolesville Green for participation in National Drive Electric Week (NDEW) with DEP, including outreach at the Poolesville Day event. An ad campaign for the NDEW event ran on the exteriors of Ride On Electric Buses.  - See related MCDOT progress in T-7.	MCDOT: - Electric Vehicle Purchasing Coop (EVPC) to continue, with increased outreach efforts to businesses in the County to explore how to increase fleet EV purchases/leases and installation of EV charging facilities to support those vehicles Coordinate with DEP to support the Poolesville Green National Drive Electric Week (NDEW) and other related events at Poolesville Day.

		1	T
T-4: Constrain Cars in Urban Areas, Limit New Road Construction	Continue actions to support removal of the extension of the Mid-County Highway from the Council of Governments' regional plan to be adopted in FY22.	MCDOT:  - Removed Mid-County Highway from region's 2022 Transportation Long Range Plan, Visualize 2045.  - Transportation Planning Board (TPB) sponsored and reviewed the Climate Change Mitigation Study (December 2021) and developed goals and strategies intended to reach a regional consensus for Visualize 2045, including pricing and VMT reduction strategies. MC was successful in getting an amendment to the plan passed that increased the goals for Visualize 2045 over those originally proposed.	MCDOT:  - As a result of efforts by MC to amend the goals in the region's long-range transportation plan, "Visualize 2045," the TPB-adopted target for reduction in GHG emissions for the region has now been increased from 32% to 50% by 2030. More ambitious and impactful strategies will need to be adopted by regional jurisdictions in order to meet that goal.  - The long-range fiscally constrained transportation plan "Visualize 2045" will be updated in 2024 with a call for projects to be identified by early 2023. MCDOT will evaluate existing projects and any new projects in both the long-range Plan and the nearterm (6-year) Transportation Improvements Plan (TIP) with regard to their inclusion in those plans. The County may consider dropping major roadway capacity expansion projects already in the plans to help meet the County's and the region's climate goals. The submitted projects from the region will be assessed by TPB on GHG reduction criteria for inclusion in the revised transportation plan.
		M-NCPPC – Parks:  - During COVID, Parks launched Open Parkways program to provide more outdoor space for recreation and exercise by closing portions of the parkway to vehicles on weekends. These sites also connect non-vehicle users to several larger trail systems and parks. These car-free streets are exclusively for pedestrians and bikers; no motorized vehicles are allowed.	M-NCPPC – Parks:  - Due to the overwhelming popularity of the Open Parkways initiative, the program remains.  - With MCDOT launched a pilot program in June 2022 to study the potential of permanently reducing Little Falls Parkway from four lanes to two (one in each direction) between River Road and Arlington Road (1.3 miles). The study will continue through the fall of 2022. The goal of the pilot project is to

			eliminate unintended traffic consequences in the surrounding neighborhoods while providing the long—term benefits of the popular Open Parkways program. If the study is successful, the excess space from the narrowed road will be used to create a new linear park or other recreational amenities, which will be accessible to park users seven days a week.
T-5: Zero Emission Public Buses and School Buses	<ul> <li>Continue development of a zero-emissions transit plan.</li> <li>Place an additional 10 EV transit buses into service for Ride On.</li> <li>Release RFP for next round of electric transit buses.</li> <li>Research hydrogen fueling options for transit and large vehicles and pursue federal grant opportunities (e.g., USDOT's RAISE Grants) for hydrogen fuel cell fueling site and vehicle acquisition.</li> <li>Finalize MCPS order for first 25 EV school buses (expected Fall 2021).</li> <li>Continue regional collaboration with other jurisdictions and transit providers and local collaboration between MCDOT, DGS, MCPS, and others on Zero Emissions Vehicle (ZEV) bus contracting model.</li> </ul>	MCDOT:  - Through the ongoing task to develop the Zero Emissions Bus (ZEB) Transition Plan, MCDOT completed a "quick' transition plan in Q3 to include with the upcoming Low/No grant application at the end of May (Q4). This element of the grant will be for the design and construction of a hydrogen fuel cell station and 13 hydrogen buses for Ride On. In addition, to this task, the team developed a Program of Requirements (POR) for the new bus depot. Development of the PEER analysis/model for the 2027 and 2035 ZEB overall transition plans is ongoing. The ZEB Plan is on track to be completed by mid-2023.  - Received debriefing from FTA with feedback on its prior RAISE grant application. Information obtained was used to inform the Low/No grant application cited above, which includes a proposed hydrogen fueling station and 13 hydrogen-fueled buses for Ride On.  - Supports WMATA's goal to achieve a zero-emissions bus fleet by 2045.	MCDOT:  - Next 10 electric Ride-On buses will be put into service. Ride-On will operate a total of 14 EV buses in FY23.  - If the No/Low Emissions grant application is approved, the County will develop a project to construct a hydrogen station and purchase 13 hydrogen buses.  - Finalize the program of requirements for a new net-zero bus maintenance and storage facility to serve electric buses.

		MCPS: -As of June 28, 2022, MCPS received all 25 scheduled EV buses. There have been a few mechanical problems and recalls, but in total, the buses have been driven more than 20,000 miles with few problems. Testing and data collection continue with a total of 16 to 18 in service at any one time on selected routes and transport students to Falls Church, VA, and Prince George's County. Some buses can manage the entire day on one charge, while others need small recharging to complete the day. We have learned that the ambient outside temperature plays a role in how the batteries perform.	MCPS:  - Continue testing and increasing electric school bus fleet. Use electric buses on summer school routes and increase the number of drivers who are familiar with the buses.  M-NCPPC – Parks:  - Hiring a new fleet manager; the role will include responsibility for electrifying Parks' fleet and assisting the department in greenhouse gas reduction goals.  - 3 new electric trucks and an electric work van were purchased and will become part of the Parks fleet in the upcoming fiscal year.  DGS:  - Issued an RFP for procuring 100 EV Ride On Buses over the next 3 years. FY23 will be the first year of this procurement, and DGS anticipates ordering approximately 45 EV buses in FY23.  - Investigating the possibility of funding additional EV buses.
			- Investigating the possibility of funding additional
T-6: Electrify County and Public Agencies Fleet	• Complete study to right-size the County vehicle fleet and develop a targeted approach to transition the County's fleet to ZEVs, including necessary infrastructure and support facilities.	MCPS: - Purchase order issued for new pilot vehicles, 1 full electric van, and 2 electric-hybrid vehicles; delivery expected early FY23.	MCPS: - MCPS Sustainability Policy (ECA) includes purchasing fleet vehicles that are cleaner fuel or hybrid/electric. Pilots underway Collaborating with PEPCO and solar vendors to support the county infrastructure.

	Pilot test EV police vehicle.		DEP:
	• Pilot test a new type of vehicle		- DEP will coordinate a monthly intergovernmental
	charger which would reduce		meeting between Montgomery County agencies,
	infrastructure/charging network		including MCDOT and DGS, M-NCPPC, and MCPS, to
	constraints for administrative		share and coordinate plans and procurement
	fleet.		strategies for electrification of fleet vehicles.
			DGS:
			- Implementing second phase of the zero-emissions
			plan for County fleet.
			- Work with departments to right-size vehicles and
			re-imagine operations without the use of internal
			combustion engine vehicles.
T-7: Expand the Electric	<ul> <li>Increase the availability of</li> </ul>	MCDOT:	MCDOT:
Vehicle Charging	electric vehicle charging stations	- Finalized guidelines and Council adopted code	- Federal IIJA funding will be made available to the
Network	at public parking facilities and	changes to section 49-11 to allow for	state to expand EV charging capacity along
	other County locations,	homeowner-installed vehicle charging facilities	transportation corridors, primarily US 29, I-495, and
	including M-NCPPC parkland	within the public right of way.	I-270. The State of Maryland will publish a draft plan
	sites.	- With DGS, added 2 EV charging stations to	in July and a final report in August to lay out plans
	<ul> <li>Expand use of the pilot</li> </ul>	Garage 45 in Wheaton for county employee use	for using federal funds under the NEVI (National
	program for residential	for fleet and private vehicles. Planning on adding	Electric Vehicle Infrastructure) program to expand
	charging.	two dual-port EV charging stations to Garage 13	EV charging along these routes.
	<ul> <li>Examine opportunities for on-</li> </ul>	in Wheaton. The stations have been ordered and	MCDOT will be reviewing those plans in coordination
	street charging and/or	electrical contractor will begin prep work shortly	with other County agencies.
	streetlight charging pilot	- Continues to advance partnership with PEPCO	- Add EV charging to additional County parking
	program at selected locations in	to bring 8 dual-port EV charging stations to the	garages to the maximum extent possible, working
	the County.	County Parking Lot Districts (PLDs), 4 to be	with Pepco and other resources.
	<ul> <li>Encourage and, where</li> </ul>	located in Bethesda and 4 in Silver Spring.	- Submitted additional 3 sites for streetlight charging
	possible, require new projects	Planning and design phases are complete, and	for coordination and approval internally (to Division
	to provide EV charging or EV	Pepco has submitted building permits to DPS.	of Parking). After they are approved, they will be
	charging-ready spaces in their	- Installed 42 EV charging station wayfinding signs	submitted to PEPCO for final approval. Final
	parking facilities.	in Bethesda, Silver Spring, and Wheaton. The	approval from PEPCO is anticipated by the end of
	Modify the public benefits list	signs are in and around public parking facilities	July/ early August 2022.
	for site plan approval to	that currently have EV charging stations. The	

encourage or require EV charging stations in a wider range of projects.

- Implement EV charging station wayfinding signage program to facilitate EV access and reinforce awareness of the general public about widespread availability of EV charging.
- Install pilot EV charging station at an MCPS administrative center.

wayfinding signage was installed to assist current EV owners in locating charging stations available in public parking facilities and create public awareness of the County's charging infrastructure to encourage more EV purchasing/leasing. Currently, 20 Level 2 charging

purchasing/leasing. Currently, 20 Level 2 charging stations are available at Bethesda, Silver Spring, and Wheaton parking facilities.

- MCDOT's collaboration with PEPCO regarding streetlight charging is ongoing. PEPCO denied 3 locations previously under consideration.

New/alternate locations for consideration with PEPCO are under development, and an update on viability and PEPCO acceptance should be available for Q4.

# MCGB:

 EV Chargers: Working on an EV charger installation program for affordable rental properties supported by a grant that would help install over 25 EV chargers in these properties.
 Set to launch in summer 2022.

Also funded the installation of 6 dual chargers at Clarksburg Condominiums to support the interest of the condominium owners to meet demand at the property.

# M-NCPPC - Planning:

Implementing EV charging requirements for new projects and as part of the public benefits, list

# DEP:

- DEP will provide staff support to the Metropolitan Washington Council of Governments to develop a regional electric vehicle infrastructure plan.
- DEP will provide outreach and education to condominiums, co-ops, and townhome communities to encourage expansion of EV charging infrastructure in partnership with the Office of Common Ownership Communities, Montgomery County Green Bank, and Department of Permitting Services. In addition, DEP will explore additional programs that streamline and support multifamily communities to install EV charging.
- DEP will coordinate the County's response to funding opportunities for EV charging infrastructure made available through the Bipartisan Infrastructure Law and the MD Zero Emissions Vehicle Infrastructure Plan.

# MCGB:

- Launch affordable rental EV charger program and use the learnings from that effort to assess the ability to provide a scaled program in the County.
- Look to other approaches to support EV Chargers and leverage the business model of the EV Charger program to support financing strategies that would help private property owners undertake EV Charger projects.

# M-NCPPC - Planning:

FY23 approved work program includes conducting a review of the points system in the zoning code for public benefits related to higher density projects.

would require a zoning text amendment to implement. M-NCPPC - Parks: - Currently working with both Pepco and BGE in their respective service areas to install 42 parking

spaces with charging stations (36 spaces with Pepco, 6 spaces with BGE) across 11 parks.

- Spring of 2022, Pepco began construction on 6 charging stations, which will provide 11 parking spaces for charging across 5 parks. Construction was recently completed on EV charging stations in South Germantown Recreational Park and Big Pines Local Park, which are now fully operational. May be a way to begin looking at EV charging infrastructure provisions in the zoning code.

# M-NCPPC - Parks:

-Will continue the installation of Public EV charging stations through the partnership with Pepco and BGE. The second round of EV installation is planned for Fall 2022, once review and permitting is complete. Parks is exploring options to expand the program with other electric utility providers in the county.

- Partnership with Pepco/BGE is in the pilot phase, but if the program goes smoothly, Montgomery Parks would be interested in installing more Pepco/BGE EV chargers at other locations.

# DGS:

- DGS has awarded a contract for the installation of EV charging stations at approximately 65 County facilities geographically distributed throughout the County, including libraries, recreation centers, and swimming pools. All these EV chargers will be publicly accessible. The installation work will get underway in FY23.
- Receive and deploy portable EV chargers.

# MCPS:

- 3 pilot sites identified for EV charging stations. (CESC, Rockville High School, Gaithersburg Middle these stations will be for public use.) One additional site has been identified for fleet vehicle charging.
- Explore an employee campaign/program for public transportation.

T-8: Transportation	Finalize NextGen	MCDOT:	MCDOT:
Demand Management	Transportation Demand	- Finalization of the NextGen TDM regulations is	- Travel Smart Ambassador program is funded in the
and Telework Strategies	Management regulations.	underway prior to submitting for final approval.	FY23 budget. This program will seek to raise
	Implement requirements for	- Implementation of the White Oak TMD is	community awareness of the entire range of
	TDM strategies to be adopted	underway.	transportation options to reduce GHG emissions,
	for new and existing projects in	- Promoting the FareShare program to private	promote resiliency and create a more livable,
	additional areas of the County	sector employers and employees. Many	equitable community. The program will work to
	under NextGen.	employees, including those in the County	reach population subgroups not "tuned in" to typical
	Begin implementation of	government, receive information on available	media and messaging, including vulnerable groups
	White Oak Transportation	transit/vanpool subsidy programs during Benefits	such as lower-income and ethnic minorities, as well
	Management District	Open Enrollment efforts. County government	as suburban neighborhoods where many residents
	Promote use of more	employees are encouraged to participate in the	have minimal knowledge of options available.
	generous transit/vanpool	County's Get-In subsidy program. The County also	- Plans to provide increased outreach in White Oak
	subsidies available to private	offers discounted Capital Bikeshare memberships	and countywide.
	sector employers and	and free Ride-On by showing their County	- Executive regulations for Transportation Demand
	employees through FareShare,	badges.	Management are moving forward.
	and to County government	- Working to help County businesses to support	
	employees through Get-In.	the adoption of TDM strategies. Special efforts	
	<ul> <li>Provide assistance to</li> </ul>	are dedicated to promoting telework, including	
	businesses to support	providing free consulting from national experts.	
	continuing and formalizing		
	telework programs.		
T-9: Traffic Management	Continue installation of	MCDOT:	MCDOT:
Systems	pedestrian HAWK signals.	- Advancing the installation of pedestrian hybrid	- Continuing to work with SHA on traffic adaptive
	Implement adaptive traffic	beacons (PHB or HAWKs) to promote pedestrian	systems, focused on Route 108.
	signal control systems in select	safety when crossing multilane roadways or	- Continuing to install pedestrian hybrid beacons and
	corridors	crossing point where reduced vehicle gaps and	full traffic signals at block crossings to facilitate safe
		higher levels of pedestrian exposure to moving	pedestrian crossings. MCDOT is developing a policy
		vehicle traffic exists. Also, developing a policy	document on where to install these devices.
		document that provides criteria on where and	- Continuing collaboration with MDOT SHA on the
		under what conditions PHBs should be	adaptive Signal corridors. MDOT SHA still has not
		considered.	completed its review of MCDOT recommendations
		- Continue collaboration with MDOT SHA on	due to continued staffing shortages.
		adaptive signal control implementation on MD	

T-10: Electric Vehicle Car Share Program for Low- Income Communities (Not in Climate Work Plan 2022)		108. MDOT SHA has not completed its review of the recommendations because of staffing constraints. MCDOT is encouraging additional progress from the State on this action.	<b>DEP:</b> DEP will explore existing models from other parts of the country for potential replication locally.
T-11: Off-Road Vehicle and Equipment Electrification	<ul> <li>Research hydrogen fueling options for transit and large vehicles and pursue federal grant opportunities (e.g., USDOT's RAISE Grants) for hydrogen fuel cell fueling sites and vehicle acquisition.</li> <li>Introduce legislation to ban the sale and use of gas-powered leaf blower equipment.</li> <li>M-NCPPC – Department of Parks will continue conducting a pilot on commercial-grade electric (battery-operated) landscape equipment, including large-scale blowers to smaller</li> </ul>	MCDOT: - See T-1 above for updated information on the grant efforts. However, the No-Lo grant application does not include heavy-duty off-road equipment at this point. If the grant is successful, however, the hydrogen fueling facility may be able to be used for fueling heavy-duty off-road vehicles in the future A total of 79 electric leaf blowers and string trimmers have been distributed to Highway Services mowing and maintenance crews to replace prior gas-powered equipment. A total of 192 electrical components and accessories, including backpack battery units, batteries, belts, and chargers, were purchased to enable this transition.	MCDOT: - Undertake second phase of its electric mower pilot. The electric handheld equipment and trimmers that were piloted in FY22 worked well, and MCDOT is fully implementing them into the program Purchase 2 new electric mower models that are intended for industrial purposes. If the equipment works as intended, MCDOT will transition all mowing equipment into electric.
	blowers, string trimmers, chainsaws, etc. • Perform evaluation of MCDOT's pilot implementation of electric mowing, string trimming, and handheld blower equipment currently underway	M-NCPPC – Parks: - Coordinating with Park Managers to increase the charging capacity of maintenance facilities to support the transition to both electric vehicles and landscape equipment. Any major renovations or new maintenance yards will be built with the	M-NCPPC – Parks: - Continue to transition small equipment over to electric as end-of-life cycle and funding becomes available.

	and scheduled for completion in fall of 2022.	required charging capacity to support full electrification.  - Committed to transitioning over to fully electric 2-cycle and small gas-powered equipment. In FY22, new fully electric equipment was introduced, including 9 electric zero-turn mowers, electric paint sprayers, weed eaters, and leaf blowers. About \$500,000 of funding was dedicated to purchasing electric equipment.  - Piloted fully electric park maintenance crews in both the Northern and Southern regions. The two crews were provided with a trailer and all-electric weed eaters, edgers, leaf blowers, and stand-up no-turn lawn mowers. The inside of the trailer is outfitted with outlets to charge equipment, which is connected to one external plug at the end of the day. The pilot has been very successful, and Parks will continue to transition crews to all-electric	- Working to transition all our trim crews over to fully electric equipment in trailers outfitted to charge the equipment.  DEP:  - The County Executive submitted gas-powered leaf blower legislation in FY22; County Council will take up this legislation in FY23.
T-12: Advocate for a Vehicle Carbon Gas Tax or VMT Tax	• Explore next steps for state- level advocacy on this issue.	MCDOT: - Participated in discussion with County representatives to State Legislature. The	DEP: - The State Climate and Energy Policy Manager will begin researching this effort in coordination with
		delegation is aware of County's interest in advancing this issue in the next legislative session.	MCDOT staff.

T-13: Advocate for Rail	Identify the critical issues	MCDOT:	
Alternative Fuels	related to this action.	- This action is not yet started. However, the	
(Not in Climate Work		Purple Line will run on electricity.	
Plan 2023)			

Sequestration Actions	FY22 Plans	FY22 Accomplishments	FY23 Plans
S-1: Retain and Increase Forests	<ul> <li>Continue planting and maintaining reforestation by all departments as required for compliance with laws.</li> <li>Continue Reforest Montgomery and manage all Planning Department treerelated programs under one tree czar.</li> <li>Expand the Reforest the Reserve effort focused on reforesting stream valley buffers and areas that need planting.</li> <li>Evaluate tree spacing requirements for reforestation to improve establishment of newly planted forests.</li> </ul>	DEP: - DEP received \$1.5 million from the FY22 Omnibus Appropriations for tree planting, including reforestation. No details have been provided, but plans are underway, and sites are being identified DEP will continue to pursue opportunities for tree planting and reforestation through the 5-million tree initiative as the programs develop. DEP anticipates being a stakeholder on three separate levels, providing technical advice for applicants in Montgomery County, providing assistance with applications to residents, and as an applicant.  OAG: - Work with farmers to plant trees in riparian areas and promote Montgomery Countryside Alliance's Re-Leaf program.	DEP:  - DEP will continue to pursue opportunities for tree planting and reforestation through the 5-million tree initiative as the programs develop. DEP anticipates being a stakeholder on three separate levels, providing technical advice for applicants in Montgomery County, providing assistance with applications to residents, and as an applicant. DEP anticipates applying for funds from the State of Maryland (the 5 million Tree Initiative) for forest reforestation efforts.  - DEP is actively collecting locations for reforestation and for individual tree plantings, including at the Oaks closed landfill site.  OAG:  - Promote tree plantings and find ways to keep forests.
		M-NCPPC Planning:  - Introduced an amendment to strengthen the Forest Conservation Law in April 2022. The Montgomery County Planning Board approved the draft with minor changes, and it was transmitted to the County Council on May 11 for a July 2022 introduction. The bill would increase forest planting and forest conservation requirements for projects subject to the Montgomery County Forest Conservation Law.	M-NCPPC - Planning: - Reforest Montgomery is in its third full year and has increased planting efforts across the county. The program, managed by one Montgomery Planning staffer, now reforests anywhere from 5-10 acres per year and offers an average of 600+ free and discounted trees per year. The Reforest Montgomery program includes efforts to reforest County parkland and private properties protected by easements and offers free trees and a native

# planted within the county. The program focuses these efforts on urban areas of the county or areas where there has been historical forest loss or to reduce runoff and improve stream water quality. - September 2021 Site Plan approvals in the Ten Mile Creek Special Protection Area will result in more forest protection via park dedication and Category I easements: 1. Creekside at Cabin Branch includes 172 acres of forest retention (99% retained) and 82 acres of new forest planted, totaling 255 acres of protected forest (parkland and Cat. I easements). 2. Ashford Woods includes 51 acres of forest retention (87% retained) and 15 acres of new forest planted, totaling 66 acres of protected forest.

tree coupon to reduce the cost of native trees

# M-NCPPC - Parks:

- -Parks' Horticulture, Forestry and Environmental Education Division staff map all dead and hazardous trees removed on parkland. Removals are converted to stumps in the mapping system, and stumps are ground in accessible areas to allow for canopy replacement. Horticulture Staff visits open planting sites via the mapped locations throughout the year to create tree replacement plans. Balled and burlapped trees receive 2 years of aftercare (water, mulch, pruning, IPM services) to ensure long-term survival in the landscape.
- Continues to require mitigation planting for disturbance of forest on parkland, not less than that required of the Forest Conservation Law and

# M-NCPPC - Parks:

- Continue to map tree stumps for canopy replacement.
- Continue to require mitigation planting under the new requirements of the Forest Conservation Law amendments.
- Continue to coordinate with the Planning Department on plantings through the Parks Reforestation Program. Planned plantings for FY23 include: Watts Branch Stream Valley Park: approximately 250 trees across 5.2 acres; Rock Creek Stream Valley Park: 5 large caliper trees; Rosemary Hills Local Park: 2 large caliper trees; Lynnbrook Park: 5 large caliper trees; additional projects will be added throughout the year.

- considerate of assessed land impact, incorporating planting as part of park development, renovation, and stormwater management projects.
- Many of the trees, shrubs, and ornamental plants featured in Montgomery County's park system are grown at the Pope Farm Nursery. The nursery works in cooperation with Montgomery Planning to implement Fee-In-Lieu, and other offsite mitigation required plantings on appropriate parklands through the Parks Reforestation program. In fiscal year 2022, the collaborative program successfully planted 335 native trees and 50 native shrubs across 8 different parks in the county. In total Pope Farm planted 1,500 trees and 1,125 shrubs on parkland this past fiscal year.
- Developed and maintains reforestation planting standards in accordance with best management practices to achieve survivorship and establishment of Piedmont Forest typology.
- The Weed Warrior Program empowers community members to help Montgomery Parks staff manage non-native, invasive plants (NNIs) on parkland and continues to be an essential contribution to protecting forests on parkland. In 2021, contributed 6,627 hours of volunteer work and freed 8,221 trees from NNI vines. Through the beginning of January to the end of May, the weed warrior contributed 4,126 hours of volunteer NNI management and is slated to surpass the volunteer hours of 2021.
- September 2021 Site Plan approvals in the Ten Mile Creek Special Protection Area will result in

- Continue to develop and maintain reforestation planting standards in accordance with best management practices to achieve survivorship and establishment to Piedmont Forest typology.
- The Weed Warriors Program is continuing to train new members and planning workdays for the upcoming fiscal year.
- Urban Forest Patches Program: The Horticulture, Forestry, and Environmental Education Division and Park Planning and Stewardship Divisions have mapped out small urban forest patches in our local, urban, and neighborhood parks. They collected data on species diversity, invasive cover, and understory health of the patches. Most of these patches are not currently managed but serve a deep ecological purpose in areas of the county with low forested and tree canopy cover. Program is in the early stages, and first project is in Carroll Knolls Local Park, implementing NNI and understory plantings. The program will increase forest health and make the patches more resilient to climate change.

		more forest protected via park dedication and Category I easements: 1. Creekside at Cabin Branch includes 172 acres of forest retention (99% retained) and 82 acres of new forest planted, totaling 255 acres of protected forest (parkland and Cat. I easements). 2. Ashford Woods includes 51 acres of forest retention (87% retained) and 15 acres of new forest planted, totaling 66 acres of protected forest.  - M-NCPPC acquired 472.78-acres of property. This land acquisition will create the new Broad Run Conservation Park. Public ownership of this property would ensure long-term preservation and conservation of land that includes: 325 acres of forest, significant areas of contiguous forest and interior forest habitat, and 1.5 miles of Broad Run mainstream and headwater tributaries.	
S-2: Retain and Increase Tree Canopy	<ul> <li>Evaluate tree spacing requirements for street trees to enhance opportunities to shade impervious surfaces.</li> <li>Plant more shade trees by increasing staffing in the Tree Montgomery Program to target neighborhoods where tree canopy is lacking in underserved areas.</li> <li>Administer grant from Casey Trees for tree planting in the public right-of-way.</li> <li>Administer grant to Conservation Montgomery to continue the Home Tree Care</li> </ul>	DEP:  - Tree Montgomery completed a successful planting season by installing more than 1700 trees on more than 380 separate properties. Tree Montgomery began planning for the FY23 season in February and continues to meet with property owners to identify planting locations and species.  - DEP is preparing to fulfill grant opportunities. The FY22 Omnibus Appropriations have been awarded to DEP, but no details have been provided yet. Additionally, the Chesapeake Bay Trust grant, as part of the 5-million tree initiative by Maryland, for 250 trees in urban frontline communities has been awarded to DEP. DEP was awarded a grant through the DNR Trust Fund for a reforestation project at the Wheaton Branch	DEP:  - DEP will recruit for a nature-based climate solutions position in FY23 to assist with ongoing work towards meeting related CAP actions.  - DEP will increase planting under the Tree Montgomery Program in FY23. Due to new hire of a tree planting staff in FY22, DEP expects additional plantings to be made in FY23.  - Several grant opportunities have been confirmed, and plans are underway. DEP has received \$1.5 million through the FY22 Omnibus Appropriations, with half of this targeted for tree planting and the other half for green infrastructure. DEP was awarded a grant through the DNR Trust Fund for a reforestation project at the Wheaton Branch property. DEP will be receiving a \$169,000 grant

101 classes and resources in	property.	from the Chesapeake Bay Trust as part of
multiple languages (already	- DEP reviewed amendments to the Forest	Maryland's 5-million tree initiative and will initiate
offered in English and Spanish).	Conservation Law proposed by Montgomery	planting in fall 2023. DEP will continue to pursue
<ul> <li>Conduct research on micro-</li> </ul>	Planning Department.	opportunities for tree planting and reforestation
forests and edible forests and		through the 5-million tree initiative as the
asses the flow of waste and		programs develop.
wood in the County.		- The Planning Department put forth amendments
		to enhance the Forest Conservation Law; the
		amendments are with Council, and Council is
		expected to take action in FY23. The amendments
		will help with forest and tree conservation during
		development projects that are subject to the Forest Conservation Law.
		- DEP will review the potential for new legislation to
		protect additional trees any time there is
		redevelopment, perhaps using the model of the
		Roadside Tree Law.
		- DEP will continue to implement riparian plantings
		above regulated requirements in stream
		restoration projects.
	MCDOT:	MCDOT:
	- MCDOT planted 1,672 trees in the right-of-way	- Will have additional funding for tree planting,
	in FY22.	enabling the Department to increase the rate of
	- The County Executive transmitted the proposed	tree planting efforts. A total of over \$800K has
	Operating Budget to Council with a	been budgeted for FY23 stump removal and tree
	recommendation to increase funding for stump	planting to improve the urban tree canopy.
	removal and tree planting. Council agreed to fund	- MCDOT submitted a grant application to
	·	•
	substantial increases for this program. Stump	Chesapeake Bay Foundation and Casey Trees for
	substantial increases for this program. Stump removal is necessary to create space for tree	Chesapeake Bay Foundation and Casey Trees for \$800k; should any or all of these funds be awarded,
	substantial increases for this program. Stump	Chesapeake Bay Foundation and Casey Trees for \$800k; should any or all of these funds be awarded they will enhance the Department's tree planting
	substantial increases for this program. Stump removal is necessary to create space for tree	Chesapeake Bay Foundation and Casey Trees for \$800k; should any or all of these funds be awarded

	T	T
	M-NCPPC – Parks:	M-NCPPC – Parks:
	- Increasing focus and prioritization on parks	- Continue to increase focus and prioritization on
	located in Equity Focus Areas to ensure that they	parks located in Equity Focus Areas to ensure that
	are being/have been visited on a regular basis for	they are being/have been visited on a regular basis
	assessment of tree planting/canopy coverage	for assessment of tree planting/canopy coverage
	needs. Montgomery Parks staff are preparing a	needs.
	Forest Conservation Plan to protect existing tree	- The 2022 Urban Tree Summit is set to take place
	canopy in Wheaton Regional Park through the	in September 2023 and is open to the public. There
	Wheaton Regional Park Master Plan.	will be virtual and in-person field days, including an
	- In September 2021, we hosted an Urban Tree	educational tour of Pope Farm Tree Nursery.
	Summit Field Day that was open to the public	-Tree Diversity Planting Plan: The Horticulture,
	with a focus on urban wood waste and utilization	Forestry, and Environmental Education Division
	through a partnership with Baltimore and DC's	(HFEE) mapped out the diversity of current
	Wood waste facilities called Urban Wood	landscape trees and built out a tree diversity
	Utilization: Let's talk shop!	management plan. Each maintenance region was
		given a species and age diversity rating, along with
	M-NCPPC - Planning:	an action plan to increase diversity levels. This will
	- Discussions are underway with MCDOT, DPS and	ensure our current canopy is resilient to climate
	M-NCPPC about re-evaluating the spacing	change and pest/disease. Currently collaborating
	requirements for street trees. The grant that was	with Pope Farm to ensure new plantings follow
	received through the Chesapeake Bay Trust has	recommendations.
	been planned and is being implemented, with	- Preventative Tree Maintenance: In the past Tree
	nearly 100 trees planted in Q2 and an additional	Crews have only been able to perform reactive tree
	150 planned for planting through fall 2022.	maintenance. HFEE urban forestry program in
	150 planned for planting through fair 2022.	instituting a 3-year rotation of preventative tree
		pruning and preventative tree maintenance. This
		help retain our current canopy by improving tree
		health.
S-3: Restore and	M-NCPPC – Parks:	M-NCPPC – Parks:
Enhance Meadows and	- Final plantings were installed for Ken-Gar	- On-Going meadow restoration projects:
Wetlands	Palisades Local Park wetland creation and	Rachel Carson Conservation Park: Project was
(Not in Climate Work	enhancement project. Work began September	started in 2021 and will be approximately 20 acres.
Plan 2022)	2019 on execution of a Wetland Mitigation	Currently working on a 12-acre section adjacent to
	Project at the Ken Gar Palisades park to mitigate	completed 8-acre section.
	i roject at the Ken Gai'r alloades park to ffittigate	completed o dele section.

		wetland impacts incurred through construction of the Purple Line light rail transit project connecting Prince George's and Montgomery Counties in Maryland. Project improvements included removing invasive species within the existing wetlands, expanding wetland areas, and replanting native wetland plant species.	- Locust Grove Nature Center: Project will create a small half-acre demonstration plot for environmental education and pollinator habitant. Meadowside Nature Center: Project includes a 1.5-acre restoration for environmental education and pollinator habitant On-going wetland restoration projects: Little Bennett Regional Park: Just began restoration; project will be 20 acres in size when complete. The wetland will enhance habitat for protected species and is adjacent to Little Bennett creek Rock Creek Regional Park: Project is ongoing and will be approximately 5 acres and include invasive species control. Over 500 native plants will be supplied by Pope Farm and reintroduced by volunteers in the Weed Warrior Program. Black Hill Regional Park: On-going project is a 6-acre restoration along Cabin Branch stream valley, which will likely expand after the current acreage is complete.  DEP: - DEP's Inspection and Maintenance team will conduct and inventory of potential restoration opportunities at stormwater maintenance facilities that are currently maintained in turf, for conversion to meadow habitat.
S-4: Regenerative Agriculture	•Continue working with farmers to encourage regenerative farming practices.	M-NCPPC – Planning:  - Maintains agricultural leases on parkland for farming. These agricultural leases include requirements for nutrient management, soil conservation, and use of cover crops.	M-NCPPC - Planning: - Advanced amendments to Forest Conservation law have been transmitted to County Council. The Planning Department incorporated recommendations of a stakeholder committee. The

	Host educational events about the benefits of regenerative agriculture.	M-NCPPC – Parks:  - Agricultural leases have nutrient management, soil conservation, and use of cover crops.  OAG:  - Work with farmers to utilize food scrap composting. Partnered with the Compost Crew to open 2 compost outposts on 2 farms. The first at One Acre Farm and the second at Butlers Orchard. Partner with Brenda Platt of ILSR to submit an EPA application for funds to set up a composting training site at the AHFP. We heard verbally the application was selected for funding. The Soil Conservation District continues to sign farmers up for the MDA cover crop program and utilize its own separate cover crop program. We work with the UME nutrient management specialist to promote nutrient management practices. The OAG has worked with DEP, MES, and SCA to allow 20-yd deliveries of leaf grow from the Dickerson Composting facility. By allowing smaller deliveries, more farmers can access this product and work to improve soil health.	goal of the amendments is to get closer to a net zero forest loss status.  M-NCPPC – Parks: - Agricultural leases will continue to have nutrient management, soil conservation, and use of cover crops.  OAG: - Continue to promote food scrap composting, cover cropping, nutrient management practices, and leaf-grow deliveries. We will work with ILSR to construct the composting training site at the AHFP and hold trainings.
S-5: Restore Soil Fertility, Microbial Activity, and Moisture Holding Capacity	<ul> <li>Expand commercial food composting pilot and launch residential food composting pilot.</li> </ul>	<ul><li>DEP:</li><li>- DEP continued planting and establishing forests and trees through several programs and grantfunded projects.</li></ul>	<ul><li>DEP:</li><li>Continue planting and establishing forests and trees through several programs and grant-funded projects.</li></ul>

- Host educational workshops and outreach emphasizing soil health.
- Continue the healthy lawns program.
- The Department of Environmental Protection RainScapes program installed over 150 projects on private properties, including conservation landscape and rain garden projects.
- Continued commercial food scraps recycling partnership program, solicited partners that generate food scraps; provided technical assistance and best practice recommendations; helped to set up on-site food scraps separation and storage/recycling containers; provided collection/transportation to a compost facility; provided for processing fees; etc.
- Continued work with businesses, non-profit organizations as well as local, state and Federal government facilities, provided technical assistance and support to establish food scraps recycling programs.
- Launched single-family residential curbside recycling collection of food scraps pilot. Selected a contractor to collect food scraps from participating households; determined areas of eligible households; solicited participation of eligible households; developed and produced educational materials; secured recycling carts, kitchen counter caddies, and compostable liners for up to 1,700 participating households; and more.
- Continued providing outreach and education on the benefits of grasscycling and composting.
- Developed educational materials and training sessions on using rodent-proof compost bins to include food scraps in backyard composting efforts.
- Purchased and delivered two types of rodent-

- The Department of Environmental Protection will continue to expand its RainScapes program on private property through the installation of conservation landscape and rain garden projects (over 150 new projects).
- Continue commercial food scraps recycling partnership program, soliciting partners that generate food scraps; providing technical assistance and best practice recommendations; helping to set up on-site food scraps separation and storage/recycling containers; providing collection/transportation to a compost facility; providing for processing fees; etc.
- Continue to work with businesses, non-profit organizations, and local, state and Federal government facilities, providing technical assistance and support to establish recycling programs for food scraps.
- Continue Phase I and launch Phase II of the single-family residential curbside recycling collection of food scraps pilot. Work will include selecting a contractor to collect food scraps from participating households; determining areas of eligible households; soliciting participation of eligible households; developing and producing educational materials; securing recycling carts, kitchen counter caddies, and compostable liners for up to 3,400 participating households; and more.
- Continue to provide outreach and education on the benefits of grasscycling and composting.
- Continue to distribute educational materials and conduct training sessions on using rodent-proof compost bins to include food scraps in backyard composting efforts.

proof compost bins for testing and evaluation by volunteer residents: one static compost bin model and one dual-chamber tumbler compost bin model.

- Recruited almost 1,000 volunteer residents to participate in the above study through outreach efforts via electronic newsletter articles; website info; email blasts to listservs; presentations to garden clubs and Master Gardeners; information shared with multiple partner organizations; etc.
- Conducted educational workshops and training for backyard composting of yard trim, as well as initial trainings on backyard composting of food scraps using rodent-proof compost bins.
- Provided compost bins to residents directly or via 22 partner distribution locations to encourage managing yard trim and food scraps at the source and create compost for use to improve soil health.

- Continue testing and evaluation of two rodentproof compost bins by an expanded group of volunteer residents: one static compost bin model and one dual-chamber tumbler compost bin model.
- Continue to conduct educational workshops and training for backyard composting of yard trim and backyard composting of food scraps using rodent-proof compost bins.
- Continue to provide compost bins to residents directly or via 22 partner distribution locations to encourage managing yard trim and food scraps at the source and create compost for use to improve soil health.

#### OAG:

- Educate farmers and landowners on using no-till practices, following nutrient management plans, and covering crops. These three practices are the best way to restore soil health. OAG also advocates for farmers to utilize compost whenever feasible.

#### OAG:

- Continue to promote these practices and show the good work farmers do to reduce GHG and reduce pollution to the Chesapeake Bay.
- OAG posts the GHG reduction of agricultural BMP installation; the COMET tool calculates the reduction in GHG for a BMP installed to NRCS standards. OAG posts GHG reduction and N, P, and sediment reductions on its website.
- When the new BDS is hired, OAG can expand its efforts in promoting soil health and the use of compost.

S-6: Whole-System	Conduct research on available	DEP:	DEP:
Carbon Management and Planning	tools.	- DEP successfully secured technical support from the Urban Sustainability Directors Network's Natural Climate Solutions Initiative to identify cobenefits associated with different interventions and conduct a high-level analysis to inform a carbon management and measurement tool.	- DEP, in collaboration with the Urban Sustainability Directors Network's Nature Based Climate Solutions initiative and a workgroup with Planning Department and Department of Parks, will use the Nature-based climate solutions initiative framework to identify co-benefits associated with different interventions. DEP is convening a cross-departmental workshop in early FY23. Using the County's data, DEP and partners will identify ways to tap into the Trust for Public Land's carbon management tool.  - DEP will continue to implement the lawn care program in FY23.  - DEP will continue to plant and establish forests and trees through several established programs and grant-funded projects.  - DEP promotes conservation landscapes through
		M-NCPPC – Parks:  - Held its first-ever urban wood sale on November 13 and 14, 2021, making wood slabs and lumber sawn from our portable sawmill available to the public for purchase. Approximately 8,500 board feet of wood slabs were purchased during the event, which generated \$24,000 in revenue. This revenue will be utilized to support future park projects. Montgomery Parks' urban wood reuse program turns hazardous trees removed from parkland into lumber and other reused wood products in park operations. Based on the success of this wood sale, we look to incorporate public wood sales as a regular event in the program.	the Rainscapes program.  M-NCPPC – Parks:  - Second annual Parks urban wood sale is set to take place in October of 2023.  - Continue to be an active member of natural climate solution working group led by the county.

Adaptation Actions	FY22 Plans	FY22 Accomplishments	FY23 Plans
A-1: Water Infrastructure Resilience	<ul> <li>Develop WSSC service-areawide future conditions flood zone and use this to screen all WSSC horizontal assets for the 100-year storm event projected for 2065.</li> <li>Finalize WSSC Climate Change design guidelines by citing Design Flood Elevations for critical sites.</li> <li>Complete WSSC Calendar Year 2021 GHG inventory and update the WSSC GHG Action Plan.</li> </ul>	WSSC: - The WSSC climate change guidelines are being incorporated into Engineering and Construction design guidelines.	WSSC: - Continue with updates to the GHG plan.
A-2: Repair and Enhancement of Stormwater Conveyance Systems	<ul> <li>Implement CIP work program for repairs.</li> <li>Conduct flood plain study before resizing culverts.</li> </ul>	DEP  - The Department of Environmental Protection, Department of Transportation, and Department of General Services is working with Naval Support Activity Bethesda (NSAB) to prepare a Military Installation Resiliency Review (MIRR) planning study. The MIRR will identify off-base climate vulnerabilities impacting NSAB's onsite water, transportation, and energy operations and propose mitigation actions. The study is funded through a Department of Defense Office of Local Defense Community Cooperation grant -The Department of Environment continued developing the final design for the Wheaton Dam Flood Mitigation project and secured funding from the Maryland Department of Natural	The Department of Environmental Protection will complete the design and permitting for the Wheaton Dam Flood Mitigation project by January 2023, and construction is expected to be completed in late 2024.  -The Department of Environmental Protection will be applying to the United States Army Corps of Engineers for Planning Assistance to the State funding to study the causes of flooding and potential solution to these flooding problems in several watersheds.

Resource (\$110,000) to expand and enhance forested buffers and existing tree canopy on 7.7 acres around the Wheaton Regional Stormwater Management Facility and Wheaton Branch, a tributary to Sligo Creek and the Anacostia River.

#### MCDOT:

- Started construction for the Hidden Valley Culvert.
- Completed construction of Clarksburg Road.
- Started design of Crabbs Branch Culvert, Peach Leaf Court Culvert, and Crystal Rock Drive Culvert, and completed design of the Pooks Hill Road Culvert Rehabilitation.
- Completed construction of Blunt Road South Culvert and the Turkey Branch Parkway Culvert Replacement.
- Conducted maintenance of storm culverts and ditches countywide. Completed a Flood Plain Study for the Clarksburg Road Culvert and initiated Flood Plain Studies for the Wightman Road Culvert and for the Tucker Lane Culvert.
- Progress on other actions includes:
- Pursued funding and started design for the Amaranth Drive Culvert.
- Started construction on the Armat Drive culvert.
- Participated in regular Flooding Task Force meetings.
- Supported DEP on defining the scope for a task to develop a strategy to address flooding county-wide.
- Completed a flood study of the 9/1/22 storm for the Twinbrook/Rockcrest Watershed.

#### MCDOT:

- The CIP budget for stormwater conveyance drains, outfall repairs, and culvert replacement will nearly double in FY23, approximately \$8.8 million more in the FY23-28 CIP for additional permit-related projects. Expanding capacity to undertake stormwater conveyance repairs and culvert replacement. The additional funds will be matched to MCDOT's capacity to advance these projects.

		Began a Riverfalls drainage study.  M-NCPPC – Parks:  Ongoing coordination with MCDOT has resulted in a program to address failing storm drain outfalls and associated downstream channels on parkland. The collaboration continues to implement projects that not only address the aging infrastructure, but also protect eroding banks and promote velocity dissipation and infiltration before the drainage channel reaches a perennial stream.  Has 362 acres of conveyance pending for the Creekside at Cabin Branch and Ashford Woods development plans. The Department has continued to provide guidance and approval of a required Conservation Management Plan for long-term preservation and care of natural landscape remaining for any development within the plan area. This also includes review and approval of a Stream and Wetland Restoration Plan to remediate for past land use that has degraded these resources and the stormwater management plan to ensure regenerative	M-NCPPC – Parks:  - MCDOT was able to secure additional funding for design and construction for their storm drain program. Parks is currently coordinating 3 projects that are set to begin construction in FY23.
A-3: Temperature	Apply for NOAA urban heat	groundwater techniques are being applied.  OEMHS:	OEMHS:
A-3: Temperature  Monitoring and Alerts	<ul> <li>Apply for NOAA urban neat mapping grant.</li> <li>Conduct a campaign to spread the word about Alert Montgomery and how to sign up.</li> <li>Explore options to expand Alert Montgomery messaging,</li> </ul>	- Spring/summer update of the Extreme temperature plan is almost finalized. The group contact list has been updated, Alert Montgomery/Social Media messaging and procedures have been updated, and training provided to Alert Montgomery staff.  - DEP, OEMHS, and HHS met to discuss	- Extreme temperature plan is updated by OEMHS twice per year Working with the state of Maryland (MDEM) on a state-level weather data system that the state will own.

	focusing on underserved communities.  • Update the County's extreme temperature plan to include a climate change lens; determine ways to send messages to broader sectors of the County.	community outreach events, materials, and other ideas for Alert Montgomery enrollment.	OEMHS & DEP:  - NOAA Urban Heat Campaign will be conducted in FY23. The Campaign is currently scheduled for early August. Coordination between NOAA, OEMHS, and DEP is underway. The County will partner with the American Geophysical Union to solicit assistance from a scientist through the Thriving Earth Exchange program to analyze the data gathered by County heat mapping campaign volunteers. Among other outcomes, the results will be used to identify communities to target shade tree plantings on private property and along streets.
A-4: Extreme Weather Energy Efficiency Building Code (Not in Climate Work Plan 2023)	Explore options for adopting resiliency-ready language into the building codes.	DPS: - The 2021 building code cycle is underway; in FY22, DPS has been reviewing the 2021 building codes, including the International Energy Conservation Code, in preparation for adoption in FY23.	
A-5: Climate-Adapted Housing Incentives/Subsidies (Not in Climate Work Plan 2022)		DEP: - DEP received funds in the FY23 operating budget to offer climate resilience funding for lowand moderate-income housing.	DEP: - In FY23, DEP will launch a pilot program that will provide climate resilience funding for low- and moderate-income housing, to fill funding gaps in existing programs that these households may benefit from. Funds will have a broad scope of possible uses to help people stay in their homes and insulate these existing homes from climate vulnerabilities.

			- DEP, through Tree Montgomery and several grant awards, will target frontline communities for shade tree plantings to increase the benefits of shading-built surfaces and AC units.  MCGB: - Work with the County and property owners to understand the needs of affordable rental property owners to meet climate-adapting improvements and determine initial strategies for responding.
A-6: Green/Cool/PV Roof and Pavement Code (Not in Climate Work Plan 2023)	• Continue to improve the energy and green building codes through adoption and amendments. The International Green Construction Code would cover commercial buildings; there is already a requirement for certain aspects of green roofs for commercial projects, and both the energy code and green code have elements for reflectivity/cool roofs (white roof or concrete in place of blacktop).	-International Green Construction Code is a "holistic building code" for new construction. The code applies to all new buildings of more than 5,000 square feet. The new standards address materials, indoor air quality, energy use, and more. One aspect of the code is the zero energy performance index or zEPI. That index shows how well different types of buildings are meeting energy efficiency and performance goals — the lower the score, the better the building is. Goal of a zEPI of zero (producing as much electricity as they use).	
A-7: Green Public Spaces	Implement Green Streets projects.	<b>DEP:</b> - See A-10.	<b>DEP:</b> - See A-10.
- Spaces	projects.	See A-10.	366 A 10.
A-8: Harden Emergency Shelters and Install	Complete the Scotland     Community Contor resilience		DGS: - Scotland Resilience Hub is scheduled for
Resilience Hubs	Community Center resilience hub and solar installation.		- Scotland Resilience Hub is scheduled for completion in October 2022.  - Look to prioritize other neighborhood recreation centers to turn into resilience hubs.

A-9: Mold Protection and Remediation (Not in Climate Work		OEMHS: - Drafting the position description to begin recruitment for the Climate Adaptation Program Manager in FY23. This position will work with HHS and DGS on resiliency hubs.	OEMHS: - Recruit a Climate Adaptation program manager to support this effort.
A-10: Green Infrastructure	<ul> <li>Expand the funding and staffing for RainScapes program, Tree Montgomery, and Watershed Restoration and Grant programs.</li> <li>Explore options for incorporating green infrastructure into building codes.</li> <li>Implement CIP work program for planning and implementation of water quality best management and stormwater management projects.</li> <li>Pursue Congressional earmarks to support additional work in this area.</li> </ul>	DEP: - DEP received \$1.5 million from the FY22 Omnibus Appropriations for tree planting and green infrastructure. No details have been provided, but plans are underway, and sites are being identified DEP completed construction of Glenmont Forest Green Streets, with 53 rain gardens, bio-retention gardens, and tree boxes installed.	DEP:  - DEP is in the process of reviewing Pay for Performance proposals and Invitations for Bids for projects that will include green infrastructure elements.  - DEP's congregations for clean water initiative will lead to green infrastructure planning work in FY23.  - DEP, through Tree Montgomery and several grant awards, will target frontlines communities for shade tree plantings to increase the benefits of shading-built surfaces and AC units.  - DEP will release its 9th RFP for Watershed Implementation grants in partnership with the Chesapeake Bay Trust. This year's RFP will include an expanded request for green infrastructure implementation projects to use the awarded EPA Community Grants, which are part of the \$1.5 million FY22 Omnibus Appropriations.  - DEP will continue training for stormwater BMP inspection and maintenance contractors, including ESD BMPs, and will begin a new program in partnership with the Alliance for the Chesapeake Bay to pilot inspection and maintenance incentives for ESD practices on private property in the

		M-NCPPC – Parks: - Completed 2 of the 4 original stream restorations identified for the County's MS4 permit.	Anacostia watershed, including a Green Ambassadors Program for maintenance assistance.  M-NCPPC – Parks:  - Continue projects to reach the 20% restoration requirement of its untreated impervious area for its Phase II MS4 permit.  - DEP and Parks have signed an MOU to expand this work to include an additional 4 stream restoration and outfall projects.
A-11: Climate Adapted	Explore options through the		
Development Standards	building codes and investigate examples being implemented by other municipalities.		
A-12: Stormwater	Certer mamorpaneres.		
Retention Credit Trading			
(Not in Climate Work			
Plan 2022 and 2023)			
A-13: Ban Stormwater	Continue to push for full		DEP:
Management	compliance with requirements.		- DEP and DPS have an effort underway to review
Requirement Waivers	Examine what other		the costs associated with water quality treatment
	jurisdictions in the region are		waivers.
	doing on this issue.		DPS:
			- The County's stormwater management waiver process is already one of the most stringent in the
			area. DPS and DEP will collaborate in reviewing the
			existing fee structure for stormwater management
			waivers and will propose updates to the
			stormwater management waiver fees.

A-14: Update Floodplain	Complete update of FEMA		DPS:
Maps	floodplain maps by summer of		- Anticipates receiving the preliminary flood maps
	2023.		for Montgomery County from FEMA, which will
	Conduct outreach during flood		update the flood insurance program. Upon receipt
	awareness month (April).		of the flood maps, FEMA will undertake a six-month
			public comment period.
			- Participate in the Maryland Department of the
			Environment stakeholder consultation group to
			revise State stormwater management regulations.
			OEMHS:
			- New OEMHS hydrologist will start and will provide
			subject matter expertise on hydrologic processes.
A-15: Water Supply	Continue to work on special	M-NCPPC – Planning:	M-NCPPC – Planning:
Protection	protection area requirements	- Working on ensuring adequate implementation	-Continuing to apply updated guidelines to the Ten
	that protect the aquifer in the	of the 10 Mile Creek Special Protection Area. The	Mile Creek watershed. Planning staff is a member
	Clarksburg area.	Montgomery County Planning Board approved an	of the Patuxent Reservoir's Watershed Technical
	<ul> <li>Work on ensuring adequate</li> </ul>	update of the Environmental Guidelines for	Advisory Committee. There are ongoing long-term
	implementation of the Ten Mile	Environmental Management of Development in	projects. One project is to develop a watershed-
	Creek Special Protection Area	Montgomery County to include a new chapter	wide geodata base of the Patuxent watershed to
	Master plan.	that covers environmental requirements for	enable the committee to map and analyze
	<ul> <li>Implement water quality best</li> </ul>	development in the Ten Mile Creek watershed,	watershed.
	management practices and	including requirements specific to implementing	- WSSC Water will be hosting the geodatabase to
	stormwater management	the 10 Mile Creek Special Protection Area.	advise the policy workgroup with inter-agency
	facilities in areas where there	Montgomery Planning is continuing to apply	representatives. The committee is also working on
	are no stormwater controls or	these Guidelines and requirements to all	a stream buffer restoration potential analysis to
	inadequate stormwater	development reviews in the Ten Mile Creek	assess the potential for reforesting stream buffers
	controls. Identify sites for	watershed.	in the reservoir watershed as a BMP to help the
	needed water quality treatment	- Approved the Creekside at Cabin Branch and	reservoir move closer to meeting its TMDLs for
	and stormwater management	Ashford Woods Preliminary and Site Plan	phosphorus and sediment.
	facilities for water supply	applications. Planning staff coordinated with	
	protection.	WSSC staff that monitor Little Seneca Lake as part	
		of their reviews. These applications required a	

- Implement stormwater management inspection and maintenance program.
- Conduct water quality improvement activities, projects, and stream restoration and protection activities to incrementally improve water quality in streams located in the county's urban areas.
- Conduct winter salt management activities and expand pet waste campaigns.
- See related actions in S-1 and S-5.

Stream and Wetland Restoration Plan as recommended by the Master Plan. Portions of the streams on these sites that were adversely affected by previous land uses will be restored.

#### M-NCPPC - Parks:

- Parks stormwater management staff ensure non-structural maintenance is completed on 837 SW BMPs in inventory.
- Parks stormwater teams have taken the approach of "helping native plants compete better" by removing undesirable vegetation from planted stormwater facilities and immediately planting desirable natives in dense configurations. This has proven effective in reducing staff time and effort spent on weeding while improving the aesthetic quality of individual sites. Numerous plantings were completed this fall with the expectation that manual weeding will be reduced this spring.
- M-NCPPC Montgomery Parks, completed Stoneybrook Tributary to Rock Creek stream restoration.
- Parks' FY22 Outfall Restoration Program wrapped up with 10 restorations successfully completed.
- Conducts an annual Pollution Prevention Training, which reviews potential pollution sources and discusses best management practices for protecting water sources and preventing pollution at maintenance yards and stormwater facilities. A total of 293 staff were trained in the winter of 2022.

#### M-NCPPC - Parks:

- Parks stormwater management staff will continue to ensure non-structural maintenance is completed on 837 SW BMPs in inventory.
- Continue to include NNI management in the scope of stormwater projects.
- Design and permitting are progressing for Clearspring and Glenallan stream restorations, and Pope Farm tributary is on the list of upcoming stream restoration projects. The MDE SRF Loan will fund the Clearsprings Manor Stream restoration.
- Wildwood outfall stabilization is in the design phase, and the Byeford road outfall restoration is set to be complete at the beginning of FY23. Planned outfall restorations include Flower Avenue Urban Park, Wheaton Regional Park near Parker Avenue, and Yates.
- Annual Pollution Prevention Training will continue in FY23.
- Parks' stormwater retrofits of untreated impervious areas are planned at Maplewood-Alta Vista Local Park, Nolte Local Park, Dale Drive Local Park, and Colesville Local Park.

#### DEP:

- As part of the new MS4 Permit, the County (DEP, DOT, DGS, and MCPS) will start working on its salt management plan (SMP), which must be completed by FY25. The SMP shall be based on the guidance

A-16 Flood Rescue	• Implement a grant project for	OEMHS:	provided on best road salt management practices described in the Maryland Department of Transportation, State Highway Administration's Maryland Statewide Salt Management Plan, developed and updated annually as required by the Maryland Code, Transportation §8-602.1. The County's SMP shall include, but not be limited to: a plan for evaluation of new equipment and methods, and other strategies for continual program improvement, training, and outreach for County personnel and contractors, developing and distributing best salt management practices outreach for educating residents within the County, and tracking and reporting.  - DEP will perform preventative Maintenance inspections on approximately 4,000 SWM BMPs under County jurisdiction and will assure that any identified maintenance needs are addressed.  - Pesticide law, state fertilizer law education.  - DEP submitted legislation in FY22 for onsite septic treatment, Bill 40-21 - Individual Water Supply and Sewage Disposal Systems; it is under Council review.  - Refer to the other CAP actions that mention stream restoration and reforestation projects.
Resources	piloting roadway water sensors.	- The recently installed sensors at dam locations throughout the County through a grant from the US Department of Homeland Security are operational. See G-16 for more details.	- See G-16.

A-17: On-Site Water Reuse (Not in Climate Work Plan 2023)	Work with WSSC to establish jurisdictional overlap to enforce water efficiency and auxiliary water measures in the 2021 International Green Construction Code.		
A-18: Expanded Community Gardens	M-NCPPC – Department of Parks is examining different typologies and models to suit different communities and increase the amount of gardens in parkland.	OAG: - While not a true community garden, the OAG worked with DEP and DGS to locate a county-owned property that would be used for increased production of table food. Several properties were selected if the interested grower works with DGS on the dispensation process.	OAG: - Continue to find ways to produce more local food, work with MFCF and Manna, and work with DEP and DGS to link growers to county-owned land.
		M-NCPPC – Parks:  - As a result of a site suitability study by M-NCPPC – Montgomery Parks, a new community garden is in design for Edgewood Neighborhood Park.  While subject to change, the recommended garden will provide approximately 25-30 plots within about 4,000 square feet of an enclosed area.  - Opened Nolte Community Garden, the first garden of this typology in the County. The garden provides 19 accessible gardening beds sitting atop the foundation of a demolished Park Activity Building. This garden addresses equity goals by engaging seniors and food insecure families in this part of Silver Spring. In addition, this garden has increased biological diversity with the installation of fruit and vegetable plants, annuals, native plants, wildflowers, etc. This brings the	M-NCPPC – Parks:  - Edgewood Community Garden will open in the Spring of 2023; it will help provide healthy, accessible food to this part of the County.  - The Black Hill Community Garden (slated to open in 2023) will be adjacent to the Black Hill SEED classroom, allowing for increased learning opportunities and engagement with the public.  - A community garden is under review in Stonehedge Local Park as a mini-refresher through the Level-of-Effort program.

		program to 12 community gardens across the county.  - Examined suitable parkland sites and generated a list of sites for the next step analysis. Mixed typology gardens would add multiple plots to the program.	HHS: - The Office of Community Affairs is interested in helping the community gardens effort by providing community outreach support and connecting with faith-based organizations that may have land available for farming.
A-19: Advocacy for Off- River Water Storage (Not in Climate Work Plan 2022)		DEP: - The County Executive signed a letter to congress supporting the federal Water Resources Development Act funding a US Army Corps of Engineers study to evaluate options for alternative water supplies for the DC region.	DEP: - DEP will continue to support the effort to get federal funding to complete the necessary studies of alternative water supply options.
A-20: Study Potential for Buildings in the County to Flood and Possible Remedies	Enhance the County's hazard mitigation plan to include climate change.		DEP: DEP is participating in the State's Advancing Stormwater Resiliency in Maryland (A-StoRM) initiative, which will potentially result in updated regulations for stormwater management. The initiative began in FY22 to develop a comprehensive Flood Management Plan for the County will continue. This is a multi-year, multi- stage process involving a range of County departments and agencies that will ultimately lead to specific watershed studies intended to identify the causes of and potential solutions to flooding in the County. The effort will also result in recommendations related to the structure and resources of the County government focused on flooding preparation, response, and recovery.

	OEMHS:  - A consultant has been selected for the Hazard Mitigation Plan, and work will begin in Q1 of FY 23.  - Participating in the flood strategic planning process.  - OEMHS hydrologist is going through the OHR process and should begin in FY23.	OEMHS: - Participating in the flood management study.  MCDOT: - Assist DEP and DPS in participating with the MDE A-STORM stakeholder consultation process Participate in the Jacobs study on flooding.

Governance Actions	FY22 Plans	FY22 Accomplishments	FY23 Plans
G-1: Build awareness among all Montgomery County Government staff about climate change	<ul> <li>Leverage departments' Climate Ambassadors to build awareness.</li> <li>Conduct staff educational sessions about climate change.</li> <li>Develop and define a comprehensive communication and education strategy.</li> <li>Develop and launch a few simple short educational videos/ messages.</li> <li>Incorporate a training/workshop within one of the quarterly Aspiring Leader sessions.</li> <li>Inform new MCG employees of the County's climate initiatives at new employee orientation sessions</li> </ul>	DEP: - G-1, G-2, G-5, and G-6 have been consolidated (see G-2).  M-NCPPC – Parks: - 15 staff from Parks participated in the 3-part Climate Ambassador program hosted by Montgomery County and ACCO.  OHR: - With DEP and the Office of Innovation, the Office of Human Resources Training and Organizational Division sponsored 5 programs in FY22 and developed a comprehensive Climate Change Ambassador Training curriculum to build understanding and engagement in county government staff about climate change. See G-2	DEP: - G-1, G-2, G-5, and G-6 have been consolidated (see G-2).  M-NCPPC – Parks: - Currently in the process of creating a 5-Year Sustainability Plan for M-NCPPC, which will include a 6-month internal stakeholder engagement process. The plan will evaluate the way the agency conducts business through a climate lens, incorporating goals and actions set forth by the CAP. The internal engagement process is intended to identify the intersection of climate change within different divisions of the agency and create internal buy-in by building solutions from the ground up. The Sustainability Plan will be completed in January of 2023.
		for more info.  HHS:  Behavioral Health and Crisis Service (BHCS)  - Developed and conducted a Behavioral Health	HHS: - Build awareness within HHS of the County's climate change efforts and how HHS work dovetails

and Climate Change training for all BHCS staff on June 1, 2022, that featured subject matter expert Robert Gould who presented on the intersection of Climate and Mental Health. The training included staff break-out room discussions to collect feedback on questions like "How is climate change affecting your work and affecting people you serve?" to inform the development of the BHCS FY23 strategic work plan. This training was developed with input from DEP, HHS, and OHR staff and the BHCS Mental Health Advisory Committee.

with climate change. Members of the climate team will present to HHS leadership, managers, and advisory boards and committees on the linkages between public health and climate change.

## Office of Community Affairs

- The Office of Community Affairs (OCA) Green team raised awareness and educated department staff about Climate Change and the climate crisis by:
- Creating an HHS Climate Corner infographic titled "Top 5 Reasons Why HHS Cares About Climate" for submission to the Public Information Office for inclusion in the HHS Director's Corner March newsletter.
- Develop monthly climate awareness presentations to the OCA managers team to raise awareness and educate department colleagues about the intersections of climate change issues, the health disparity work of the OCA minority health initiatives and programs, and the Community Action Agency's work addressing low-income and underserved communities. This included arranging for a presentation to OCA managers by the Montgomery County Food Council to update the group on food assistance

		benefits changes impacting low-income/underserved communities, environmental impacts of food waste, and to discuss opportunities for collaboration.  - Organizing the 1st Annual OCA Park Cleanup at Wheaton Regional Park on April 4, 2022, to commemorate Earth Month. 14 OCA staff participated in the event, including Latino Health Initiative (LHI) and the Community Action Agency staff. Montgomery Parks outreach staff delivered an educational demonstration to increase awareness about the impact of litter, recycling, and the Parks Department's cleanup efforts and provided cleanup supplies to the team, resulting in the collection of multiple bags of waste and recyclable litter.	
G-2: Establish a Climate Change Academy to integrate Climate Change Training into the Professional Development of MCG staff	<ul> <li>Brainstorm and survey departments to define and shape professional development needs.</li> <li>Determine mandatory components of education and training.</li> </ul>	DEP: - Approximately 75 Departmental/Agency Climate Ambassadors have been identified to: 1) mobilize staff to green their department's day-to-day operations, 2) build resilience among vulnerable community members they serve, with a particular focus on how climate change exacerbates existing racial and socio-economic inequities and disparities and, and 3) work as a team with other department Ambassadors to implement and evolve the Climate Action Plan. Ambassadors have participated in four learning sessions, including two "Climate Change 101" sessions with the Association of Climate Change Officers; one with the Innovation Office using the "liberating structures" method to help climate ambassadors launch successful departmental Climate Teams;	DEP: - Ambassadors will come together for monthly learning sessions, alternating between informal "Lunch and Learns" and collective consulting sessions where Ambassadors help others solve challenges (similar to the Troika Consulting model). Consideration is being given to enhanced training on "Flow Leadership" to help Ambassadors catalyze change, and creating Ambassador learning groups based on specific focus areas is also being considered.

and one during which participants shared success stories and strategies to overcome barriers.

Ambassadors have been provided with a Climate Action Strategy Development Matrix and a Top 10 List of Actions to think through what actions to pursue.

#### OHR:

- With the Association of Climate Change Officers, DEP leadership, and Montgomery County Innovation Office, the Office of Human Resources developed and implemented a comprehensive Climate Change Academy Curriculum for Climate Change Ambassadors including the following programs: Climate Change Aspiring Leader Program Kick-Off – November 16, 2021 – Chief Climate Change Officer Adriana Hochberg and CE Elrich hosted this event which introduced the Climate Change Curriculum, Role of the Climate Ambassadors, and Identified best practices to apply within county government. Climate Change Ambassador Training- February 15, 2022 and March 10, 2022 – ACAO and Montgomery County Dept of Environment Protection, and the Office of Human Resources Training and Organizational Development hosted a 2-day 4 module virtual Climate Ambassador Training Program.

#### MCPS:

- Staff participated in the Climate Ambassadors Program hosted by County DEP.

G-3: Incorporate climate competencies into Montgomery County Government job descriptions and Performance Plans (Not in Climate Work Plan 2023)	<ul> <li>Begin review of job descriptions to incorporate climate competencies in positions that are climate relevant.</li> <li>Create climate change competency language.</li> <li>Identify and prioritize with departments the key climate change-related job classifications.</li> </ul>	OHR:  - Defined and reviewed a 3-tier competency model with Climate Team. Model was well received; however, due to other competing priorities, the team recommended placing the department pilot review on hold. The recommendation is to pivot to focus on defining a Climate Change Position Strategy to identify and implement new positions to address the increasing responsibilities related to climate change initially in DEP. See G-4.	
G-4: Identify and create new positions that are needed for the County government to prepare for and respond to climate hazards, implement climate adaptation measures, and reduce greenhouse gas emissions	Through the FY23 budget process, including proposals for new climate positions as needed.	OMB: - The CE's recommended FY23 budget included 16 new positions for the County's climate efforts, including positions to implement Building Energy Performance Standards and address flooding.	OMB: - Continue effort to identify and create new positions needed for the County's climate goals.  OHR: - Refocus efforts to research and define positions, roles, and responsibilities and develop applicable job classifications to respond to DEP needs.
G-5: Establish a cross- departmental Climate Innovation Lab to develop, fund and implement climate and resiliency initiatives	Launch climate innovation accelerator cohort to support the implementation of FY22 CAP projects.	DEP: - G-1, G-2, G-5, and G-6 have been consolidated (see G-2).  CEX: - The Innovation Office led a half-day training using the innovation method of liberating structures to help climate ambassadors launch successful departmental teams.	<b>DEP:</b> - G-1, G-2, G-5, and G-6 have been consolidated (see G-2).
G-6: Designate Climate Ambassadors within	Convene meetings/trainings with departments' Climate Ambassadors and continue the	DEP: - G-1, G-2, G-5, and G-6 have been consolidated (see G-2).	<b>DEP:</b> - G-1, G-2, G-5, and G-6 have been consolidated (see G-2).

each County	process of designating		
department	ambassadors.		
acparement	Share information about		
G-7: Evaluate and update county planning, policy, and operations activities to account for the risks of climate change impacts and prioritize the needs of vulnerable residents	departments' energy usage with ambassadors.  • Update the County's hazard mitigation plan and potentially the critical infrastructure plan to account for climate change.  • Conduct extreme weather-based planning exercises and trainings.  • Coordinate Thrive-CAP implementation through recurring check-in meetings.	M-NCPPC - Planning:  - Thrive Montgomery 2050 is currently undergoing County Council review. Final approval is anticipated by fall 2022. Meetings to coordinate Thrive Montgomery 2050 and CAP implementation will begin after the final plan is approved.  OEMHS:  - Consultant has been selected for the Hazard Mitigation Plan, and work will begin in Q1 of FY 23.  - Held the Emergency Operations Center (EOC) Spring Functional Exercise on 6/22/22. We had a	M-NCPPC - Planning:  - Thrive Montgomery 2050 is currently undergoing County Council review. Final approval is anticipated by fall 2022. Meetings to coordinate Thrive Montgomery 2050 and CAP implementation will begin after the final plan is approved.  - Conduct climate assessments for Zoning Text Amendments and for master plans—Planning Board proposed that the Planning Department should do this instead of OLO under Council Bill 3-22; the T&E Committee agreed to make this change. T&E Committee has held two sessions on this bill, and the bill hasn't gone to the full Council yet. Montgomery Planning has hired a consultant to help develop the methodology and has kicked off the project. Bill 3-22 is being amended to require the Planning Board to begin producing climate assessments for ZTAs and Master Plans as of March 1, 2023.  OEMHS:  - Kick off the hazard mitigation planning process in FY23; anticipate completing the plan in Fall 2023. The hazard mitigation plan will make stronger connections to climate change.
		primer on the Climate Action Plan at the start of the exercise, and the exercise scenario focused	- Planning a functional exercise in the Fall of 2023.

G-8: Evaluate and update county planning, policy, and operations activities to reduce greenhouse gases	• See related activities in B-7, G-7, T-5, and T-6.	M-NCPPC – Planning:  - Continues to achieve positive environmental impacts as a result of implementing digital signature software. In Q2 of FY22, more than 2,300 digital signatures were received for Commission business, equating to a savings of nearly 4,000 gallons of water, over 1,300 pounds of wood, and reduced nearly 215 pounds of waste.	M-NCPPC – Parks:  - The 5-year 2022 Parks, Recreation, and Open Space (PROS) Plan is set to be sent to Maryland Department of Planning on July 1st, 2022. The 2022 PROS Plan will serve as the planning policy for parks and recreation in Montgomery County. The plan addresses climate risks by calling for the creation resiliency plan to improve the ability of park and recreation facilities and natural resources to withstand the effects of climate change.  HHS:  - The Behavioral Health and Crisis Services Division of HHS will draft an addendum to its strategic plan to incorporate climate change considerations more directly into the work of the division.  M-NCPPC – Parks:  - Parks' 5-year Sustainability Plan will include detailed metrics and goals around achieving carbon-free operations by 2035 and will align with the CAP.
greenhouse gases		Commission business, equating to a savings of nearly 4,000 gallons of water, over 1,300 pounds of wood, and reduced nearly 215 pounds of	the CAP.
G-9: Incorporate climate	Participate in Cost of Carbon	OMB:	OMB:
considerations into the	study with the University of Virginia, Environmental Finance	- Departments submitted climate information alongside their FY23 operating and capital budget	- Further, develop the role of climate in the budget process by adding to and/or refining the

County's budgeting processes	Center, and Rotunda Solutions, and incorporate findings into the FY23 budget development process.	requests and the information was included in packets and presentations for the County Executive.	information submitted by departments as part of the justification for their capital and operating budget requests.  DEP:  OMB will continue to refine its set of climate questions and analytical framework. Early in FY23, DEP and the Department of Finance will be exploring modeling approaches to reduce emissions and enhance resilience.
G-10: Develop financing strategies for implementing climate actions and incorporate climate considerations into County finance practices	<ul> <li>Introduce legislation to expand the role of the Green Bank to also serve as the County's Resilience Authority to help finance projects focused on addressing the impacts of climate change, including flooding and other resilience activities.</li> <li>Introduce legislation to expand the scope of the Commercial Property Assessed Clean Energy program.</li> <li>Coordinate with the Montgomery County Green Bank Board of Directors and</li> </ul>	DOF: - Worked with DEP to expand the scope of the C-PACE program through approval of Bill 46-21 - Worked with OMB, DGS, and DOT on financing strategies to transition to an EV bus fleet Bill 44-21 was approved, creating an annual appropriation to Montgomery County Green Bank of 10% of the fuel-energy tax revenues. DOF is responsible for distributing the funds to the Green Bank and monitoring the use of these appropriated funds, beginning in FY23. DOF and OCA developed a Memorandum of Understanding that the Green Bank Board of Directors approved in June 2022 to be executed on or about July 1, 2022.	DOF:  - Develop a monitoring program for the fuel-energy tax appropriation to the Green Bank that will begin in FY23. The monitoring program is intended to confirm that appropriated funds are used in accordance with the authorizing legislation.  - DOF and DEP are responsible for the CPACE program, which the Green Bank administers. New loans are anticipated to be made in FY23 for energy savings projects in accordance with the revisions made in Bill 46-21. DOF will ensure that CPACE loans are accurately reflected on tax bills and monitor CPACE assessment collections.
	staff on development of financing strategies and ideas.	MCGB:  - New Structures: Implemented its newest structure with Sandy Spring Bank, where the Green Bank matched its CLEER loss reserve product with an investment of Green Bank capital in the project loan. This novel structure was used with 2 clean energy transactions with Sandy	MCGB:  - Continue its engagement with the market to assure understanding of the needs and gaps in funding to make clean energy projects work.  - Explore structures and products that could be developed to meet new and emerging needs and revise current products as the market needs

		Spring Bank and will prove to be a model for more flexible investment structures. <b>DEP:</b> - Bill 46-21 amending the C-PACE financing program was enacted on March 15, 2022, and became effective on June 27, 2022 Bill 44-21which will provide 10% of the Fuel Energy Tax to the Green Bank to further its work in the Countywas passed unanimously by Council on February 1, 2022, and was incorporated into the FY23 operating budget.	dictate Expand the amount of private capital that will be brought to the County and make the financing most feasible for the end-user property owners.
G-11: Develop climate, energy, health and racial equity metrics and a data driven assessment and reporting process	<ul> <li>Develop climate metrics with an emphasis on climate equity metrics.</li> <li>Update the climate webpage to display a dashboard of action status updates.</li> <li>Engage community advisory groups in the development of metrics.</li> </ul>	OMB: - Effort was passed on to the Climate Change Officer and DEP during FY22.  DEP: - Engaged with CEAQAC in developing and reviewing initial climate metric considerations.	HHS: - Explore collaboration opportunities with Healthy Montgomery on health metrics and indicators.  DEP: - Update the climate webpage to include climate data and metrics information.
G-12: Formalize the Climate Leadership Team to guide the implementation of climate plan actions (Not in Climate Work Plan 2023)	<ul> <li>Expand the membership of the Climate Leadership Team and include communications/engagement staff.</li> <li>Draft an Executive Order to formalize its role.</li> </ul>	DEP: - Membership of the Climate Leadership Team has also been expanded to include representatives from the Housing Opportunities Commission, Office of Innovation, Department of Health and Human Services, Office of Human Resources, and the Town of Chevy Chase Drafting of Executive regulations is underway to formalize the Climate Leadership Team.	

G-13: Update the	Finalize the County's new	M-NCPPC – Planning & M-NCPPC – Parks:	M-NCPPC - Planning:
County's teleworking and transit benefit policies to encourage MCG staff to reduce vehicle miles traveled	teleworking policy and develop procedures as required.  • Eliminate inefficiencies generated by the County's vehicle use policies through the Zero Emissions fleet transition plan.	- Updated its teleworking policy in fall 2021 to create more flexibility for increased teleworking opportunities. Montgomery Parks and Montgomery Planning have allowed employees to telework up to 2 days/week based on their work program. Hundreds of employees are now teleworking at least 1 day/week.  - Piloting a commuter stipend and benefits currently open to M-NCPPC employees working out of Wheaton HQ. The program is two parts - (1) provides a monthly stipend (based on a telework agreement) to all M-NCPPC employees at Wheaton HQ, including those who walk and bike to work, and (2) provides employees the opportunity to contribute to a pre-tax account for commuter expenses.	- The teleworking policy and commuter stipend are ongoing.
G-14: Establish		OHR: - New Telework Policy implemented in October 2021. 4 new training modules released.	OHR: - Expand resources on managing in a hybrid environment, calculate the impact of Telework Program on GHG emissions, and provide individual consults and workshops to expand access to telework where appropriate.  DGS: - Completing plans for the consolidation of County government facilities to reduce the footprint, associated costs, and energy requirements.
Montgomery County Government Carbon Fund for Air Travel (Not			

in Climate Work Plan 2022 and 2023)			
G-15: Consolidate County climate data	Host a "data retreat" with County departments to develop a comprehensive list of climate data for publicly displaying.	OMB: - Effort was passed on to the Climate Change Officer and DEP during FY22.  DEP: - Created a spreadsheet to track where key climate datasets are housed and how to access them. Instead of a data retreat, a graduate intern met with staff individually to gather data points.	DPS:  - Moving forward with a new database system that will capture more information in support of the CAP, including building profile data. There is an opportunity to capture data points related to solar installations and EV charging systems (particularly for commercial buildings; residential EV charging data is already being captured).  DEP:  - Update the climate webpage to include climate data and metrics information.
G-16: Conduct climate vulnerability detailed assessments	<ul> <li>Implement US Department of Defense resilience grant of NSA Bethesda facility (Walter Reed).</li> <li>See G-7 for related activities.</li> </ul>	<b>DEP:</b> - Began development of a comprehensive Flood	M-NCPPC - Planning: - Flood management study — Planning staff is participating in the team, helping County gather data related to stream valleys, floodplains, GIS, and elevations to help create a more realistic conditions map of the County for stormwater management plan. Will look at every aspect of stormwater management.  DEP: - The initiative began in FY22 to develop a
		Management Plan for the County. This is a multi- year, multi-stage process involving a range of County departments and agencies that will ultimately lead to specific watershed studies intended to identify the causes of and potential solutions to flooding in the County. The effort will also result in recommendations related to the	comprehensive Flood Management Plan for the County will continue.  - DEP continues to partner with DOT and DGS on the DoD NSA Bethesda Resiliency project  - USACE Planning Assistance to States studies DEP will be proposing to USACE several areas for potential studies.

governm response - MCDOT Departm Installati identify of the trans sectors a	and resources of the County nt focused on flooding preparation, and recovery. DGS, and DEP are working with the nt of Defense/NSA Bethesda n and surrounding community to imate change-related vulnerabilities in portation, energy, and stormwater d develop a Resiliency Implementation ne Installation.	- DEP will work in partnership with OEMHS, MCFRS, DOT, and others to implement real-time monitoring of flooding events through the newly installed (FY22) Flood Sensors deployed at 35 locations throughout the County. DEP is working with other County agencies and the Department of Homeland Security to assess the utility and long-term operations of this new system of Flood Sensors DEP Dam Safety Response Program will continue to implement Emergency Action Plans for the 8 dams and 2 levees that DEP is responsible for, including monitoring and maintaining preparedness to respond to storm events that may trigger staff deployment based on predicted rainfall amounts."
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Public Engagement, Partnerships, and Education Actions	FY22 Plans	FY22 Accomplishments	FY23 Plans
P-1: Undertake vigorous public outreach campaign aimed at empowering the public with information on how to reduce emissions and adapt to the impacts from climate change	<ul> <li>Conduct expanded public outreach activities on climate change.</li> <li>Launch the Climate Stories Ambassadors program with a focus on amplifying the voices and perspectives of underserved communities.</li> </ul>	DEP: - Working with community members affiliated with The Climate Mobilization's Montgomery County chapter to disseminate information on the Cool Block, empowering residents to mobilize their communities to take climate action See P-3.  DEP and MCPL: - Co-hosted a Contemporary Conversations session with climate change journalist and author Elizabeth Kolbert.	DEP: - Climate Change Communication Coalition will launch the umbrella campaign for outreach around five areas of GHG reduction: using less energy at home, planting trees, reducing food waste, purchasing flood insurance, and transportation choices See P-3.
		OEMHS: - DEP, OEMHS, and HHS met to discuss community outreach events, materials, and other ideas for Alert Montgomery enrollment in the US 29 corridor.	OEMHS: - Participating in an effort to expand outreach to vulnerable communities in the US 29 corridor and how to expand Alert Montgomery subscriptions in the region of the County.
		HHS:  Charlemos con Zumba - HHS Latino Health Initiative (LHI) conducted 2 6- session, virtual, Spanish language physical activity cohorts (12 total sessions) of "Charlemos con Zumba," or "Lets Chat with Zumba"). Zumba sessions included a presentation and discussion with participants on various climate related topics. LHI partnered with staff from DEP and Montgomery Parks to have the presentations and	HHS: - HHS will support the Alert Montgomery communications campaign to ramp up the number of people living along the US 29 corridor who get signed up for Alert Montgomery emergency notifications HHS will support the development of communications tools that convey culturally-appropriate messages to audiences in multiple languages.

discussions delivered by subject matter experts in Spanish. The Fall 2021 cohort had an average of 13 participants attended the sessions, while the Spring 2022 cohort on average had an average of 30 participants.

## **Climate Stories Ambassadors Project**

- Community Action Agency (CAA), African
American Health Program (AAHP) and LHI met
with DEP and its partners to plan the launch of
the new Climate Stories Ambassadors Training
Project, considering barriers to participation, and
using best practices learned through their
experiences of working with people with lived
experience. This included listening sessions with
Community Action Board leaders, who suggested
framing the program to align closely with specific
health and social, and economic consequences of
climate change which disproportionately impacts
the county's s economically and racially diverse
residents.

## **Graduates of CAA's Community Advocacy**

- -Institute and individuals associated AAHP were the target participants recruited for the first Climate Ambassadors Training Project cohort in the Summer of 2021. 14 CAI graduates applied to the program, and 10 were able to participate. 5 CAI graduates recorded climate stories, which are posted HERE. The sixth video posted on the site features the husband of a CAI graduate.
- DEP and LHI staff worked with the Climate Stories Project Director to adapt the Climate Ambassadors Training into Spanish in order to offer the training to Spanish speakers in the Spring 2022 cohort. Recruitment for the Spanish

## Behavioral Health and Crisis Service (BHCS)

- Development of BHCS's FY23 strategic work plan will incorporate climate as a primary pillar and will include an analysis of staff feedback provided during the June 1, 2022 staff meeting and will consider climate-specific actions such as:
- a) Having more cooling/warming stations for the homeless population
- b) Increase teleworking to decrease traffic and pollution
- o Expanding resources to decrease heating and cooling costs
- c) Development of an interview and storytelling project that shares clinical staff experiences working with clients on the impacts of climate change on behavioral health

language cohort was conducted by LHI, DEP, and other community partners. 43 Spanish-speaking community members were recruited to participate in the 3-session training in Spanish. Participants learned about the impact of climate change in their communities and began documenting their own climate stories using video recording skills developed in the trainings. - LHI contracted a project videographer to conduct 14 participant interviews that will be edited and adapted for future climate promotion projects. Behavioral Health and Crisis Service (BHCS) - In conjunction with the Mental Health Advisory Committee, convened a sub-committee on Environmental and Climate to address the impact of the climate crisis on mental health, community connectedness and resiliency. Community Outreach and Engagement - On June 15, 2022, LHI hosted an online webinar entitled Latin@s' Climate Experience in Montgomery County, to provide insight into Latinos knowledge and attitudes about recycling, community engagement and climate action. LHI staff presented an overview of its climate work, shared examples of how that work intersects with LHI health education and awareness raising efforts and presented the findings from a series of community conversations with representatives from the Latino community regarding recycling and climate change. The webinar included Doug Weisburger from DEP who presented an overview of DEP's climate action plan and highlighted the importance of cross agency

		partnerships in conducting meaningful and effective community engagement related to climate action. 12 participants attended the webinar, including internal and external community partners.  - LHI raised awareness of climate-related issues and promoted climate action by creating monthly social media content, including posts to commemorate Earth Day, Worldwide Water day, bicycle riding as a climate-friendly mode of transportation, and everyday actions to take at home, such as air drying clothing, to save on home energy costs and positively impact the climate.  - LHI staff attended Montgomery County Greenfest 2022 at Brookside Gardens. It reached more than 100 individuals to raise awareness about the intersection of human health and the health of the planet and climate."	
P-2: Conduct an outreach campaign that uses evidence-based communications strategies	Use evidence-based communications strategies in tandem with P-1 and P-3.	OEMHS: - Drafting the position description to begin recruitment for the Climate Adaptation Program Manager in FY 23. This position will provide climate, flood, and related outreach.  DEP: - See P-1 and P-3.	OEMHS:  - Recruit a Climate Adaptation program manager in FY23 to support outreach related to flood, Alert Montgomery.  DEP:  - Utilizing the results from our campaign in Spring 2022, we will create a campaign that uses evidence-based communication strategies along with feedback from the public.  - See P-1 and P-3.

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P-3: Form a Climate	Launch the climate change	DEP:	DEP:
Change Communication	communications coalition.	- The Climate Change Communication Coalition	- The Climate Change Communication Coalition (C4)
Coalition	Coordinate department-level	(C4) was established and is comprised of	will be meeting bi-monthly to discuss the creation
	climate communications.	representatives from 12 different departments	and progress of the outreach plan.
		and agencies. C4 initiated a campaign soliciting	
		feedback from the public on the Climate Action	
		Plan, particularly as it relates to resonant themes	
		that can be used in ongoing outreach.	
		M-NCPPC – Parks:	M-NCPPC – Parks:
		- Is a participating member in the County's	- Parks' Public Affairs & Community Partnerships
		Climate Action Communication Coalition, which	Division remains an active member of the Climate
		met 2-4 times per month throughout the Winter-	Change Communications Coalition.
		Spring of 2021-2022. The Coalition is creating a	
		promotional campaign to educate and inspire the	
		public on simple lifestyle changes people can	
		make to reduce their carbon footprint.	
P-4: Enhance County	Add links to County climate	DEP:	DEP:
websites to focus more	initiatives to the County	- A complete refresh of the County's climate	- The updates to the climate and flood websites will
sharply on climate	homepage, related department	website is underway. The updated website will be	be completed in early FY23.
change	homepages, and other high	linked more directly from the County's main	
	traffic County webpages.	landing page.	
		-The County's flood website is being updated to	
		include additional information and resources.	
P-5: Establish a	Hire a consultant to assist	DEP:	DEP:
Community Justice	with designing the academy.	- New Climate Engagement Program Manager	- Ground the Core and Collaborative Teams in
Academy in which	Identify grant funding to	hired; met with Racial Equity and Social Justice	transformative frameworks such as Community-
Graduating Community	support academy start-up in	Committee to discuss mutual goals, priorities,	Driven Planning, Participatory Action Research, and
Ambassadors	late FY22.	and approaches; established a fully executed	Collaborative Governance; initiate broader
Representing their	Collaborate with community-	contract with an expert consultant; established	community outreach to lay foundation for
Neighbors Conceive and	based organizations on	"working purpose;" established criteria for	community and government collaborators; develop
Co-create Integrated	program design and delivery.	building out the Core Team and Collaborative	high-level, loosely held concept of Community
Health, Equity and		Teams, both comprised of community members	Justice Academy and build mechanisms for

Quality-of-Life Solutions Directly Applicable to their Communities		and government officials; created draft work plan; and held a kick-off meeting with initial Core Team members to explain the approach to building the Community Justice Academy.	community feedback; build community relationships centered around listening, focusing on most impacted and underrepresented communities; conduct power analysis using the Spectrum of Community Engagement to Ownership; create community asset map to identify possible existing similar efforts and potential partners; develop Racial Equity Framework to guide the 'who' and the 'how' of the work; develop curriculum, ambassador structure, Community Justice Fund management, and governance.  HHS:  - HHS will support the development and launch of the Community Justice Academy.
P-6: Use the Climate Energy and Air Quality Advisory Committee as a resource to advise the County	<ul> <li>Support the development of metrics.</li> <li>See related activities in G-11.</li> </ul>	DEP: - CEAQAC continues to meet monthly to advise the County on climate, energy, and air quality issues. In FY22, CEAQAC provided recommendations on the FY23 operating budget, gave guidance to the Montgomery County Public Libraries on a climate speaker series, and developed initial climate metric considerations. CEAQAC also started coordinating climate-related metrics with the Racial Equity and Social Justice Advisory Committee.	DEP: - CEAQAC will continue to meet monthly to advise the County on climate, energy, and air quality issues.
P-7: Facilitate ongoing input from community members on the CAP's implementation	<ul> <li>Participate in community meetings about the Climate Action Plan.</li> <li>Conduct CAP roadshows in community locations to meet people where they are.</li> </ul>	DEP: - The Climate Team discussed the Climate Action Plan and planned implementation at various community events and venues and met with interested community members to identify partnership opportunities. Community meetings	DEP: - The Climate Team will continue participating in community meetings and events to discuss the Climate Action Plan and climate initiatives.

	See related activities in P-5.	included: Faith Alliance for Climate Solutions, National Night Out, One Montgomery Green, Food Council, Town of Kensington, Air and Climate Public Advisory Committee, Rotary, Silver Spring Citizens Advisory Board, MidAtlantic Region Environmental Professionals, Mid-County Citizens Advisory Board, Common Energy's COP26 Climate Action Marathon, Gaithersburg Community Museum, Mental Health Advisory Committee, Councilmember Katz's Student Advisory Group, and Town of Chevy Chase.	
		M-NCPPC – Parks: - In coordination with the County's Climate Action Communication Coalition, Parks began the first phase of soliciting public input in April 2022. The workgroup is asking the public to submit words, phrases, or a sentence that will inspire neighbors to act on simple climate solutions. Parks shared the campaign on social media and e-newsletters through May 27, 2022	
P-8: Engage County artists through public art installations to raise awareness, discussion, and action on climate change	Provide this support through two new outreach and partnerships positions at DEP and leveraging staff capacity in other departments.	<b>DEP:</b> - See P-7, P-9.	<b>DEP:</b> - See P-7, P-9.
P-9: Support the efforts of community organizations, businesses, and associations that	Publicly display the climate change art contest winning entries in the virtual information room and other venues.	<b>DEP:</b> - DEP staffer agreed to serve as a Public Arts Trust Steering Committee member.	DEP: - Capacity permitting, DEP to work with Departmental Climate Ambassadors to work with the Arts and Humanities Council of Montgomery

promote and operationalize equitable climate action			County to pursue public art that raises awareness of climate change.
P-10: Establish a statewide coalition of local governments and youth groups focused on advancing ambitious state climate policy by collectively advocating their positions before the state legislature, Public Services Commission, and the utility companies	Host strategic planning sessions with other local MD jurisdictions to plan advocacy actions for the upcoming General Assembly session.	DEP:  - The Department co-developed the formation of the Maryland Coalition of Counties and Cities for Climate Action (MC4A), a statewide climate coalition of local governments. MC4A has launched and is meeting regularly.	DEP: - DEP will continue to participate in, co-develop, and leverage the local government coalition to advance progress at the State level Climate Interns and DEP's Climate Engagement Program Manager are having exploratory conversations with youth-led organizations on the need for a coalition, with a report finished by Q1 of FY23.
P-11: Establish partnerships with federal agencies located within the County's boundaries on GHG mitigation and climate resiliency efforts	<ul> <li>Implement Department of Defense resilience grant for NSA Bethesda facility (Walter Reed).</li> <li>Collaborate with the National Institute of Standards and Technology to install a GHG monitoring station at a County- owned site.</li> </ul>	DEP: - In support of NIST and Penn State University's climate research efforts, in 2022, Penn State University installed a combined wind/CO <sub>2</sub> sensor instrument at the Montgomery County Yard Trim Composting Facility. For the next 12 months, the instrument will record the CO <sub>2</sub> flux due to the exchange of the atmosphere with pasture lands in a rural, agricultural area like Dickerson, MD Also, see G-16.	<b>DEP:</b> - See G-16.
P-12: Advocate for the continued integration of climate change education into the existing school curriculum	<ul> <li>Elevate climate change content where it already exists in the K-12 MCPS curriculum.</li> <li>Create formal MOU to establish County/MCPS relationships for climate change education and training. Identify County and MCPS lead</li> </ul>	MCPS:  - Work is well underway in science and social studies to identify the myriad of climate	DEP: - Work with MCPS staff and MAEOE (help to monitor the Green Schools process) to ensure that climate change and energy curricula are embedded into the Green Schools process.  MCPS: - Elevating programs through the community superintendents and talking with non-profits about

	teams to ensure flow of	connections in the current curriculum and	suggestful groop schools so that more schools will
			successful green schools so that more schools will
,	support and collaboration.	highlight that content.	want to participate in green schools' efforts.
,			- Aiming to increase the number of green schools.
,			- Create talking points for principals to use at parent
,			meetings, with some background information about
,			climate change education and what's happening,
			helping principals feel more comfortable knowing
,			where it is in the curriculum and be prepared to
			answer tough questions.
P-13: Develop a	Continue implementation of		DEP:
standardized climate	the environmental literacy		- Work with MCPS staff to develop standardized
change curriculum across	curriculum, which embeds		courses for K-12 students.
public schools and	climate change.		
recommend the same for	<ul> <li>Identify curriculum areas</li> </ul>	MCPS:	MCPS:
private schools and home	where additional climate	- As part of the review of the current MCPS	- Develop climate change learning standards
schools	change content could be	science and social studies curriculum, areas are	because they are needed before developing a
	created and integrated,	being identified to embed additional climate	curriculum [between the Office of Curriculum and
	including environmental	change content that addresses the MSDE	Instruction and the Science Office.]
,	justice.	environmental literacy standards (that includes	- Develop a K12 environmental literacy plan that
	Promote climate change	climate change education).	addresses environmental and climate standards. The
	resources developed by		MCPS environmental literacy plan can be shared
	students, such as		with private schools.
	https://climateedu.org		·
P-14: Provide	Continue providing and		DEP:
professional	expanding professional training		- Through the Montgomery Energy Connection
development for	for MCPS staff on sustainability		program, provide presentations and workshops for
educators on climate	and climate change curriculum		teachers and PTA members on how to reduce
change topics	lessons.		energy usage and make changes that will reduce the
,	Conduct climate change		impact of GHG emissions.
	symposiums for MCPS students		·
	and staff.	MCPS:	MCPS:
	Increase the comfort level of	- Several virtual MD Green School support	- On-going training to provide professional
	educators to answer questions	sessions were held in Fall 2021 - Winter 2022 to	development for educators on climate change.
,	about climate change.		MCPS will build on the environmental literacy plan

assist MCPS Green Team Leaders in certifying/recertifying as Green Schools.  Hosted a Fall Symposium to celebrate American Recycling Day. Students, staff, and school-based Green teams learned how MCPS contributes to the 4R's—"Reduce, Reuse, Recycle, Rethink."  P-15: Use school gardens or other outdoor learning facilities as a jumping off point to address a multitude of climate related topics  Amount of the Gardening and maintenance.  assist MCPS Green Team Leaders in certifying/recertifying as Green Schools.  Hosted a Fall Symposium to celebrate American Recycling Day. Students, staff, and school-based Green teams learned how MCPS contributes to the 4R's—"Reduce, Reuse, Recycle, Rethink."  M-NCPPC — Parks:  Parks Community Garden Program Manager serves as a Co-Chair of the Gardening Subcommittee (under the Montgomery County Food Council). This group aims to highlight, advance, and create opportunities for gardening and local food production across the county.  The continue plans for climate change lessons. Whenever a new curriculum is introduced, there funding for professional development.  Whenever a new curriculum is introduced, there funding for professional development.  Whenever a new curriculum is introduced, there funding for professional development.  Whenever a new curriculum is introduced, there funding for professional development.  Whenever a new curriculum is introduced, there funding for professional development.
- Hosted a Fall Symposium to celebrate American Recycling Day. Students, staff, and school-based Green teams learned how MCPS contributes to the 4R's—"Reduce, Reuse, Recycle, Rethink."  P-15: Use school gardens or other outdoor learning facilities as a jumping off point to address a multitude of climate related topics  P-15: Use school gardens or other outdoor learning facilities as a jumping off point to address a multitude of climate related topics  P-15: Use school gardens or other outdoor learning facilities as a jumping off gardens for instruction.  • Continue encouraging MCPS schools to build and use school gardens for instruction.  • Continue to advocate for garden coordinators (both volunteers and paid positions) at MCPS schools to assist with garden building and maintenance.  P-16: Use school gardens or the 4R's—"Reduce, Reuse, Recycle, Rethink."  M-NCPPC – Parks:  - Parks Community Garden Program Manager serves as a Co-Chair of the Gardening Subcommittee (under the Montgomery County Food Council). This group aims to highlight, advance, and create opportunities for gardening and local food production across the county.  Subcommittee (under the Montgomery County Food Council). This group aims to highlight, advance, and create opportunities for gardening and local food production across the county.  Classroom is net-zero water and net zero energy will allow students to track energy production across will allow students to track energy production across will allow students to track energy production across the county.
Recycling Day. Students, staff, and school-based Green teams learned how MCPS contributes to the 4R's—"Reduce, Reuse, Recycle, Rethink."  P-15: Use school gardens or other outdoor learning facilities as a jumping off point to address a multitude of climate related topics  P-15: Use school gardens or other outdoor learning facilities as a jumping off point to address a multitude of climate related topics  Recycling Day. Students, staff, and school-based Green teams learned how MCPS contributes to the 4R's—"Reduce, Reuse, Recycle, Rethink."  M-NCPPC – Parks:  - Parks Community Garden Program Manager serves as a Co-Chair of the Gardening Subcommittee (under the Montgomery County Food Council). This group aims to highlight, advance, and create opportunities for gardening and local food production across the county.  RH-NCPPC – Parks:  - Black Hill SEED (Sustainable Education Every Declassroom is in the design phase and will begin construction in Fall 2023. The classroom is a sustainable, modular learning space that encount creative education through the building's living and local food production across the county.  RH-NCPPC – Parks:  - Black Hill SEED (Sustainable Education Every Declassroom is in the design phase and will begin construction in Fall 2023. The classroom is a sustainable, modular learning space that encount creative education through the building's living and local food production across the county.  Classroom is net-zero water and net zero energy will allow students to track energy production across the county.
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maintenance. will allow students to track energy production a
• Support MCPS schools with rainwater collection. This community space will
creating and using outdoor provide an example of how people can learn in
learning spaces while comfortable and beautiful spaces that are healt
integrating the use of outdoor for both us and the environment. The new Black
spaces into the curriculum.  Community Garden will be sited right next to th
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classroom and will also serve as a learning tool
around sustainable/resilient food systems.
MCPS:
- Authorized a new position in FY23, a Live
Infrastructure Manager, and work is underway t
this new position. The position will keep everyth
green in working conditions and build the capac
people who can keep everything working—to
nurture/encourage people to use what's already
there and expand how it can become a better
learning environment. This effort will encompas
just school gardens; it will be inclusive of everyt
Just school gardens, it will be inclusive of everyt

P-16: Develop increased opportunities for students to participate in climate change learning experiences outside of the classroom

- Host a Youth Climate Summit in Winter/Spring 2022 for MCPS students.
- Identify opportunities for extracurricular activities and Student Service Learning, including local projects at students' schools.
- Increase student opportunities for exposure to careers in the green industry and knowledge of the pathways to get there, including internship opportunities and hands-on experiences with organizations working on climate change.
- Partner with M-NCPPC Department of Parks nature centers as important venues for providing climate change learning experiences for students.

## M-NCPPC - Parks:

- Parks Nature Centers' Mission is to enrich people's lives and bring communities together through unforgettable experiences, meaningful connections, and appreciation for nature. The nature centers also offer a diversity of services to keep up with trending topics and have served as a space to educate the public on climate-related topics through the following programs:
- Parks' Brookside Nature Center offered a self-guided trail program, "Fahrenhike". Participants use a worksheet to guide them through a series of activities and provide real-world examples of how temperature and climate and changes in weather patterns affect plants, animals, and people. There is a specific reference to a warming climate/climate change at the conclusion of the activity.
- Black Hill Visitor Center was successfully recertified, and Meadowside Nature Center extended its certification as a Maryland Green Center with MAEOE (Maryland Association for Environmental and Outdoor Education). The Maryland Green Center award represents a commitment to the Maryland Green Schools Program and requires the centers to demonstrate best management practices for sustainability through waste reduction and habitat conservation. The Nature Centers continue to support local schools with the implementation of environmental literacy and assist them in earning Green School status.
- 2022 Greenfest celebration was hosted in person for the first time in two years at Brookside

## M-NCPPC - Parks:

- Parks Nature Centers will continue providing opportunities for students to participate in outdoor learning experiences that connect back to climate change.
- Black Hill SEED (Sustainable Education Every Day) classroom is in the design phase and will begin construction in Fall 2022. The classroom is a sustainable, modular learning space that encourages creative education through the building's living and technical components. For example, the SEED Classroom is net-zero water and net zero energy and will allow students to track energy production and rainwater collection. This community space will provide an example of how people can learn in comfortable and beautiful spaces that are healthy for both us and the environment. The new Black Hill Community Garden will be sited right next to the classroom and will also serve as a learning tool around sustainable/resilient food systems. The community gardens should break ground in the summer of 2022.

		Gardens through a coalition of public, non-profit, and university partners. There were 5,000 attendees, and it was a chance for residents to learn more about electric vehicles, sustainability/climate action in the county, and more!  - During 2022 Earth Month, Dr. Sacoby Wilson presented at the Montgomery Parks' speaker series about the ongoing development and implementation of the environmental justice mapping tool MD EJSCREEN.  - Black Hill Visitor Center saw over 1,400 students in the spring of 2022 for meaningful watershed field experiences, which often touched upon how climate change affects our local habitats and wildlife.	MCPS:  - Build on the Youth Climate Summit and Town Hall meetings, working with student government, the curriculum office, and science and social studies departments.  - Investigate other student climate programs outside of MCPS and other jurisdictions for potential replication or partnership in the County.
P-17: Develop sustainability goals for schools to reach and provide incentives to do so	<ul> <li>Increase the number of MCPS schools certified as Maryland Green Schools, focusing on middle schools.</li> <li>Identify ways to provide stipends for leaders of Green Schools programs.</li> </ul>	MCPS: - MCPS Board of Education approved a new Sustainability Policy on June 28, 2022. Over 1000 participants engaged in information sessions, and over 100 written comments were received, with the majority supporting the new policy.	<ul> <li>MCPS:</li> <li>Begin implementation of the Sustainability Policy (ECA).</li> <li>MCPS schools are required to complete a sustainability action plan. The form provides schools with an opportunity to reflect on where they are and where they want to go.</li> </ul>

			<ul> <li>Division of Sustainability will share data with schools and give them real-time information so they know how their schools are performing.</li> <li>Division of Sustainability will continue working with schools to support individual schools' efforts.</li> </ul>
P-18: Encourage climate change action at home	<ul> <li>Expand the MCPS Community Resources webpage with information on what students and families can do at home to tackle climate change.</li> <li>Promote energy awareness during Energy Action Month in October.</li> <li>Partner with Parent Teacher Associations to use School STEM nights as opportunities to talk to parents about climate change action at home.</li> </ul>	MCPS: - MCPS continues to partner with DEP on food composting at 2 central locations, and staff and students have begun composting programs at 13 schools. Staff has developed Best Practices Documents for Food Sharing Tables and supported implementation at several schools, to a total of 42 schools. Several other streams for recycling (markers, batteries, etc.) were initiated, and about 80% of the schools participated in some fashion in at least one of the new FY23 initiatives.	MCPS: - Expand on FY22's efforts in partnering with PTAs. Everything done at school is consistent with what students can do at home. MCPS is working on "building a bench" to ensure long-term continuity Investigating a potential partnership with MCPL for books with green themes; MCPL summer reading challenge—including green-themed books and practices.  DEP: - Through the communication plan and outreach efforts, we will reach 1000 families and encourage them to take climate action in their homes.
P-19: Establish cross- departmental partnership to facilitate implementation of climate goals at County schools	Establish a mission statement for this group. Determine department/agency participant list and begin convening meetings.	MCPS: - Met monthly with various agencies to solve related issues.	MCPS:  - Convene the cross-departmental partnership meetings quarterly or as needed. Staff will develop agendas in advance with a specialized time for the educational/curriculum piece vs. the operational discussions to enable more focused discussion.

Economic	FY22	FY22	FY23
Development	Plans	Accomplishments	Plans
Actions			
Development	Economic Development Plan, an economic inclusion strategy based on the CAP, including identifying actions with high- job creation potential and career pathways for	- Emerald Cities Collaborative completed the "High Road Economic Inclusion Framework for an Equitable Climate-Ready Economy" with recommendations on a) training a diverse and inclusive workforce that meets the demand for the thousands of green jobs generated by the	-Hire Green Workforce Liaison to help align the County's Climate Action Plan with WorkSource Montgomery's Local Area Workforce Plan and the Office of Procurement's equity and inclusion goals; jumpstart the development of an anchor strategy to align major County anchor institutions' food
	underrepresented and historically marginalized people. • Complete analysis of opportunities to transition "legacy businesses" (those that contribute to community stability and identity) into worker-owned coops, particularly those with the	CAP and ensures that these jobs are accessible and lead to career pathways and b) aligning and leveraging local anchor institutions' procurement to drive the County's climate goals by procuring local, organic food from our Agricultural Reserve. In addition, Project Equity completely analysis evaluating the opportunity to transition legacy businesses into worker-owned businesses to enhance economic stability, build local resilience, and increase community wealth for underserved	purchasing with the County's climate, resilience and food security and sustainable agriculture efforts; enhance support to Impact Silver Spring to advance its existing work supporting and expanding worker-ownership business models.
	greatest potential to advance racial equity and contribute to the County's resiliency and climate change goals.	community members.	

Zero Waste	FY22	FY22	FY23
Actions	Plans	Accomplishments	Plans
Zero Waste Actions (Not in Climate Work Plan 2022)		DEP: - Zero waste actions related to food scraps composting are described in S-5.	DEP: - Zero waste actions related to food scraps composting are described in S-5 In coordination with the Solid Waste Advisory Committee, DEP will create a tracking mechanism for regularly reporting on progress related to Zero Waste activities.

## **ACRONYMS**

- AAHP: African American Health Program
- AHFP: Agricultural History Farm Park
- BDS Business development specialist
- BEPS: Building Energy Performance Standards
- BOE: Board of Education CAA: Community Action Agency
- CAI: Community Advocacy Institute
- CAP: Climate Action Plan
- CBT: Chesapeake Bay Trust
- CCE: Community Choice Energy
- CEAQAC: Climate, Energy, and Air Quality Advisory Committee
- CE: County Executive
- CEX: County Executive Office
- CIP: Capital Improvements Program
- C-PACE: Commercial Property Assessed Clean Energy
- DEP: Department of Environment Protection
- DGS: Department of General Services
- DPS: Department of Permitting Services
- EV: Electric Vehicle
- FEMA: Federal Emergency Management Agency

- FIN: Department of Finance
- FTA: Federal Transit Administration
- FY: Fiscal Year
- GHG: Greenhouse Gas
- HAWK: High-Intensity Activated crosswalk
- HHS: Department of Health and Human Services
- HOA: Homeowners Association
- HOC: Housing Opportunities Commission
- IECC: International Energy Conservation Code
- ILSR: Institute for Local-Self Resilience
- IGCC: International Green Construction Code
- KW: kilowatt(s)
- KWh: kilowatt hour(s)
- LHI: Latino Health Initiative
- LLC: Limited Liability Company
- MCCPTA: Montgomery County Council of Parent-Teacher Association
- MCDOT: Montgomery County Department of Transportation
- MCG: Montgomery County Government
- MCPD: Montgomery County Police Department
- MCPS: Montgomery County Public Schools
- MDOT: Maryland Department of Transportation
- M-NCPPC: Maryland-National Capital Park and Planning Commission

- MCRA: Montgomery County Revenue Authority
- MORE: Montgomery County Racial Equity FY22 Climate Work Plan Quarter 2 Updates 63
- MOU: Memorandum of Understanding
- MSDE: Maryland State Department of Education
- MTA: Maryland Transportation Authority MW: megawatt(s)
- NOAA: National Oceanic and Atmospheric Administration
- -NREL: National Renewable Energy Laboratory
- NSA: Naval Support Facility
- OAG: Office of Agriculture
- OEMHS: Office of Emergency Management and Homeland Security
- OHR: Office of Human Resources
- OIR: Office of Intergovernmental Relations
- OMB: Office of Management and Budget
- OPI: Office of Public Information
- PEPCO: Potomac Electric Power Company
- PSC: Public Service Commission
- PV: Photovoltaic
- RAISE: Rebuilding American Infrastructure with Sustainability and Equity
- RFP: request for proposal
- SHA: State Highway Administration
- SSL: Student Service Learning
- TPB: Transportation Planning Board

- UMD: University of Maryland

- UME: University of Maryland Extension

- USDOT: United States Department of Transportation

- WMATA: Washington Metropolitan Area Transit Authority

- WSSC: Washington Suburban Sanitary Commission

# **CONTACT INFORMATION**

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