



PlanHoward 2030

2019 Mid-Term Monitoring Report

January 2020

Howard County, Maryland

PlanHoward 2030: Mid-Term Monitoring Report

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Prepared By:

Howard County Department of Planning and Zoning (DPZ)
Division of Comprehensive and Community Planning (DCCP)

Contributing Howard County Agencies:

| | |
|-------|---|
| DCRS | Department of Community Resources and Services |
| DF | Department of Finance |
| DFRS | Department of Fire and Rescue Services |
| DHCD | Department of Housing and Community Development |
| DILP | Department of Inspections, Licenses and Permits |
| DPW | Department of Public Works |
| DPZ | Department of Planning and Zoning |
| DRP | Department of Recreation and Parks |
| HCHC | Howard County Housing Commission |
| HCAC | Howard County Arts Council |
| HCC | Howard Community College |
| HCEDA | Howard County Economic Development Agency |
| HCHD | Howard County Health Department |
| HCLS | Howard County Library System |
| HCPD | Howard County Police Department |
| HCPSS | Howard County Public School System |
| OB | Office of Budget |
| OCS | Office of Community Sustainability |
| OF | Office of Finance |
| OT | Office of Transportation |

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Introduction

[PlanHoward 2030](#) was adopted in 2012, as Howard County's General Plan update. It provides long-range policy guidance for public services and the general land use, economic development, and conservation practices to be followed through the year 2030. The Plan was prepared by the Department of Planning and Zoning (DPZ) and includes over 360 Policies and Actions requiring regular County agency reporting on implementation progress. As set forth under Policy 2.1, c., the *2014 Initial Review* was prepared for the County Council as a baseline for documenting agency implementation efforts. In 2016, the [Short-Term PlanHoward 2030 Monitoring Report](#), as set forth under Policy 2.1, b., was prepared and submitted to the Planning Board and County Council, identifying agency progress within three years following the initial review. This *2019 Mid-Term PlanHoward 2030 Monitoring Report* (mid-term report), also set forth under Policy 2.1, b., provides the Planning Board and County Council with agency progress on implementing [PlanHoward 2030](#) policies and actions within four to seven years of the Plan's adoption.

Following the presentation of the *2014 Initial Review* and the [2016 Short-Term PlanHoward 2030 Monitoring Report](#), the mid-term report is formatted as a supplement to the Policies and Implementation Actions Summary Matrix in Appendix A of the Plan. The Matrix identifies a recommended timeframe (short-, mid-, long-term and/or ongoing) for completing each Implementing Action. The mid-term report identifies the agencies working on implementing each policy and provides a summary statement of their progress on each action. Given the Plan's many policies and actions, agency progress statements are crafted to be as concise, as well as complete, as possible.

This Mid-Term Monitoring Report is presented as the County's begins our next General Plan Update. Announced on June 11, 2019, this multi-year update will replace [PlanHoward 2030](#), and will serve as the County's policy document for decisions related to development, land preservation, changing demographic and employment trends, environmental sustainability, capital projects, County services, and other key land use issues. Once the new general plan is adopted, additional long-term monitoring for [PlanHoward 2030](#) will no longer be necessary. The updated Plan will provide new policy direction and will address future monitoring needs to ensure that county actions are consistent with new overarching planning goals.

SECTION I – INTRODUCTION**Chapter 1 – Quality of Life & Sustainability (no policies and actions)****Chapter 2 – Public Participation****Policy 2.1 Promote dialog throughout development and implementation of *PlanHoward 2030* with a broad range of community participants including those groups who are underrepresented or are part of a special population.****a. Involvement. Engage the full spectrum of the County's population in planning and implementing actions. (DPZ)**

The following initiatives were undertaken by the Department of Planning and Zoning (DPZ) during the reporting period:

- Launched the [PlanHoward Academy](#) in FY17 as part of public education and outreach. This free, five-week citizen planning course was designed by the Department to provide diverse groups of residents an understanding of how to navigate the County's development and zoning regulations to better participate in the planning and land development process. The Academy was held in the fall of 2017, spring of 2018, and the winter and fall of 2019. Since its inception more than 100 residents have completed the course, including five elected officials, two Planning Board members, 17 Homeowners Association members, and 13 who participate on local community boards or committees.
- Partnered with Leadership Howard County in 2017, 2018, and 2019 to speak at their seminars on growth and development.
- Launched an assessment of the County's development regulations in 2016 and engaged nearly 500 residents and stakeholders in more than 40 meetings to discuss what should be improved in the existing regulations. This outreach and an online survey resulted in more than 700 comments. The Howard County [Development Regulations Assessment](#) was completed in January 2018.
- Staffed advisory boards for various planning initiatives. Served on the Ellicott City Partnership Board, which engaged residents and business owners on community Main Street efforts. DPZ also served on the Ellicott City Horizon Council, which engaged Horizon staff, HCPSS students, school counselors, and community advocates on community topics and efforts.
- Participated in listening sessions and stakeholder meetings conducted by the Maryland Department of Planning ([MDP](#)) for the development of a new state development plan, [A Better Maryland](#).
- Collaborated with stakeholders to obtain and reapply for various State program designations. Howard County has three Sustainable Community designations: Ellicott City (2012, 2017), North Laurel-Savage (2014, 2019 pending reapplication), and Long Reach (2016). Ellicott City has also maintained its Main Street designation since 2014. These designated areas are eligible for State revitalization funding..
- Developed several virtual web surveys, web apps, and online tutorials to enhance public access to planning information. These included online workshops, an interactive mapping app, a search development plans web page, a public meetings app, and a community registration app. These applications provide information on plans that are either in-process or approved, allow community organizations to register with the County, and provide County mapping data. DPZ developed a tutorial to walk citizens through steps to determine what uses are permitted on a County parcel. The search plans web page provides development plans for historic and current projects.
- Participated in community "pop-up" events for the Ellicott City Watershed master planning effort at the 2017 Ellicott City Music Fest and the May 2019 Ellicott City Soak It Up Community Gathering sponsored by [Howard EcoWorks](#).

b. Monitoring. Engage diverse stakeholder groups in the monitoring process with the first monitoring report due three years after plan adoption and the second monitoring report due five years after the first report. (DPZ)

DPZ engaged many stakeholder groups in a year-long planning effort to assess the County’s current Zoning, Subdivision and Land Development Regulations. The 2016-2017 assessment used extensive public outreach with citizens and stakeholders to examine strengths and weaknesses of the current land development regulations and development recommendations for improvement. Nearly 500 residents and stakeholders participated in more than 40 meetings to discuss what should be improved in the existing regulations. This outreach and an online survey resulted in more than 700 comments. The Howard County [Development Regulations Assessment](#) was completed in January 2018. A key frequently heard comment from the public was that there was a need to accelerate a general plan update. A General Plan update will begin in 2020.

c. Initial Review. Prepare and present to the County Council an initial review of *PlanHoward 2030* by September 1, 2014. (DPZ)

Initial Review was completed in 2014. No further action is needed.

SECTION II – ENVIRONMENT

Chapter 3 – Environmental Protection

Policy 3.1 Ensure the adequacy of wastewater treatment capacity.

a. Plant Expansion and Upgrade. Accommodate flows from projected growth in the Planned Service Area at the upgraded Little Patuxent Water Reclamation Plant. (DPW)

The Little Patuxent Water Reclamation Plant secured a major customer for effluent reuse, which allows a viable program to reduce nitrogen discharge. An eighth plant addition to upgrade and replace solid handling systems is pending regulatory state requirements for bio-solids management.

b. Flows and Nutrient Loads. Require that properties added to the current Planned Service Area (PSA), large redevelopment sites within the PSA, and large sites with zoning intensification within the PSA minimize increases in flow and the nutrient concentration in flow sent to the wastewater treatment plants. (DPW)

See Policy 8.4 a

- c. Wastewater Reuse and Nutrient Trading. Encourage the State to expand options for wastewater reuse and nutrient trading to reduce nutrient flows and help maintain the nutrient cap at the Little Patuxent Water Reclamation Plant and the Patapsco Waste Water Treatment Plant. (DPW)**

See Policy 3.2 e

Policy 3.2 Reduce pollution loads to surface and groundwater.

- a. Stormwater Utility. Institute a dedicated fund to ensure increased and sustained funding for stormwater and watershed management programs. (DPW, OCS, DRP)**

The County Council adopted CB8-2013 to create a dedicated Watershed Protection and Restoration Fund and associated fee for stormwater and watershed management. The following initiatives were undertaken during the reporting period:

- Evaluation and adoption of CB20-2016, authorizing additional credits toward the Fund.
- Evaluation and adoption of CR37-2016, the updated schedule of various charges related to the Fee.
- CR78-2019 updated the scheduled of rates for the Watershed Protections and Restoration Fee.
- Evaluation and adoption of CR122-2019, updating the Storm Water Management Fees-in-lieu. The Storm Water Management Fees-in-lieu (CR122-2019) doubled the fees-in-lieu to construct stormwater management from \$72,000 to \$175,000 per acre foot of water storage. To determine these new fees, the County conducted case studies of existing stormwater management ponds to arrive at a per acre foot cost to store stormwater. The fees are to be paid if geotechnical issues exist that make managing the short duration, high intensity storm impossible on-site and there are no opportunities to implement stormwater management off-site within the same watershed.

- b. State Grant Funds. Conduct public outreach and education to encourage use of State grant funds for septic system upgrades to nitrogen-reducing systems when the funds are available on a statewide basis. (DPW, OCS, HCHD)**

The following initiatives were undertaken during the reporting period:

- The Howard County Health Department's (HCHD) Well and Septic Program developed a [website](#) with information on the state's Bay Restoration Fund. The [website](#) provides links to fact sheets and to the [Maryland Department of Environment](#) (MDE) Bay Restoration Fund [website](#).
- HCHD inspectors recommended to homeowners the installation of Best Available Technology (BAT) using Bay Restoration Fund grants, when a septic system needed to be repaired (and qualified under the Bay Restoration Fund priorities). New HB-12 Grants bolster these efforts by contacting owners to ensure that BAT system maintenance is on-going and notify owners if the system is out of compliance.

c. Financial Incentives. Provide financial incentives such as tax credits, low-interest loans, and grants to promote the use of nitrogen-reducing treatment for new and upgraded septic systems. (DPW, OCS)

The following initiatives were undertaken during the reporting period:

- The Office of Community Sustainability (OCS) initiated the Septic Savers program in 2017 to promote septic system maintenance on individual properties. Properties with septic tanks pumped every three years are eligible for a \$100 reimbursement.
- The Department of Public Works added two projects to the Shared Septic System program (Belvedere Estates and Highland Reserve), under which the County is responsible for the operation and maintenance of the system. Four additional projects are pending incorporation.
- OCS Partnered with the University of Maryland Sea Grant Extension and the Howard County Health Department to offer free educational septic workshops for residents to learn how and why they should care for their systems beyond just pumping out the tank.

d. Inspections and Maintenance. Establish and maintain a long-term septic system inspection and maintenance infrastructure for nitrogen-reducing systems. (DPW, OCS)

OCS established a Septic Savers program, which incentivizes residents to properly maintain their septic systems through workshops, information sharing, and a \$100 rebate once every three years when a system is pumped. No inspection, beyond requiring proof of pump from the hauler, is done by the County.

e. Nutrient Trading. Explore the potential for cross-sector nutrient trading to utilize the most cost-effective nutrient reduction strategies. (DPW, OCS)

While MDE has been evaluating a nutrient trading program, the state has not yet implemented a program. Internally, the Department of Public Work's (DPW) Bureaus of Utilities and Environmental Services have been evaluating the use of nutrient reduction credit at the Little Patuxent Water Reclamation Plant (LPWRP) for stormwater credit, in conjunction with state watershed protection mandates. Assessments over the past five years indicate credits associated with the LPWRP have not been warranted; however, there is a greater chance of needing credits in the next five-year period. The following initiatives were undertaken during the reporting period:

- Awarded nearly \$2 million in 2019 through the Clean Waters Commerce Act Grant from MDE. As part of state bay restoration funding, the County is evaluating the grant for nutrient reduction credit by improving the LPWRP's performance per pound discharge for nitrogen and phosphorous.
- Participated in the multi-jurisdictional [Maryland Association of Municipal Wastewater Agencies](#) to advocate for wastewater policy with the state legislators.

Policy 3.3 Use watershed management plans to guide the protection and restoration of water resources.

- a. Watershed Management Plans. Prepare comprehensive watershed management plans for all watersheds, to set priorities and guide efforts to protect, restore, and improve the County's water resources. Complete and update all watershed management plans on a regular cycle. (DPW, OCS, DPZ, DRP)**

The following DPW initiatives were undertaken during the reporting period:

- Completed annual National Pollutant Discharge Elimination System Stormwater Management Permitting reports.
- Published the [Patuxent River Watershed Assessment Report](#) in January of 2017. This report includes the Patapsco River and Mainstem of the Patuxent River watersheds. The County conducted public meetings in Summer 2016 and January 2017 to report on the findings of field work results, to describe the next steps in the assessment study, to review possible restoration techniques, and to discuss its countywide plan for meeting local and Chesapeake Bay Total Maximum Daily Load (TMDL) goals.

- b. Forest Cover and Riparian Forest Buffers. Establish and achieve measurable goals for forest cover and riparian forest buffers in all County watersheds. (DPW, OCS, DPZ, DRP)**

- DPW collected all tree planting results from other agencies for permit reporting. Howard County continued to plant trees through forest conservation, riparian buffer, and stormwater initiatives.
- The Department of Recreation and Parks (DRP) Stream ReLeaf Program planted the following number of trees in riparian forest buffers: 1,004 in 2016, 469 in 2017, and 414 in 2018.
- OCS with DRP to create the Turf to Trees program. The following number of trees were planted through the Turf to Trees program: 1,157 in 2016, 1,464 in 2017, and 1,112 in 2018.
- OSC worked with DRP on the Students Branching Out program. Under this program, 450 students planted 495 trees on school grounds and the following number of trees (by number, acreage, and stream length) were planted along streams: 2016 (1,500 trees, 18 acres, 1,270 feet of stream); 2017 (1,811 trees, 20.14 acres, 1,760 feet of stream); and 2018 (2, 250 trees, 15.05 acres, 2,080 feet of stream).
- DRP recorded the following acres of forest conservation easements (based on digitized easements): 2016 (233 acres); 2017 (282 acres); 2018 (222 acres); and 2019 (138 acres).
- DRP planted approximately 1,750 native trees and shrubs at the Robinson Nature Center, as follows: 450 in 2016; 600 in 2017; 500 in 2018; and 200 in 2019.
- DRP planted 564 native trees and shrubs in the Middle Patuxent Environmental Area as part of habitat restoration and management efforts.
- DPW completed [Watershed Management Plans](#) to identify opportunities to plant forested stream buffers and new forests.

c. Resident Participation. Encourage active participation of individuals, businesses, and local community and environmental organizations in restoration activities. (DPW, OCS, DPZ, DRP)

The following initiatives were undertaken during the reporting period:

- Since the mid-1990s, DRP has actively recruited volunteers and tracked efforts to remove trash and debris from Howard County's waterways. Since 1996, 2,622 people have spent 5,806 hours cleaning County waterways. These volunteer efforts continued during this reporting period.
 - In FY 2016, 36 volunteers spent 74 hours collecting 333 pounds of trash and an additional 213 pounds of bottles, cans, tires, and scrap metal, which were recycled.
 - In FY 2017, 28 volunteers spent 77 hours collecting 625 pounds of trash and an additional 1,164 pounds of bottles, cans, tires, and scrap metal, which were recycled.
 - In FY 2018, 41 volunteers spent 127 hours collecting 1,025 pounds of trash and an additional 1,338 pounds of bottles, cans, tires, and scrap metal, which were recycled.
 - In FY 2019, 25 volunteers spent 69 hours collecting 993 pounds of trash, and an additional 846 pounds of bottles, cans, tires, and scrap metal, which were recycled.
- The County participated annually in the Baltimore regional stream and watershed clean-up effort, "Project Clean Stream," and the world wide "International Coastal Cleanup." Since 2000, 42 miles of stream/river edges and 102.7 acres of lake and pond areas have been cleaned. Trash collected since 2000 totals 32,992 pounds, with an additional 20,572 pounds being recycled.
- OCS encouraged the active participation of individuals, businesses, and local community and environmental organizations in restoration activities by offering the [CleanScapes](#) Incentive Program on [CleanWaterHoward.com](#), promoting programs like Property Assessed Clean Energy and Leadership in Energy and Environmental Design building incentives on [LiveGreenHoward.com](#), and supporting programs like the Legacy Leadership Environmental Institute, the [Watershed Stewards Academy](#), Master Gardeners, and the University of Maryland Sea Grant Extension pilot programs.
- OCS presented to the public on the benefits of stormwater management and the County's CleanScapes program over 60 times.
- The Restoring the Environment And Developing Youth (READY) Program, through [Howard EcoWorks](#), offered a stormwater best management practice (BMP) fee-for-maintenance program that is subsidized by a grant, allowing READY to maintain BMPs for a cost that is more acceptable to private landowners. As part of this program, READY teaches the landowner to maintain their stormwater practice. This enables residents to engage in restoration practices on their own time, thereby connecting the individual to the environment and increasing their likeliness to perform their own routine maintenance.
- Partnered with over 230 nonprofit organizations, which have joined the County's Watershed Protection Nonprofit Partnership Program. The program encourages and assists the nonprofits with installing stormwater treatment facilities on their properties, in exchange for Watershed Protection and Restoration Fee credits.

- DRP coordinated with individual volunteers and residential communities through the Stream ReLeaf (a stream buffer planting program) and Tree Canopy planting programs:
 - Students Branching Out
 - Turf to Trees
 - Volunteer Tree Plantings: 2016 (45 total, 25 for Earth Day and 20 for Family Volunteer Day), 2017 (38 total, 30 for Earth Day and 8 for Family Volunteer Day), and 2018 (37 total, 20 for Earth Day and 17 for Family Volunteer Day).
- DRP coordinated with volunteers through the Weed Warrior program, which works to remove invasive plant species. To date, 223 volunteers have worked 892 hours removing invasive plants.
 - 2016: (7 volunteers recorded 28 hours)
 - 2017: (15 volunteers recorded 48 hours)
 - 2018: (6 volunteers recorded 27 hours),
- [Middle Patuxent Environmental Area](#) (MPEA) volunteer programs included the MPEA Conservation Stewardship Program, Weed Warriors, Trail Team, nest box monitoring, managed hunt volunteers, tree planting events, Master Gardeners, Master Naturalists, Eagle Scout projects, and a Chesapeake Conservation Corps intern – (# of volunteer hours): 2017 (1,152 hours); 2018 (973 hours); and 2019: (2,396 hours).
- OCS presented to homeowner associations on how stormwater management improvements could provide a financial benefit by protecting infrastructure and enhancing neighborhood safety.

d. Wetlands. Develop a wetlands program to inventory, map, protect, and enhance wetland resources. (DPW, OCS, DPZ, DRP)

The following County initiative was undertaken during the reporting period:

- DPW completed Watershed Assessments, which identified opportunities to implement best management practices, including creating and enhancing wetlands in each County watershed.

e. Dedicated Funding. Institute a dedicated fund (often referred to as a stormwater utility) to ensure increased and sustained funding for the watershed management program. (DPW, OCS, DPZ, DRP)

The County Council adopted CB8-2013 to create a dedicated Watershed Protection and Restoration Fund and associated fee for stormwater and watershed management. An accompanying *Financial Insurance Plan* was approved in FY15 to fund 75 percent of projected program costs. The Council adopted CB20-2016 authorizing additional credits to reduce the fee if the fund balance covers program costs. Council adopted CR 122-2019 the Storm Water Management Fees-in-lieu resolution that doubled the fees-in-lieu to construct stormwater management from \$72,000 to \$175,000 per acre foot of water storage.

f. Grant and Cost-Share Opportunities. Pursue Federal and State grant and cost-share opportunities to secure additional resources for restoration efforts. Apply jointly with community and environmental organizations, and with neighboring jurisdictions, as appropriate. (DPW, OCS, DPZ, DRP)

- The following OCS initiatives were undertaken during the reporting period:
- Awarded over \$4.5 million in grants for water quality improvements through restoration.
- Formed Rain Gardens for Clean Water, a program that provides a cost share opportunity for residents to install stormwater treatment practices on their property.
- Piloted a commercial partnership with WalMart in Ellicott City to cost share a stormwater pond retrofit project for improved water quality and increased water quantity control.
- Continued to look for more commercial partners for stormwater retrofits.
- Awarded two Maryland Urban and Community Forest Committee/Forestry Board grants to the Middle Patuxent Environmental Area to support restoration planting in conjunction with invasive species control work. This included a spring 2015 grant for \$2,600 and a fall 2016 grant for \$2,000.

Policy 3.4 Coordinate regional protection of water resources.

a. Patuxent and Patapsco Rivers. Coordinate and cooperate with other local, regional, and State agencies and organizations on joint watershed planning and management for the Patuxent and the Patapsco Rivers. (DPZ)

The following initiatives were undertaken during the reporting period:

- Howard County remained an active member of the interjurisdictional [Patuxent River Commission](#), the [Patuxent Reservoirs Watershed Protection Group](#), and the [Patapsco Heritage Greenway](#). In 2014, the County Council adopted the 2015 *Update to the Patuxent River Policy Plan*, which was subsequently adopted by the Maryland General Assembly during the 2016 legislative session.
- Patuxent Reservoirs Watershed Protection Group renewed the Patuxent Reservoirs Protection Strategy Memorandum of Understanding in 2014 to continue and expand the existing Patuxent Reservoirs Agricultural Cost-Share Program. The renewed MOU added eligible best management practices and increased the cost-share funds a property owner could receive. Howard County and [Washington Suburban Sanitary Commission](#) (WSSC) also renewed funding for the Howard County portion of the program, which is managed by the Howard Soil and Conservation District.

b. Patapsco Heritage Greenway. Coordinate with Baltimore County to accomplish certification of the Patapsco Heritage Greenway. (DPZ)

In 2015, the County Council adopted CB18-2015, amending [PlanHoward 2030](#) to include the [Patapsco Valley Heritage Area Management Plan](#).

Policy 3.5 Promote individual environmental stewardship.

a. Stewardship. Conduct public outreach and education to encourage individuals and businesses both to be good stewards of their own property and participants in community environmental enhancement efforts. (OCS, DPW, DRP, HCEA, HSCD)

The following stewardship initiatives were undertaken by the Office of Community Sustainability (OCS) during the reporting period:

- Led the outreach portion of Students Branching Out, a project to involve students in planting trees. Through the project, 450 students had the opportunity to plant 495 trees on school grounds. Students also received in-class education about the benefits of reforestation.
- Implemented the 20 Minute Cleanup, a litter removal and awareness project. Over 9,660 volunteers participated in this litter removal project.
- Provided education to non-profit groups that encourage hands-on environmental projects, including the Legacy Leadership Environmental Institute and the [Watershed Stewards Academy](#).
- Created a local version of a storm drain stencil that was used on 155 storm drains.
- Educated the public on water quality awareness through release of and publicity for the Stream Mapper smart phone app. The app currently has 270 users and 159 reports. In 2019 Stream Mapper was updated to a new platform, Water Reporter, to increase visibility and connect to other groups doing water monitoring. The HCPSS [Watershed Report Card](#) program for 9th grade students will utilize Water Reporter in the fall of 2019 to track their water quality monitoring data and share it through the interactive map feature.
- In cooperation with the Howard County Conservancy and Watershed Stewards Academy, educated Howard County Public School students in the [Watershed Report Card](#) program. OCS has joined water monitoring events, showing students how to use the Stream Mapper app to collect data about physical features of the streams.
- Participated in several outreach events including: Howard Community College Sustainability Day, Robinson Nature Center events, Columbia Families in Nature, Earth Forum, 50 Plus Expo, several school STEM/GT events, Howard County Association of Student Councils, Leadership U, Howard County Wellness Day, Howard County Diversity Day, Bike to Work Day, Howard County Fair, and several other public speaking engagements with groups such as the Ellicott City Rotary Club.
- Coordinated with the Environmental Sustainability Board. This group of volunteers advises the County Executive and County Council on numerous sustainability topics.
- Co-chaired [GreenFest](#), an annual event attended by approximately 2,000 - 2,500 people each year. GreenFest educates the public and encourages actions they can take to improve the environment. Themes for the event were: "Buy Local, Eat Local, Be Local" (2016), "Earth Day Every Day" (2017), "Explore, Connect, Act" (2018), and "Science and the Environment" (2019).
- Produced a more user-accessible version of the Green Map to help Howard County residents connect with local environmental opportunities.
- Worked with DRP to engage stream cleanup volunteers each year through Project Clean Stream, International Coastal Cleanup and other local projects.

- Created the Watershed Improvement Network to educate and inform members of the public about watershed issues. The group also promotes networking and collaboration between watershed groups. There are approximately 120 members of WIN, including a Steering Committee.
- Hosted two contractor workshops in January and February of 2019 to educate and inform local landscaping companies about the County's residential stormwater programs.
- Encouraged active participation by listing local environmental opportunities on an Events Calendar on LiveGreenHoward.com. OCS also uses the LiveGreenHoward email list to notify residents about action opportunities. The email list has approximately 4,600 contacts.

During the reporting period, DRP participated in the following:

- Partnered with the "Safe Skies" organization studying the problem of bird strikes (birds hitting windows) and worked with local organizations to implement solutions.
- Completed demonstration initiatives in the Middle Patuxent Environmental Area (MPEA) to promote environmental stewardship by example. Park users can enjoy these areas recreationally, while implementing similar efforts at home. The demonstration projects include the following:
 - Planted grasses at Clegg's Meadow: Eight acres of native warm-season grasses were planted in 2001 and are now well established. A nearby area of approximately 3 acres was similarly planted as a native warm-season grass meadow. Both serve as nocturnal roosting fields for breeding woodcock and are part of the *Woodcock Management Plan* for the MPEA. They contain a variety of forbs that serve as both nectar and larval host plants for a variety of pollinators.
 - Established an official Monarch Butterfly Waystation: MPEA provides monarch habitat and recovers tags along migration routes.
- Performed community outreach at Robinson Nature Center: The Center's Community Liaison performed community outreach promoting environmental stewardship at various special events, programs, and other facilities. Since 2014, 250,000 patrons have been reached.

b. Best Management Practices. Expand current outreach and education efforts to promote and assist private property owners with the implementation of best management practices, including installing rain gardens and rain barrels, planting stream buffers, replacing lawn with native plants, increasing tree canopy, and limiting use of lawn chemicals. (OCS, DPW, DRP)

The following outreach and education initiatives were undertaken by OCS during the reporting period:

- Contributed to the [Watershed Stewards Academy](http://WatershedStewardsAcademy.com) (WSA) residential stormwater assessments, which help residents identify runoff sources and solutions on their property. In 2018 OCS partnered with the WSA to provide further opportunities for outreach and volunteer hours through the County's Rain Gardens for Clean Water program.
- Distributed information on the residential stormwater Best Management Practice (BMP) financial incentive program (CleanScapes) to relevant stakeholders throughout the community. To date (December 2013-June 2019), 260 residents have treated 5.5 acres of impervious surface and received \$136,741 in reimbursements.
- Created a new residential stormwater program in 2017, Rain Gardens for Clean Water, which is a cost share with the County for installing rain gardens and rain barrels. Residents pay 25% of the cost of a project and Howard County pays 75%. The program hires a contractor to do the installations through an annual contract. To date (May 2016-July 2019), 45 rain gardens have been installed, treating 1.2 acres of impervious surfaces and providing a cost savings of \$134,368.

- Made stormwater BMP implementation simpler for residents by working with the [University of Maryland Extension](#) and three stores located in Howard County to create the Green Registry, a list of materials and even aisle number locations within participating stores that residents may use to implement BMPs.
- Developed an Eco-Friendly Gardening Cheat Sheet, available on www.cleanwaterhoward.com, which references all the resources that residents may need to install their own BMP or hire a firm to install.
- Participated in outreach and education initiatives, including the following community programs: Stream ReLeaf; Tree Canopy Program; Students Branching Out I and II; Volunteer Tree Plantings for Earth Day and Family Volunteer Day; and the Middle Patuxent Environmental Area (MPEA) volunteer programs, which include the MPEA Conservation Stewardship Program, Weed Warriors, Trail Team, nest box monitoring, managed hunt volunteers, tree planting events, Master Gardeners, Master Naturalists, Eagle Scout projects, and a Chesapeake Conservation Corps intern – (# of volunteer hours): 2017 (1,152 hours); 2018 (973 hours); and 2019 (2,396 hours).

c. Agriculture. Encourage the agricultural community to work with local, State, and Federal agencies and programs to expand the use of best management practices on local farms. (OCS, DPW, DRP, HCEDA)

Ongoing activity.

Policy 3.6 Safeguard the environmental integrity of the region's reservoir systems.

a. Funding and Support. Continue funding and support for implementation of the Baltimore Reservoirs Action Strategy and the Patuxent Reservoirs Priority Resource Protection Program. (DPW, DPZ)

- Provided annual funding for staff support through the [Baltimore Metropolitan Council](#) for the interjurisdictional Baltimore Reservoirs Technical Advisory Committee and Watershed Protection Committee.
- Remained an active member of the interjurisdictional groups that support implementation of the Baltimore Reservoirs Action Strategy and the Patuxent Reservoirs Watershed Protection Program.
- Provided a fee structure to cover the County share of core assets in capital projects for the finished water reservoirs in Baltimore City through the County's water contract.
- Executed a forty-year water agreement with Baltimore City in 2017.

Policy 3.7 Safeguard the environmental integrity of the region's reservoir systems.

a. Streams, Wetlands, and Floodplains. Evaluate the effectiveness of current regulations in protecting streams, wetlands, and floodplains. (DPZ)

The following initiatives were undertaken during the reporting period:

- Added section 16.104(d) to the Subdivision and Land Development Regulations under CB80-2016, which restricts issuance of waivers of regulations protecting floodplain, wetlands, streams, buffers and 25% steep slopes for properties located within the Tiber Branch watershed, unless determined necessary under certain specific circumstances or for development projects that provide at least 10% additional flood control.
- In response to research required by CB56-2018, the Department of Planning and Zoning, the Department of Public Works, and other County agencies studied past, present, and future land uses, drainage infrastructure, storm water management, and flood mitigation, and all other factors related to flooding in the Tiber Branch Watershed and made recommendations on changes to land uses, drainage infrastructure, stormwater management, and flood mitigation.
- As a result of the research conducted for CB56-2018, DPZ developed new standards for storm water management for Tiber Branch and Plumtree watersheds. CR123- 2019 revised standards for storm drainage systems by amending [Volume I of the Design Manual](#) for development within the Tiber Branch and Plumtree watersheds to provide adequate management and conveyance of runoff for the 24-hour, 100-year and 3.55-hour, 6.6-inch storm event to a stormwater management facility.
- Drafted CB61 (later passed on December 2, 2019) that amended the criteria for granting waivers from the requirements of the Howard County Subdivision and Land Development Regulations that included the following:
 - requiring survey bearings and distances on plans to delineate wetlands and required wetland and stream buffers;
 - requiring that the Office of Community Sustainability and the Department of Public Works review certain requests for necessary disturbances;
 - establishing criteria for alternative compliance from the provisions of the Subdivision and Land Development Regulations;
 - providing that the Office of Transportation will also review requests to eliminate sidewalk requirements.
- Drafted CB62 (later passed on December 2, 2019) that repealed and reenacted the Forest Conservation Act of Howard County. The Act requires a Forest Conservation Plan for any person, or unit of local government, developing land 40,000 square feet or greater and that included the following:
 - requiring a [Forest Conservation Manual](#) to be updated and adopted;
 - requiring that the Manual include specific standards and guidelines;
 - setting forth certain forest retention priorities;
 - requiring certain reforestation requirements and providing that reforestation shall be based on certain calculations;
 - requiring certain afforestation and providing that afforestation shall be based on certain calculations;
 - setting forth certain afforestation and reforestation location priorities and preferred methods;
 - requiring certain site design; requiring certain financial security for afforestation and reforestation;
 - providing for certain enforcement and penalties;
 - requiring mitigation by the County when land is developed in violation of the Act;
 - providing for certain appeals;
 - revising the process and criteria for variances of the provisions of the Act, under certain circumstances;

b. Environmentally Sensitive Development. Encourage more environmentally sensitive design in residential zoning districts other than the R-ED District. Promote the use of the neighborhood preservation parcel option, as well as the use of smaller, tightly clustered lots to limit site disturbance and maximize open space for natural resource protection. (DPZ)

DPZ and the Department of Inspections, Licensing and Permits (DILP) continued to implement the voluntary Green Neighborhood (GN) Program, which incentivizes environmentally sustainable development. The Oxford Square GN, currently being built, is a transit-oriented, high density residential development that includes additional resource protection measures.

c. Higher Intensity Development. Institute development requirements and/or incentives for better resource protection in higher density residential projects and commercial, office, and manufacturing areas. (DPZ)

The following DPZ initiatives were undertaken during the reporting period:

- Evaluated County Zoning and Subdivision and Land Development Regulations.
- Began initial steps in preparation for the next update to the county's General Plan. Announced on June 11, 2019, and set to begin in 2020, this multi-year project will guide decisions related to resource protection, development, land preservation, changing demographic and employment trends, environmental sustainability, capital projects, county services, and other key land use issues.

Policy 3.8 Improve stormwater management practices throughout the County to help restore and protect water resources.

a. Redevelopment. Ensure redevelopment is designed and implemented to reduce storm water runoff rate, volume, and pollution to the maximum extent practicable. (DPZ)

Completed in short-term reporting period. No further action is needed.

b. Incentives for Enhancements. Create incentives for new development and redevelopment to provide on-site or off-site water quality enhancements that exceed minimum regulatory requirements. (DPZ, DILP, OCS)

The following initiatives were undertaken during the reporting period:

- OCS offered a variety of stormwater incentive programs for residential, commercial and nonprofit properties. OCS oversees the Nonprofit Partnership Program, which provides a 100% credit to the Watershed Protection and Restoration Fee (WPRF) in exchange for allowing stormwater improvements on nonprofit properties. The residential incentive programs, known as CleanScapes and Rain Gardens for Clean Water, provide residents who upgrade their onsite stormwater practices with both a onetime reimbursement for the cost to install the practice,

and an annual credit toward their WPRF. The Commercial credit and reimbursement program provides incentives to commercial properties to upgrade their stormwater facilities to meet the MD Design Manual Standards.

- DPZ and DILP implemented the voluntary Green Neighborhood Program, which incentivizes environmentally sustainable development and redevelopment. The program includes incentivizes for on-site or off-site water quality enhancements (stormwater management, stream and wetland restoration, rainwater harvesting) that exceed minimum regulatory requirements.

Policy 3.9 Increase collaboration between residents, businesses, nonprofit groups, and the County on implementing state-of-the art sustainability practices and techniques.

- a. Sustainability Center. Consider developing an online center, associated with Green Central Station, which provides information about reducing the community’s carbon footprint and about cost-effective green practices and products. (OCS)**

Completed in short-term reporting period. No further action is needed.

- b. Green Directory. Work with the local business and nonprofit communities to instill sustainability principles in their products and services, and help them by promoting them in the Green Business Directory. (OCS)**

Completed in short-term reporting period. No further action is needed.

- c. Expanding Green Network. Establish criteria for joining the Green Business Directory and Green Business Council; create incentives for joining. Promote membership and use of the Directory on Green Central Station. (OCS)**

Completed in short-term reporting period. No further action is needed.

- d. Education and Incentives. Work with the financial and real estate communities to promote green buildings and neighborhoods, through education on environmental and financial benefits and incentives for residents implementing sustainable practices. Incorporate benefits of green technologies and ecosystem services into building and property values. (OCS)**

The following initiative was undertaken during the reporting period:

- DPZ continued to review the development phases of the County’s second Green Neighborhood (GN), Oxford Square. GN projects are required to provide public outreach and education on their GN features and the environmental benefits they provide.
- OCS and DPZ worked with the Environmental Sustainability Board and other stakeholders to investigate ways to create additional sustainable neighborhoods through the Green Neighborhoods Program. The conclusion was that while some credits could be changed to make achievement of Green Neighborhood status more feasible, there was not sufficient motivation within the development industry to pursue Green

Neighborhood status at this time. The GN program provides housing allocations as an incentive, but because home building allocations have been readily available, this did not serve as an incentive.

Chapter 4 – Resource Conservation

Policy 4.1 Promote additional agricultural preservation opportunities.

- a. Future Application Cycles. Facilitate additional Agricultural Land Preservation Program application cycles and recruit owners of uncommitted land to preserve their farms. (DPZ)**

An enhanced [Agricultural Land Preservation Program](#) (ALPP) application cycle was launched in Spring 2013. The enhanced program included updates to the scoring system that is used to determine the easement purchase price for each property, and changes to the County Code to allow for rolling applications instead of a batching process.

- During the reporting period, DPZ worked with six property owners through the process of selling their development rights to the County, for a total of 437.6 acres.

- b. Other Preservation Options. Promote other preservation options such as the dedication of easements to the County through the subdivision process, the purchase of easements by the MALPF program, and the donation of easements to nonprofit land trusts. (DPZ)**

The following DPZ initiatives were undertaken during the reporting period:

- Processed a 26-acre horse farm (to go to settlement by the end of 2019). [Maryland Agricultural Land Preservation Foundation](#) (MALPF) has seen an increase in their funding in the last two years, so the program has become a more viable option for property owners.
- Provided educational assistance to property owners explaining the key similarities and differences between County and State programs.

Policy 4.2 Enhance and expand the partnership between the ALPP, the HCEDA, the University of Maryland, and the farming community to assist farmers as agriculture continues to evolve and diversify.

- a. Agricultural Working Group. Establish a working group consisting of the ALPP, the HCEDA, the University of Maryland, and agricultural community representatives to advise DPZ on farming issues, such as expanded uses to enhance the farm economy. (DPZ, HCEDA)**

The following initiatives were undertaken during the reporting period:

- The Howard County Economic Development Authority's (HCEDA) Agricultural Advisory Board conducted bi-annual meetings with farming representatives, including the ALPP Program Administrator.
- An Agricultural Subcabinet formed in 2016, consisting of representatives of OCS, ALPP, HCEDA, DPZ, University of MD, and the [Howard Soil Conservation District](#) (SCD). The group meets regularly to discuss policy issues affecting the ag community, and to create opportunities for increased profitability and conflict resolution.

b. Assistance to Farmers. Consider joint ALPP/HCEDA projects to educate new farmers about innovative products or practices and to encourage new farming ventures via technical assistance, agribusiness innovation grants, or other incentives. (DPZ, HCEDA)

The following HCEDA initiatives were undertaken during the reporting period:

- Participated in educational efforts, such as Annie's Project training protocol, the annual Women in Ag Conference, the annual Farm-City Celebration, business planning, estate planning, and the Kauffman Program for Agriculture Businesses and Farms, and other activities.
- Administered the Agriculture Innovation Grant, which awarded \$104,000 to 27 projects. In additional \$14,000 was leveraged from [Maryland Agricultural & Resource Based-Industry Development Corporation](#) (MARBIDCO) grants for these projects.

c. Marketing of Local Products. Expand marketing efforts like the Farm-City Celebration, farmers markets, community supported agriculture, and other projects that focus on the benefits of local products and business opportunities. (DPZ, HCEDA)

The following HCEDA initiatives were undertaken during the reporting period:

- Expanded marketing efforts for the Farm-City Celebration, farmers markets, community supported agriculture, "farm to glass," and other projects that focus on local products and business opportunities.
- Launched Farm and Flavor Howard magazine to expand agriculture marketing, and continued outreach programs to schools and leadership organizations, which was rebranded in 2019 to Farm and Flavor.
- Hosted Howard County [Farm Academy](#) twice a year, one on a farm for neighbors, and one for County employees.
- Offered Farm Academy self-guided and guided tours at the Howard County Fair.

d. Monitoring and Stewardship of Easements. Use the easement monitoring and inspection visits to identify issues of concern and offer assistance to easement holders. (DPZ, HCEDA)

The following initiatives were undertaken during the reporting period:

- DPZ conducted baseline agricultural easement monitoring and inspection visits between 2014 and 2017. With few exceptions, all properties in the County purchased and dedicated programs have been inspected.
- The [Agricultural Land Preservation Program](#) and the [Howard Soil Conservation District](#) provided property owners access to planning and technical expertise.

e. Training for Real Estate Professionals. Educate real estate agents, appraisers, and others on the retained rights and market value implications of easement-restricted land. (DPZ, HCEDA)

The following initiatives were undertaken during the reporting period:

- DPZ provided several educational events on County and state agricultural easements for appraisers and real estate agents.
- The Agricultural Land Preservation Program provided this type of information in an informal manner on a daily basis through phone and in-person inquiries.

f. Agricultural Services Center. Consider consolidating offices, services, and educational resources for the farming community in a single location. (DPZ, HCEDA)

This concept has been discussed by the Agricultural Sub-cabinet, but no action is planned at this time.

Policy 4.3 Educate rural residents about the County's Right-to-Farm Law.

a. Right-to-Farm Update. Evaluate the clarity and effectiveness of current Right-to-Farm provisions with input from the farm community. (DPZ)

The County sought input from farmers when adopting CB15-2017. This Right-To-Farm Act amendment added the [Howard Soil Conservation District](#) as an additional opinion for the Health Department to consider in determining whether a nuisance condition exists in connection with an agricultural operation.

b. Educational Materials. Produce and distribute educational materials that bridge the gap between farm and nonfarm neighbors. (DPZ)

The following initiatives were undertaken during the reporting period:

- Held the annual Howard County [Farm Academy](#) where residential neighbors are invited annually to nearby farms to learn about the opportunities and challenges affecting agriculture.
- Expanded Farm Academy to include once-yearly opportunities for county employees and an intensive new program during the Howard County Fair. Guided and self-guided tours are now available at the Fairgrounds to introduce County Fair attendees to many aspects of agriculture in Howard County.

Policy 4.4 Require more robust separation between cluster lots and adjoining agricultural properties.

a. Better Buffers. Amend the Subdivision Regulations to require fencing, a landscape buffer, or a non-buildable preservation parcel buffer between cluster lots and adjoining agricultural properties. (DPZ)

Completed in the short-term reporting period during Comprehensive Zoning in 2013. In addition, the County amended the Howard County Code through CB11-2019 to altering the minimum buffer of existing forest or wooded area between a road and a new development located along scenic roads. This amendment required a certain buffer to be wide enough to maintain a road's visual character with a certain minimum width from the road right-of-way.

Policy 4.5 Refine the Rural Conservation (RC) and the Rural Residential (RR) zoning regulations to provide greater flexibility for the agricultural community, as well as appropriate protections for rural residents.

a. Review of Permitted Uses. Examine and amend where appropriate the list of accessory and conditional uses in the RC and RR districts and refine uses and standards for approval. (DPZ)

The following Zoning Regulation Amendments (ZRAs) pertaining to the RC and RR districts were evaluated during the reporting period:

- ZRA 175: To amended Sections 128.0.A.4 & 128.0.I.8 to exempt farms in the RC District and farms 20 acres or larger in the RR District from Animal Shelter and Riding Academy and Stable setback requirements from dwellings on new residential lots. (Passed as Amended)
- ZRA 188: To amend the Howard County Zoning Regulations pertaining to conditional uses to (i) allow the hearing authority to grant variances to certain setbacks; (ii) provide that certain setbacks are inapplicable;(iii) provide that written authorization of owner must be submitted; & (iv) provide that child day care centers are an accessory use to a private academic school conditional use. (Pending)
- ZRA 189: To authorizes the Hearing Authority to reduce the required minimum setback of 75' from a residential lot to no less than 25' for the buildings and parking uses of an indoor commercial athletic facility. (Pending)

- b. Use Designations. Review use designations (permitted by right, by permit, and conditional) in each Rural West zoning district, and determine whether amendments are needed to make some uses less or more restrictive. (DPZ)**

Completed in short-term reporting period with as a part of the 2013 Comprehensive Zoning.

Policy 4.6 Formalize a Green Infrastructure Network Plan in Howard County

- a. Green Infrastructure Network. Define, protect, and enhance a Green Infrastructure Network that includes and links the most ecologically significant natural areas in Howard County. (DPZ, DRP)**

Completed in short-term reporting period with the completion of the [Howard County Green Infrastructure Network Plan](#) (December 2012).

- b. Protection and Enhancement Strategy. Develop a Green Infrastructure Protection and Enhancement Strategy that identifies property owner education, land management, preservation incentives, acquisition, and regulatory tools and also includes implementation priorities. (DPZ, DRP)**

The following DPZ initiatives were undertaken during the reporting period:

- Amended the Agricultural Land Preservation Program in 2014 to increase the easement purchase price for land owners who voluntarily agreed to additional protections for the Green Infrastructure Network on their property. To date, the Program has purchased easements on six properties that include additional protections for almost 194 acres in the Network.
- Hired a consultant from 2014 to 2019 to develop property owner education and land management tools. The consultant delivered habitat management plans ([Dorsey Wetland Hub Habitat Assessment and Management Plan](#) and [Guilford Branch Forest Hub Habitat Assessment and Management Plan](#)), corridor break assessments, wildlife monitoring reports, and wildlife road crossing design guidance.

c. Land Preservation, Recreation and Parks Plan. Incorporate the Green Infrastructure Network into the Department of Recreation and Park's *Land Preservation, Recreation and Parks Plan*. (DPZ, DRP)

The County Council adopted the [2017 Land Preservation, Recreation and Parks Plan](#). The Plan notes the importance of a protected green infrastructure network.

Policy 4.7 Continue to protect, restore, and expand forested lands.

a. Forest Integrity. Prioritize retention and reforestation areas, guide efforts to minimize forest fragmentation, and increase forest interior habitat. (DPZ, DRP)

The current [Forest Conservation Manual](#) and [Forest Conservation Regulations under Subtitle 12](#) set priority locations for subdivision and development projects to protect existing forest and reforestation/afforestation areas, to minimize forest clearing and fragmentation, and to increase forest interior habitat. Sections 16.1205 and 16.1208 prioritize forest retention and reforestation/afforestation areas to protect 100-year floodplain, stream buffers, forested wetlands and buffers, steep slopes, and state champion and specimen trees of 30 inches in diameter or larger. During this reporting period, DPZ and OCS initiated a rewrite of the County's Forest Conservation Regulations to clarify, come into compliance with state law and to strengthen the act.

- DPZ continued to evaluate projects for the following hierarchy of priority locations: 1. Floodplain and stream buffers, 2. Wetland and wetlands buffers, 3. Critical habitats and buffers to create forest corridors for wildlife movement, 4. Steep slope areas, 5. Areas adjacent to existing forest stands, 6. Infill between small forest and tree stands, and 7. Property line or right-of-way buffers. At these locations, DPZ's reviews accomplished the following:
 - Maximized on-site forest retention areas, minimized forest fragmentation, and supplemented those areas with additional reforestation plantings to expand forest corridors. In addition, contiguous forest stands were increased, as well as interior forest wildlife habitat areas.
 - Examined critical habitat areas and forest corridors for wildlife movement and, where practical, sought a minimum 300-foot-wide forest corridor.

The following DRP initiatives were undertaken during the reporting period:

- Managed approximately 180 forest conservation sites throughout the County, totaling over 350 acres. Sites are planted with trees native to the region, which include tulip poplar, black locust, eastern red bud, and serviceberry. These serve as nectar sources for a variety of pollinators, while other tree species, such as oaks, black cherry, and hackberry, benefit certain caterpillars as larval hosts.
- Planted approximately 18 acres of new forest each year, focusing on minimizing forest fragmentation, planting riparian zones, and increasing forest interior habitat.
- The following forest conservation initiatives were undertaken at Robinson Nature Center:
 - Expanded planting areas in the park. These included the hillside behind the front entrance wall and sidewalks bordering forest edges. Along the universally accessible sidewalk from the Mezzanine Patio leading to the Sycamore Stroll Trail entrance, witch hazel, winterberry, American hazelnut, serviceberry, and black chokeberry were planted. These understory natives provide cover for wildlife, teaching tools for educators, and examples for visitors looking to create more natural environments at home. The hillside leading into the floodplain near the Simpsonville Mill Ruins was planted in October 2015 by Eagle Scout, Sylvan Scott, and approximately 15 other volunteers. The reforestation project included 11 native perennials, totaling 132 plants, with an additional 20 trees and shrubs. These helped increase habitat for butterflies, including the Hackberry Emperor, Monarch, and Spicebush Swallowtail, and other wildlife. These areas continued to be managed, with invasive species removal and additional native plantings through 2019.

b. Native and Invasive Exotic Plants. Expand on current endorsements regarding the use of native plants and continue to discourage and prohibit the use of invasive exotic plants for landscape planting in new projects. (DPZ, DRP)

The current development regulations, manuals and plan review practices restrict the planting of invasive plant species, such as Bradford Pears, Norway Maples, etc., and diseased or pest affected trees, such as Ash and Austrian Pine, and encourage planting of only native plant species as part of our best management practices for the Forest Conservation Program and required perimeter landscaping.

The following native planting and invasive mitigation initiatives were undertaken by DRP at Robinson Nature Center during the reporting period:

- Maintained Annie's Garden, a commemorative garden, which has 89 trees and shrubs from 12 species and over 240 individual native perennials from 20 species.
- Managed the Homestead Garden.
- Hosted annual family volunteer work days through 2019 for groups of 35 – 50 volunteers. Continued to work on the removal of all non-native and invasive plants from the landscape. Targeted areas included the rain gardens, stream edge, and meadow areas. Focused attention on Japanese Stiltgrass, Autumn Olive, Wineberry, Mile-a-minute, Japanese Honeysuckle, Oriental Bittersweet, and Japanese Barberry.
- Maintained the meadow and open areas seasonally. To increase flowering species, surplus plants were transplanted to meadow areas in 2015, and in the spring of 2016 invasive species were sprayed. DRP managed the spring ephemerals, such as Blood Root, Mayapple, Foamflower,

and Wild Ginger, which were planted in open forest areas as supplemental plantings and expanded into areas that may have been browsed by wildlife.

- Mulched yearly garden areas to inhibit weed and invasive species growth.
- Initiated an all species plant list, which is important for reforestation, biodiversity studies, staff assessments, and overall public education.
- Replanted the areas along the driveway leading up to the nature center to slow runoff in 2017.

c. Deer Management. Continue to expand a comprehensive deer management program. (DPZ, DRP)

The following County initiatives were undertaken during the reporting period by DRP:

- Expanded the deer management program to include the following:
 - Deer Sharpshooting (# of deer harvested): 2018 (76) and 2019 (67).
 - Managed Hunt (# of deer harvested): 2018 (158) and 2019 (82).
 - Crop damage permits (# of deer harvested): 2017 (677) and 2018 (810).
- Reported annual statistics on deer population in the Deer Management Program, and the impacts of deer management on County parklands and open spaces.

Policy 4.8 Expand our protection of rare, threatened, and endangered species.

a. Habitat Information. Work with the DNR to update information on rare, threatened, and endangered species habitat currently present within the County. (DPZ, DRP)

DRP partnered on the following projects during the reporting period:

- The [Maryland Amphibian & Reptile Atlas](#) : For this statewide reptile/amphibian (herps) survey, co-sponsored by the [Natural History Society of Maryland](#) and the [Maryland Department of Natural Resources](#) (DNR), Howard County surveyed 29 map blocks and documented a minimum ten species per map block. Nearly 800 volunteers participated in the collection of data, contributing over 2,500 hours. The County documented 53 herp species, with seven of those being non-native. Of the seven-non-native species, two were confirmed breeding - the False Map Turtle and the Red-eared Slider Turtle. The survey also documented the only Northern Scarlet Snake in the state in a Howard County park. Lizard populations overall were low, attributed to preying by domestic and feral cats. The study was published by DNR in 2018.

- Maryland Biodiversity Project: Staff and volunteers documented flora and fauna, including rare, threatened and endangered (RTE) species, across the County and submitted photos to this project. All information about RTE species is made available to the DNR. In 2017, DRP staff documented the first Bisected Honey Locust Moth in Maryland.

- b. Development Regulations. Evaluate the effectiveness of current regulations on forest conservation, wetlands, stream buffers, and steep slopes and on criteria for open space acquisitions to enhance habitat protection. Refine the development regulations, where appropriate, to ensure habitat is included in protective easements or open space. (DPZ, DRP)**

DPZ initiated an assessment of the current Zoning, and Subdivision and Land Development Regulations in 2016. The assessment focused evaluating the strengths and weaknesses of the current land development regulations and recommendations for improvement. The [Howard County Development Regulations Assessment](#) was completed in January 2018. The Assessment recommended that our future code rewrite should “carry forward” and “consolidate standards for avoidance or protection of various sensitive areas, such as floodplains, steep slopes, protected forests, and designated wildlife habitat” (Page 59). The [Forest Conservation Manual](#) was recommended to be updated to ensure that it complies with more recent updates to the state law.

Policy 4.9 Balance the potential for mineral extraction with other land uses.

- a. Development Regulations. Review current regulations to address mineral extraction operations and site reclamation. (DPZ)**

No action occurred in the reporting period.

Policy 4.10 Expand on existing programs to enhance historic preservation and create an historic preservation plan.

- a. Historic Tax Credits. Promote greater use of County historic tax credits for properties in local historic districts or listed on the Historic Sites Inventory. (DPZ)**

The following initiatives were undertaken during the reporting period:

| HISTORIC PROPERTY TAX CREDIT 20.112 | | HISTORIC PROPERTY TAX CREDIT 20.112 | |
|--|--------------|--|--------------------------------|
| YEAR | AMOUNT | YEAR | # OF APPLICATIONS PROCESSED |
| 2012 | \$20,593.30 | 2012 | 5 |
| 2013 | \$15,688.02 | 2013 | 16 |
| 2014 | \$10,731.61 | 2014 | 23 |
| 2015 | \$125,864.59 | 2015 | 21 |
| 2016 | \$39,809.38 | 2016 | 28 |
| 2017 | \$86,056.05 | 2017 | 47 |
| 2018 | \$43,452.32 | 2018 | 31 |
| 2019 | \$156,194.31 | 2019 | 42 |

- DPZ promoted the increased historic tax credit program and has seen an overall increase in tax credits pre-approved since the 2016 monitoring report. Although the total amount of tax credits issued has increased, this does not correlate to increased participation because the application process can span multiple tax years from pre-approval to issuance. Also, amounts will vary on a single property, with some properties receiving significantly higher credits than others. However, there has been an increase in the number of applications that the HPC has processed for pre-approval, which is the result of promotion of the credit after the Ellicott City 2016 and 2018 floods.
- DPZ conducted outreach at many meetings for the Ellicott City Flood Recovery and the Ellicott City Partnership.

b. Programs and Laws. Strengthen historic preservation programs and laws both to prevent demolition and incentivize restoration and adaptive reuse. (DPZ)

CB67-2016 created an expedited approval process for minor alterations to properties located in a historic district, and for tax credit pre-approval for structures listed on the Historic Sites Inventory or located in a local historic district. This bill also enabled historic landscape features, such as stone walls, to be eligible for historic property tax credits. The creation of this expedited, on-line approval process for minor alterations and tax credit pre-approval has incentivized restoration by speeding up the approval process, which has increased the number of applications submitted for alterations and repairs.

c. Historic Sites Inventory. Continue to update the Historic Sites Inventory. (DPZ)

The following initiatives were undertaken during the reporting period:

- CR34-2019 added eleven new properties to the Historic Sites Inventory, which made 10 new properties eligible for tax credits (one was already eligible due to location in a historic district).
- DPZ evaluated properties for inclusion on the Inventory
- DPZ marketed the program to eligible property owners.

d. Grants. Apply for Maryland Historical Trust grants for documentation of archeological resources, museum collections, and oral histories. (DPZ)

The following initiatives were undertaken during the reporting period:

- DPZ received \$70,000 in 2018 from Community Legacy grant funding in 2018 from the state for the renovation of Carroll Baldwin Hall in Savage. The project is primarily an exterior renovation, with minor interior changes and is driven by the need to improve handicap access and restore historic elements of the Hall (built in 1921) by replacing and renovating deteriorated materials. A \$100,000 state bond initiative was passed in the recent legislative session to support additional improvements.
- Howard County's Oral History Program awarded a grant to the Howard County Antique Farm Machinery Club, Inc. to collect and chronicle oral histories from farmers and farm service providers. This resulted in more than 30 farmers being interviewed, with hundreds of hours of oral history recorded and a final 60-minute oral history video. This grant was completed in FY16.

e. Potential New Districts. Work with property owners regarding the merits of establishing new historic districts, where owners have expressed interest. (DPZ)

- DPZ presented historic district establishment opportunities to the Savage and Elkridge communities. Outreach to individuals also informed County residents of their ability to become Single Site Historic Districts.

f. Main Street Program. Explore establishing a Main Street program for Ellicott City. (DPZ)

Ellicott City was designated as a [Maryland Main Street](#) in 2014 through the collaboration of DPZ and the Ellicott City Partnership (ECP). During the reporting timeframe, the following initiatives were undertaken:

- Supported the ECP through funding and staff resources.
- Served on the ECP Board of Directors, as well as the Economic Vitality, Design, and Clean Safe and Green subcommittees. DPZ staff attend monthly meetings and provide volunteer support for events, projects, and other important initiatives.

g. Historic Preservation Strategic Plan. Work with historic preservation advocates and other stakeholder groups and create an historic preservation plan to broaden awareness of our heritage and encourage renovation and re-use of historic resources. (DPZ)

In 2014 the County Council adopted CR27-2014, the [Howard County Historic Preservation Plan](#). The following goals from the Preservation Plan have been successfully completed:

- Established the Single Site Historic District designation.
- Updated the Historic Cemetery Condition Inventory, in collaboration with the Howard County Genealogical Society.
- Increased the Historic Property Tax Credit from 10 percent to 25 percent.
- Expanded Tax Credit eligibility to include outbuildings, certain contracted professionals, and certain historic landscape features.

h. Public Awareness. Increase public awareness of historic preservation by expanding and promoting educational opportunities for residents to learn about the County's history and historic sites. (DPZ)

The following initiatives were undertaken during the reporting period:

- DPZ increased public awareness about historic preservation, cemetery preservation, and historic tax credits by speaking to several Howard County communities and at County events, such as the following:
 - Hands on History Day at the Howard County Fair.
 - Leadership Legacy Institute.
 - Various Ellicott City flood workshops, master plan workshops, County public meetings, and Ellicott City Partnership meetings.
- DRP's Living History and Heritage staff stayed current with technology and heritage tourism trends and provided historically accurate information to visitors. DRP trained staff have professional backgrounds in historic preservation, archaeology, history, and education. DRP offers a variety of academic and cultural heritage programs, special events, historic site tours, and many opportunities for people of all ages, including the following:
 - Provided free public hours for the Patapsco Female Institute Historic Park, Ellicott City Colored School, Restored, B&O Museum, and Firehouse Museum.
 - Provided tours of the original Courthouse of the Howard District and the Thomas Isaac Log Cabin in Ellicott City, up until the May 27, 2018 flood.

i. Cemeteries. Undertake outreach to historic cemetery owners regarding best practices for maintenance, restoration, and historic tax credit. (DPZ)

The following initiatives were undertaken by DPZ during the reporting period:

- Supported the Cemetery Preservation Advisory Board (CPAB) efforts to provide outreach and updates for the County's cemetery inventory. Meetings increased from quarterly to bi-monthly. CPAB, in collaboration with the Howard County Genealogical Society, completed 80 of the 204 Historic Cemetery Condition Inventories.
- Provided two rounds of matching grants that went to private cemetery owners for restoration projects to reset and restore headstones/monuments, remove dead trees, clean-up of cemetery grounds, repair fence and/or install/repair cemetery signs. The first round was in 2016 to four sites for a total of \$5,000 in funding, and the second was in 2018 to six sites for a total of \$5,000.

j. Historic Ellicott City. Promote, plan, and protect safe pedestrian access in the retail section of Historic Ellicott City. (DPZ)

The following initiatives were undertaken during the reporting period:

- DPW installed a new crosswalk in 2016 in Historic Ellicott City on Main Street near Court Avenue to promote pedestrian safety.
- DPZ launched a master planning effort in 2017, in response to the July 2016 Main Street flood, to guide long-term redevelopment in the Ellicott City watershed area. Pedestrian access on Main Street is one of many issues evaluated through this process.
- The Office of Emergency Management (OEM) added signage to Main Street in 2019 indicating high ground areas and emergency access. Temporary digital road signs were placed by the Howard County Police Department along the streets entering the downtown retail area, posting potential flood emergencies and warnings.

Policy 4.11 Review current conditions and regulations related to the County's designated scenic roads.

a. Survey Update. Conduct a survey of the roads currently on the scenic roads inventory to evaluate whether the roads still qualify for scenic road status. (DPZ)

No action occurred during this reporting period.

b. Regulations Update. Determine if amendments to the County Code and/or Design Manual could further enhance protections for scenic roads. (DPZ)

The current Subdivision and Land Development Regulations contain guidelines and requirements to help protect the character of scenic roads during the subdivision and development plan process. Section 16.125, Protection of Scenic Roads, establishes design guidelines for development along scenic roads to help protect and preserve the landscape character, and to minimize adverse impacts along these roads. Design guidelines include:

- Use lot clustering,
- Minimize tree removal,
- Minimize grading,
- Orient lots and houses to front the scenic road,
- Locate and design utilities, SWM facilities, lighting, walls, and fences to be unobtrusive to the scenic road character,
- Locate parking lots and loading areas away from the road, or provide adequate screening, and
- Use enhanced landscape plantings.

This section also requires maintaining at least a 35-foot buffer of existing forest or wooded areas between the road and the new development, which is enforced during plan review of new development projects. Minor tree clearing is permitted to allow site access from the public road.

Policy 4.12 Develop an energy plan that prepares for different future energy scenarios, examines options for various kinds of future energy sustainability, promotes conservation and renewable resources, and sets targets to reduce greenhouse gases.

a. Education and Outreach. Establish County policies and outreach efforts that educate communities about the potential for a changing relationship with energy resources. (OCS)

The following OCS initiative was undertaken during the reporting period:

- Educated the public about climate and energy issues, how the County is reducing the energy usage and greenhouse gas emissions of County government operations, and how individuals and businesses can reduce their carbon footprint. Conducted outreach using LiveGreenHoward.com, social media, email newsletters, printed materials, displays and interactive games at events, and presentations.

b. Regulations Review. Review County development regulations that promote more compact, complete communities through design for comparison with the “What if?” scenarios in this section. (OCS)

No actions occurred during this reporting period.

c. Scenario Study. Investigate development regulations and infrastructure policies related to future energy options, such as implementing localized community-based power generation and alternative energy sources. (OCS)

The following initiatives were undertaken during the reporting period:

- In 2017 Howard County’s Energy Task Force recommended including energy reliability and resiliency in all aspects of County planning. For example, implementing regulations and codes that foster energy-resilient plans and buildings. The Energy Task Force also recommended that the County implement specific resiliency improvements, such as micro-grids, to ensure uninterrupted public safety services, even during major outages.
- OCS hired the County’s first full time Energy Manager, who is working across County departments and with external partners to further research, recommend, and implement appropriate options.
- OCS began a solar energy feasibility study of County government properties in 2019, to determine the best options for powering 20 percent of County government operations through solar energy.

d. Climate Action Plan. Implement the County’s 2010 Climate Action Plan (referenced in Chapters 1, 3, and 12), which relates to future energy technology, such as wind, solar, geothermal, and other renewable sources. (OCS)

The following initiatives were undertaken during the reporting period:

- Generated solar energy at Robinson Nature Center, Miller Branch Library, East Columbia Library, New Cut Road retired landfill, and the Little Patuxent Water Reclamation Plant. In 2019, Howard County will conduct a feasibility study of County properties to identify appropriate sites for solar panels, with a goal to maximize solar energy production on public property.
- Purchased three, full-size, electric buses for the Howard Transit fleet. The County’s administrative and public safety fleet includes 62 hybrid-electric and six all-electric vehicles. The County plans to add 44 new hybrid electric police vehicles to the fleet in fiscal year 2020 and will further reduce fuel consumption through implementing new policies, right-sizing the fleet, and continuing to increase the number of hybrid and electric fleet vehicles.

- Completed energy-saving capital improvements in more than 65 buildings, that are expected to reduce energy use in those buildings by 34 percent. The County also converted traffic lights at 85 intersections and approximately 2,000 streetlights to light-emitting diode (LED). In the next four years, the County plans to convert more than 7,000 streetlights to LED. The County also is in the process of implementing a routine, systematic, and detailed investigation of energy use in County buildings to identify and address energy inefficiencies as they occur.

e. Business Partnering. Work closely with businesses and nonprofits to address their energy supply planning and potential infrastructure needs. (OCS)

No action occurred in this reporting period.

f. Extensive Greening. Continue to enhance the County's facilities and fleet energy portfolio based on various energy sources and availability scenarios. (OCS, DPW)

The following County initiatives were undertaken during the reporting period:

- Announced new energy efficiency, renewable energy, and fleet fuel usage goals in February 2019. By 2024, Howard County will: obtain 20 percent of the power needed for local government operations from renewable sources; reduce petroleum fuel consumption in the County's fleet by 20 percent; and reduce energy use at County government facilities by 25 percent.
- Completed the second phase of the energy performance contract (EPC) in June 2018. The EPC is expected to reduce energy use at more than 65 County facilities by 35 percent and to save \$900,000 annually on electricity. In addition, the County plans to convert more than 7,000 streetlights to LED over the next four years.
- Pursued the installation of new electric vehicle charging stations at County facilities. The County is planning to add 44 new hybrid electric police vehicles to the fleet in 2020. The County also is conducting a solar energy feasibility study to determine the best locations to install solar panels on County buildings, parking lots, and lands.

g. Market Demand. Explore evolving energy markets, plus options for enabling "smart grid" technologies, which reveal new opportunities to create, store, consume, and invest in energy commodities and related assets. (OCS)

No action occurred during this reporting period.

SECTION III – ECONOMY

Chapter 5 – Economic Development

Policy 5.1 Identify, develop, implement and refine a comprehensive program to foster a diversified economy and encourage innovation and entrepreneurship.**a. Fort Meade Economic and Job Growth. Focus on the anticipated growth due to BRAC, Cyber Command, NSA, and other planned expansions to capture new growth. (HCEDA)**

The following initiatives were undertaken during the reporting period:

- HCEDA supported the Fort Meade Regional Growth Management Commission/BRAC Office through its phase out in March 2016. HCEDA identified local and regional opportunities for agencies on base, and appointed a cyber business development specialist.
- HCEDA signed Memorandums of Understanding with the National Security Agency (NSA), the Maryland Defense Technology Commercialization Center, and the MD Defense Network to foster new growth in the Fort Meade region.
- DPZ participated in a master plan charrette at Fort Meade in 2016 that focused on developing a vision for the future. DPZ also attended all the visioning workshops.
- The Office of Transportation (OT) provided regional transportation comments to the Department of Defense on an east campus expansion at Fort Meade in 2017 and 2018.

b. Branding. Develop and implement a comprehensive branding effort for Howard County to establish a distinct and readily identifiable research and technology brand in the global marketplace as a “top global tech center.” (HCEDA)

The following multi-pronged initiatives were undertaken by HCEDA:

- Received approval from the U.S. Department of Commerce's Foreign Trade Zones Board in 2019 to be included in the service area of Foreign Trade Zone #74, as part of a recent expansion.
- Founded the Howard County Innovation Center to showcase Howard County as an innovative location for startups.
- Redesigned the HCEDA brand message, [website](#), and logo to attract more businesses and entrepreneurs.
- Utilized communications platforms to showcase the work and successes of our technology community.

c. Entrepreneurship. Develop a comprehensive strategy to enable entrepreneurs to be creative, grow their businesses, and access capital. (HCEDA)

HCEDA and the [Maryland Center for Entrepreneurship](#) (MCE) implemented this strategy through cooperative agreements with various partners, including [Maryland's Small Business Development Center](#) (SBDC), [Service Corps of Retired Executives](#) (SCORE), [Maryland Small Business Development Financing Authority](#) (MSBDF), the [Latino Economic Development Center](#), and others.

The following HCEDA initiatives were undertaken during the reporting period:

- Received the Video Lottery Terminal fund, which lends funds out as part of their Catalyst Loan Fund to help provide businesses with access to capital that would otherwise be difficult to obtain.
- Opened the [Gateway Innovation Center](#) located in the Columbia Gateway Business District. The Gateway Innovation Center will serve as the nexus of the region's talent and resources driving innovation, collaboration, and entrepreneurship. The creation of the Gateway Innovation Center is the first step of a multiphase project in formally establishing the Gateway Business District.
- Partnered with the following groups: Fraunhofer USA, Maryland Defense Technology Commercialization Center, Johns Hopkins Applied Physics Laboratory (APL), National Security Agency (NSA), Maryland Technology Development Corporation, Viking Lab, and MITRE.
- Conducted hundreds of events, encouraging business leaders to learn and connect with other business leaders.

d. Downtown Columbia Revitalization. Implement the *Downtown Columbia Plan* to create a vibrant, mixed-use urban center for Howard County. This walkable, livable, revitalized Downtown will create a needed urban anchor that will attract and retain the creative class, and will advance the rebranding of Howard County for the 21st century. (HCEDA)

The following initiatives were undertaken during the reporting period:

Participated in the transformation of Downtown Columbia into a vibrant business district and walkable, urban core of residences, office space, retail space, central park, and reconfigured neighborhoods, including the Merriweather District, Lakefront District, and Warfield District. To date, the following developments were undertaken since adoption of the [2010 Downtown Columbia Plan](#):

- Crescent-Merriweather Neighborhood: Completion of Area 1 and Merriweather Post Pavilion Renovation (Phases I, II, and III) and Construction of Crescent Area 3 – Buildings A1 and B.
- Warfield Neighborhood: Completion of m.flats and TEN.M.
- Merriweather-Symphony Woods Neighborhood: Completion of Chrysalis Amphitheatre.
- Published 2018 [Downtown Columbia Redevelopment Monitoring Report](#).

e. Renewed Approach to Route 1 and Existing Business Parks. Address the demand for business growth in the Baltimore-Washington Corridor, despite the declining availability of greenfield development sites, through new redevelopment strategies. (HCEDA)

The following initiatives were undertaken by HCEDA during the reporting period:

- Collaborated with DPZ on the Route 1 Corridor Master Plan.
- Worked with MDOT and MD Public Safety & Correctional Services to analyze the surplus land inventory in the County's growth corridor which may be available for development or redevelopment opportunities.
- Designated Columbia Gateway as Howard County's Innovation District to help it redevelop and be more attractive to new companies.

f. Funding for Transportation. Expand multimodal transportation options and connectivity to ensure an adequate workforce for Howard County employers and to maintain quality of life. (OT, HCEDA)

The following initiatives were undertaken during the reporting period:

- Cooperated with MDOT on the proposed MARC station at Laurel Park and the existing Dorsey station and other transit-oriented developments to serve the business community and commuters along the Route 1 Corridor.

- Worked with Howard County Public School System (HCPSS) to promote youth and adult apprenticeship programs and opportunities within the Howard County community.
- Represented the County on the [Mid Maryland Workforce Investment Board](#) and marketed the Board's services and clientele to businesses in need of workforce development services in Howard County.

g. Workforce Development Strategy. Ensure an adequate, trained workforce is available to meet the need for service, entry level, and highly skilled workers through the provision of P-20 education, lifelong learning, diverse housing, commuting and transportation, health care, and benefits costs. (HCEDA)

The following HCEDA initiatives were undertaken during the reporting period:

- Worked with the Howard Community College (HCC) to promote customized and workforce development training and certifications necessary for county residents to compete in the competitive global market.
- Established a multi-agency Business Resource Center Group to address employment training needs of County businesses. The Group collaborated with the Local Workforce Investment Board to work with employers who needed help with employee recruitment, training, and outplacement services. HCEDA used State match investment funds for training grants to companies.

h. Existing Businesses. Continue to support and address the needs of existing businesses. (HCEDA)

The following initiatives were undertaken by HCEDA during the reporting period:

- Developed the Continuous Call Program, as part of the [2017 Strategic Plan](#), which is an aggressive business outreach and technical assistance program that will reach over 1,200 existing businesses per year.
- Expanded business development services for existing businesses through a continuous call program with the [Maryland Department of Commerce](#). Over 300 companies are visited annually to assess challenges and opportunities for growth. A small business loan program was also developed, which has provided over \$5 million to local small business.
- Supported the sunset extension of the Route 1 Tax Credit Program in CB 33-2017 and the expansion of the program to serve additional area in Elkridge along Main Street.

- Administered the [Route 1 Tax Credit Program](#) along with Department of Finance and DPZ to encourage reinvestment in properties along the Route 1 corridor. Since 2014, the tax credit has supported the renovation and upgrade of seven commercial and industrial properties that front Route 1, including an expanded area in Elkridge along Main Street for a total of over \$579,000.
- Held a Route 1 Business Roundtable in collaboration with DPZ in 2018.

Policy 5.2 Establish Howard County as a leader in 21st century entrepreneurship, information technology, and cyber security.

a. Marketing. Create a development and marketing program to attract prime information technology and cyber businesses, as well as the critical skilled workforce. (HCEDA)

The following initiatives were undertaken by HCEDA as a multi-pronged branding strategy for Howard County:

- Established “Howard County Cyber Central” to promote the strength and attractiveness of the County’s cyber industry.
- Engaged in a national public radio advertising campaign, “Where talent drives motivation,” to raise the visibility of Howard County.
- Contracted a branding firm to implement a comprehensive marketing strategy for FY17-19.
- Completed a successful rebrand of the HCEDA, which resulted in a new [website](#), logo, and brand identity. This helps to make Howard County stand out amongst competitors and make the County more attractive to technology and cyber businesses.
- Attended cybersecurity conference in San Francisco, hosting in person meetings with cyber companies from around the world to attract their attention to Howard County.
- Completed a trade mission to Germany to attract new international cyber companies to Howard County.

b. Infrastructure Capacity. Define broadband, mobile communications, and utility infrastructure requirements, and ensure that service capacity and quality are available. (HCEDA)

The following HCEDA action items were undertaken during the reporting period:

- Participated in a community engagement and planning committee, which proposes infrastructure enhancements with the Baltimore Gas & Electric (BGE) Company.
- Coordinated with the County's Department of Technology and Communication Services (DTCS) to promote the County's Inter-County Broadband Network, as an incentive to locate and grow businesses dependent on broadband infrastructure.

c. Innovation. Develop programs and facilities to promote a new culture of entrepreneurship and innovation. Encourage the creation of technology-driven entrepreneurial businesses. (HCEDA)

The following initiatives were undertaken by HCEDA and its partners during the reporting period:

- Expanded [Maryland Center for Entrepreneurship](#) (MCE) programs to foster technology innovation, which include the Business Resource Center and Service Corps of Retired Executives (SCORE). Both programs operated in conjunction with the small business program to grow technology driven business systems. Since 2012, monthly MCE traffic has increased from 250 to nearly 1,000 visitors per month.
- Opened the Howard County Innovation Center in June of 2019. Housing the MCE, along with Howard Community College, Business Recourse Center, HCEDA, Howard Tech Council, and other partnering organizations, it has become a one stop shop for business growth and support. HCEDA also developed specific programs to support the innovation community, including the Kauffman Fast Trac and the CEO Accelerator Tech Venture.

d. Education. Work with local businesses to identify the need for leading programs in science, technology, engineering, and math (STEM) in the public schools, Howard Community College, and branch campuses of leading Maryland Universities. Increase participation by minorities, women, and individuals with disabilities. (HCEDA)

The following HCEDA education initiatives were undertaken during the reporting period:

- Partnered with the Howard County Public School System (HCPSS) and [Maryland Department of Labor](#), Licensing & Regulation (DLLR) [Youth Apprenticeship and Training Program](#) to help identify businesses in Howard County that can provide meaningful apprenticeships to students in STEM and manufacturing fields. The goal is to help students earn income while working and learning, through related instruction and one-on-one mentoring with an Eligible Employer in high demand industries, which include traditional pathways and occupations in manufacturing and STEM fields.

- Established a Memorandum of Understanding with HCEDA's [Howard Technology Council](#) (HTC), MCE, and HCPSS Advanced Research Lab to connect student internships and programs with local businesses. The HCEDA also connects companies and educational institutions, through referrals and input on curricula.
- Funded a MD EARN grant with the HTC Affinity Group, in conjunction with HCC and UMBC Health IT Department, to hold a focus group to study opportunities in Health Technology. The results of the study helped the development of a new curriculum for HCC students, including updates to Health Information Technology, Information Management, and Informatics and Data Analytics.
- Hosted seven breakout sessions with the HTC Women in Tech affinity group at the Johns Hopkins APL Girl Power 2019 event. Sessions focused on STEM tracks, including 3D printing, water filtration, cabling, micro satellite design, soft skills in STEM, coding, and Micro bits. The event had over 600 attendees, including elementary and middle school students and families.
- Sponsored the HTC Howard County's Women in Engineering program for 250 high school sophomores in 2019.

Policy 5.3 Promote future energy and green industries.

- a. Differentiation. Integrate forward-thinking energy and resource use into the County's economic development agenda, particularly considering green infrastructure and transportation solutions that differentiate the County from neighboring jurisdictions. (HCEDA, OCS)**

The following OCS action items were undertaken during the reporting period:

- Accepted the United States Climate Alliance's Natural and Working Lands Challenge, which calls on jurisdictions to reduce greenhouse gas emissions and increase carbon sequestration through preservation and management of forests, meadows, and other green infrastructure, as well as increasing the carbon sequestration potential of local farms. Howard County is the first county in the nation to formally accept this challenge.
- CB76-2018 required new homes be "EV-Ready", by including infrastructure for plug-in electric vehicles (EV). Howard County was the first jurisdiction in Maryland to require this infrastructure. Howard County also is the first in the nation to require new apartment, townhome, and condominium buildings provide electric vehicle charging stations.

The following action items were undertaken by HCEDA during the reporting period:

- Adopted Commercial Property Assessed Clean Energy (C-PACE) financing in 2016 to allow commercial property owners to access flexible, 100 percent upfront financing to make energy efficiency and clean energy improvements to buildings. Energy improvements lower the property's energy expenses and make it more comfortable and inviting for tenants. These investments are repaid over time through an additional surcharge on the property tax bill. C-PACE financing requires zero percent down and can provide lower rates and longer terms

than traditional financing, allowing projects to be cash flow positive from day one. C-PACE supports the County's greenhouse gas emissions and energy use reduction goals, creates local green jobs, and provides more opportunities for businesses to save energy and lower operating expenses. In Howard County, C-PACE is available for loans greater than \$15,000 and for terms up to 20 years.

- Solicited and recruited BTS Bioenergy, an Italian-based bio-digestion company, to establish its North American Headquarters in Howard County and construct a \$20 million bio-digester for the [Maryland Food Center Authority](#). This addressed the opportunity to utilize the high volume of organic waste that was being generated by food manufacturers along the Route 1 Corridor.
- Linked several Howard County food manufacturers to donate excess inventory to the [Maryland Food Bank](#).

b. Management. Explore evolving energy markets, plus options for enabling developing technologies, which reveal new opportunities to create, store, consume, and invest in energy commodities and related assets. (OCS, HCEDA)

The following OCS action items were undertaken during the reporting period:

- In 2019 initiated a solar energy feasibility study for County facilities, and plans to supply 20 percent of the power for County government operations through on-site renewable energy.
- Partnered with a local organization to educate the public about the availability of community solar energy, an option that allows anyone who pays an electric bill, regardless of home ownership status or appropriate roof space, to benefit from the lower electricity costs and reduced greenhouse gas emissions that come from solar energy. Community solar energy also encourages the development of large-scale solar energy projects within Howard County, bringing new jobs and workforce development opportunities to the community.

The following action items were undertaken by HCEDA during the reporting period:

- Recognized the need for solutions to excess organic waste, HCEDA successfully researched the technology available to address these needs and worked with the [Maryland Food Center Authority](#) to include these solutions as part of their overall Strategic Plan.
- Worked with farms to assist their solar energy additions to operations.
- Explored growing energy markets for both residential and commercial properties with the solar energy industry. HCEDA recruited green energy businesses to the County.
- Recruited BTS Bioenergy to Howard County in 2017. This facility takes food waste and scraps, safely decomposes them, and harvests the methane byproduct to be used for power creation.

c. Commercial Opportunities. Identify and promote green technologies and associated business opportunities. (HCEDA, OCS)

The following action items were undertaken by HCEDA during the reporting period:

- Participated in establishing the Sustainable Business Council, which was restructured as the Conscious Capitalism Program. The Conscious Venture Lab was established as a business accelerator program to develop sustainable business practices.

d. Incentivizing Sustainability. Create incentives to attract new businesses demonstrating sustainable practices or developing sustainable technologies, materials, and products. (HCEDA, OCS)

The following action items were undertaken during the reporting period:

- Established a program to allow commercial properties to finance green energy solutions. As an incentive, the Property Assessed Clean Energy (PACE) program allows for 100 percent financing of improvements to be applied to property taxes.
- Implemented the voluntary Green Neighborhood (GN) Program, which incentivizes environmentally sustainable development with housing allocations. The County's second Green Neighborhood (GN), Oxford Square, is under development. Oxford Square is a Transit Oriented Development (TOD) which connects residents with public transit and walkable amenities. Sustainable practices used by Oxford Square included using locally sourced materials, permeable pavement, rainwater harvesting, energy-efficient lighting, and construction waste diversion.

See Policy 5.3, a.

Policy 5.4 Enhance the Route 1 Corridor revitalization strategy to recognize the distinct character and market potential of diverse corridor segments, and the potential at various intersections, crossings, and nodes for additional retail, restaurant, and employment development as identified in the 2011 Route 1 Market Analysis.

a. Opportunities. Focus planning efforts to maximize development potential in four types of land-use opportunity areas: redevelopment of high-visibility employment areas; greenfield development of high-visibility employment areas; major industrial park development; and mixed-use opportunity sites. (DPZ)

The following action items were undertaken during the reporting period:

- Launched the Route 1 Corridor Master Plan in 2018 to recommend a revitalization strategy to improve vibrancy and quality of life aspects throughout the Rt. 1 corridor. The effort will build on previous Rt. 1 studies, such as the recent [U.S. 1 Safety Evaluation](#), and broader projects such as the [Development Regulations Assessment](#), an initial examination of the county's zoning code.

- Submitted an application for designation renewal to the [Maryland Department of Housing and Community Development](#) (DHCD) to continue the designation in the North Laurel – Savage area as a Sustainable Community. The application for re-designation indicates the County's continued support for and commitment to enhancing livability and vitality of the North Laurel – Savage area through a partnership with residents, property owners, business and local organizations. Since its Sustainable Community designation in 2013, North Laurel-Savage has benefited from various state funds and resources including the 2018 DHCD Grant for \$70,000 for Carroll Baldwin Hall Renovation. DPZ received Community Legacy funding from the state for the renovation the historic Hall in Savage. The project was primarily an exterior renovation, with minor interior changes to restore historic elements of the Hall (built in 1921). CIP funding from C0344-Southeast Infrastructure Improvements was combined with the state grant for this project. A \$100,000 state bond initiative was passed in the recent legislative session to support additional improvements to the Hall. Construction began in January 2019 and was completed in June.

- b. Zoning Review. Evaluate the efficacy of existing Route 1 zoning districts (CE, CAC, TOD); consider more flexibility, especially regarding commercial uses. Reduce strip commercial development along Route 1 frontage by directing retail uses to retail centers and mixed-use developments and by directing truck-oriented uses, uses that require outdoor storage, and most auto-oriented retail uses such as gasoline service stations, automobile repair facilities and similar uses to parts of the corridor not fronting on Route 1 and not near residential areas. Revise zoning as needed to ensure the County vision is achieved. (DPZ)**

The following action items were undertaken during the reporting period:

- DPZ initiated an assessment of the current Zoning and Subdivision and Land Development Regulations in 2016. The [Howard County Development Regulations Assessment](#) was completed in January 2018. Specific assessments of the CE, CAC, TOD as well as the Rt. 1 Manual are included in the assessment.
- The Route 1 Corridor Master Plan is evaluating the current zoning along the corridor and will make recommendations for zoning changes consistent with key "nodes" or character areas.

- c. Residential Expansion and Preservation of Land for Employment and Industrial Use. Accommodate residential development in key nodes in the Route 1 Corridor so that it does not erode opportunities to preserve or redevelop employment and industrial areas. (DPZ)**

The Route 1 Corridor Master Plan was launched in 2018 to recommend a revitalization strategy to improve vibrancy and quality of life aspects throughout the Rt. 1 corridor. The effort will build on previous Rt. 1 studies, such as the recent [U.S. 1 Safety Evaluation](#), and broader projects such as the [Development Regulations Assessment](#), an initial examination of the county's zoning code.

- d. Refine the Vision. Clarify residential and nonresidential land use goals as a framework for evaluating future proposals. (DPZ)**

See Policy 5.4, c.

e. Transportation. Develop transit and road improvement solutions including bicycle and pedestrian accessibility to promote connectivity and support revitalization of the Route 1 Corridor. (DPZ, OT)

The following action items were undertaken by OT during the reporting period:

- Continued to advance the development of a [complete streets policy](#) and updates to the Howard County Design Manual. The draft Complete Streets Policy was endorsed by the Multimodal Transportation Board in June 2019 and was adopted by CR120-2019.
- Completed a safety evaluation in 2018 of bicycle and pedestrian safety on US 1, resulting in the development of designs for four mitigation projects.
- Developed [BikeHoward Express](#) in 2018, an accelerated implementation plan of the core network of *BikeHoward* projects.
- Collaborated with SHA and MDOT on the Route 1 Corridor Master Plan effort which includes an examination of the full spectrum of transportation modes.

Policy 5.5 Proactively consider innovative tools to enhance the Route 1 Corridor's competitiveness, attract and retain businesses, and maximize redevelopment opportunities.

a. Economic Growth. Focus incentives on opportunity sites within the Route 1 Corridor and on key industry market sectors with strong growth potential in Howard County. (DPZ, HCEDA)

HCEDA worked with DPZ to update the Route 1 Corridor Master Plan.

See Policy 5.4, c.

b. Beneficial Projects. Adopt a tiered incentive program that provides benefits commensurate with the proposed project's potential benefit to the County. (DPZ, HCEDA)

The following action items were undertaken during the reporting period:

- HCEDA investigated options for an Incentive Fund focused on the assembly of underperforming industrial parcels in the Route 1 Corridor.
- HCEDA solicited and recruited the BTS Bioenergy company to establish its North American Headquarters in Howard County and construct a \$20 million bio-digester for the MD Food Center Authority, in response to the high volume of organic waste being generated by food manufacturers along the Route 1 Corridor.

c. Nodes. Develop plans for key opportunity areas that allow for significant future intensification, while maximizing current and intermediate development potential and protecting industrially zoned land. (DPZ, HCEDA)

See Policy 5.4, c.

d. Land Assembly. Encourage land assembly to prevent piecemeal redevelopment and facilitate projects that are integral to the County's long-term development strategy. (DPZ, HCEDA)

HCEDA worked to establish an Incentive Fund focused on the assembly of underperforming industrial parcels in the Route 1 Corridor.

See Policy 5.4, c.

e. Partnering. Evaluate specific scenarios where the County might benefit from engaging in public/private development partnerships, including opportunities for nonprofits. (DPZ, HCEDA)

See Policy 5.4, c.

f. Transportation. Promote, plan, and protect bicycle, pedestrian, and transit access in the Corridor. (OT)

The following action items were undertaken by OT during the reporting period:

- Completed a US 1 Safety Evaluation of bicycle and pedestrian safety, resulting in the development of designs for four mitigation projects, as well as starting implementation of [BikeHoward Express](#), an accelerated implementation plan for a core network of [BikeHoward](#) projects.
- Completed upgrades to a number of Regional Transportation Agency of Central Maryland (RTA) bus stops in the Corridor, including working with a local artist to develop a unique bus stop shelter design, in 2017 and 2018.

- Completed an update to the pedestrian master plan ([WalkHoward](#)) in 2017, which is pending adoption by the County Council.

See Policy 5.4, c.

Policy 5.6 Plan for Class A office, industrial, and mixed-use redevelopment of commercial properties within the Snowden River Parkway area and of commercial and industrial properties in the Snowden-GE area where appropriate

- a. **Plan for Coordinated Redevelopment. Work with Snowden River Parkway and east Columbia Village Center property owners, as well as other community stakeholders to evaluate market conditions and redevelopment options to determine how to best position redevelopment of different parts of the Snowden River Parkway Area in relation to redevelopment of the Village Centers. (DPZ, HCEDA)**

Such cooperation will be facilitated by HCEDA through an accelerated Master Plan for the Gateway/Snowden River Business District. Launched in 2017, the County plans to make this plan the county’s largest business center, Columbia Gateway, into an innovation district — where leading-edge companies work with anchor educational intuitions and startups to collaborate on new technologies and services. The development of the plan will be driven by property owners and businesses in Columbia Gateway and coordinated by HCEDA. Over the longer term, new land uses, infrastructure and transportation improvements would also be assessed as part of the future vision.

- b. **Partner on Implementation. Consider establishing a partnership or special servicing district to promote and manage redevelopment. (DPZ, HCEDA)**

Engagement in the redevelopment process is allowed by the current HCEDA Charter.

- c. **Differentiate when Planning. Distinguish among the sections along Snowden River Parkway that exhibit different characteristics and merit different treatment. (DPZ, OT)**

See Policy 5.6 a.

Policy 5.7 Plan for future transportation services and facilities that connect Downtown Columbia, the Snowden River Parkway area, Gateway, and Route 1 to regional connections to Baltimore, Washington, and Fort Meade.

- a. **Connect Development Nodes. Study the feasibility of regional Bus Rapid Transit (BRT), as well as enhanced local bus service between major business and residential nodes from Downtown Columbia through the Snowden River Parkway area, Gateway**

Business Park, and the Route 1 Corridor to Fort Meade and Odenton in Anne Arundel County. If viable, take action to secure existing CSX rail spur ROW. (DPZ, OT)

The following OT action items were undertaken during the reporting period:

- Completed a ridership study for a bus rapid transit (BRT) feasibility study for various corridors, including MD 32, MD 216, US 29 corridor, Route 1, and Broken Land Parkway. The 2016 study evaluated potential optimal guideway conditions and service ridership.
- Partnered with UMD in 2016 to developed conceptual plans for the CSX right-of-way as a Rails to Trails project.
- Completed the 2017 [Downtown Columbia Transit Center Location and Site Analysis Study](#) to assess and develop recommendations for the relocation, expansion, and configuration of a transit center.
- Evaluated a revised route from Downtown Columbia to Columbia Gateway in the 2018 [Central Maryland Transit Development Plan \(TDP\)](#). This route was implemented in Phase 1 of the TDP.

See Policy 5.4, a.

b. Make More Connections. Study the feasibility and cost-benefits of a new roadway connection crossing I-95 between Route 1 and Gateway Business Park. (DPW, OT)

See Policy 5.6, a.

c. Alternative Modes of Transportation. Study the feasibility of alternative modes of transportation, including facilities for bicyclists and pedestrians, to connect Downtown Columbia, the Snowden River Parkway Area, Gateway, Route 1, and other major business and residential nodes in and near the County. (OT)

The following OT action items were undertaken during the reporting period:

- Completed the Guildford Gateway Trail Feasibility Study, a study of the existing CSX ROW in the Route 1 Corridor and connection to Columbia Gateway in 2016.
- Initiated design and development of [Patuxent Branch Trail](#) improvements in 2016 from Savage to Downtown Columbia.

d. Transportation Management Associations. Evaluate the utility and benefit of developing transportation management associations. (OT)

OT and the Downtown Columbia Partnership (DTCP) drafted a [Transportation Demand Management Plan](#) (TDMP) for Downtown Columbia in May 2019, which is being updated to reflect best practices and is anticipated to be completed in 2019. DTCP acts as a de facto transportation management association for Downtown employers and residents, in coordination with the County's Transportation Demand Management program, Howard Commuter Solutions.

Policy 5.8 Continue to enhance the vitality and redevelopment of Columbia's Village Centers.

a. Strengthen Village Centers. Encourage Village Center property owners, Village Boards, and residents to develop and implement plans for enhancing or redeveloping older Village Centers to maintain them as attractive focal points for the villages. (DPZ)

- Completed the [Oakland Mills Village Center Area Redevelopment Feasibility Study](#) in March of 2017.
- Worked with residents in 2016 to identify a developer to purchase and redevelop the Long Reach Village Center (LRVC).
 - Selected a commercial real estate consultant to manage the selection process for the redevelopment of the Long Reach Village Center.
 - Hosted a successful Industry Day and toured site with approximately 25 interested developers
 - Obtained Zoning approval for a private sector driven redevelopment concept.
- Worked with all the stakeholders on the LRVC Urban Renewal Project. The purchaser/developer project was unsuccessful, so the County began evaluating short-term renovation and long-term renewal for the Long Reach Village Center.
 - Worked with an economic advisor and consultant, RKG Associates, to complete a feasibility analysis and pro forma for the Long Reach Village Center for the possible reuse of the existing structure in 2019 to retain County ownership.
 - Completed research on potential users and space needs and launched Long Reach Rising – a stabilization and beautification initiative

b. Market Analysis. Collaborate with the Columbia Association (CA) to undertake market assessments to assist in repositioning older centers in relation to each other, Downtown Columbia, and other competing commercial centers. (DPZ, HCEDA)

The following action items were undertaken during the reporting period:

- HCEDA engaged with DPZ and the Columbia Association (CA) on the reuse of Long Reach Village Center, and for enhancements which will position the Oakland Mills Village Center to be more competitive in the marketplace.
- See Policy 5.8.a

c. Connect Commercial Centers. Plan for future transportation connections, including bicycle, pedestrian, and transit, among and between Village Centers and other commercial centers. (OT)

The following action items were undertaken during the reporting period:

- Upgraded the pedestrian bridge over Route 29 that connects the village of Oakland Mills to downtown Columbia. The 2018 improvements included the installation of a new spiraling geodesic tube around the bridge, upgraded lighting and additional safety enhancements.
- The County Council adopted CR169-2015, the [Clarksville Pike Streetscape Plan and Design Guidelines](#), which established a unified vision for the Clarksville Pike corridor through streetscape and site design standards. OT initiated design of the shared use path portions of the Streetscape Plan in 2018 and worked with DPW to complete the design of the Cedar Lane Pathway project.
- OT initiated feasibility studies in 2018 for complete streets improvements along the following roads:
 - Columbia Road: providing access to the Dorsey's Search Village Center, and
 - Tamar Drive: providing access to the Long Reach Village Center.
- OT initiated a corridor study in 2019 to identify a preferred route for continuous bicycle facilities through Hickory Ridge, including to provide access to Hickory Ridge Village Center.

Policy 5.9 Continue to enhance the vitality of the Route 40 Corridor.

- a. Enhance Route 40. Encourage commercial renovation and, where appropriate mixed-use redevelopment by promoting collaboration between owners and neighbors to create attractive focal points that serve the community. (DPZ)**

DPZ initiated assessment of the current Zoning and Subdivision and Land Development Regulations in 2016. The Assessment focused on evaluating the strengths and weaknesses of the County's current design manuals, codes and land development regulations, and made recommendations for improvement. The [Howard County Development Regulations Assessment](#) was completed in January 2018. Detailed recommendations for Route 40 zoning districts and design standards can be found in the document.

Policy 5.10 Expand programs to support and enhance agribusiness.

a. Training. Promote County and regional training programs for existing and new farmers to enhance critical business skills. (DPZ, HCEDA)

The following action items were undertaken during the reporting period:

- HCEDA established new business training programs, including "Food for Profit" and the "New and Beginning Farmer." HCEDA opened the AgTech Center to support startup companies applying technology, food safety, water quality, and soil health to agriculture. The Center also provides training and opportunities for farmers to partner with technology companies to develop farming programs and new businesses.
- HCEDA worked to implement agriculture estate planning and agriculture finance planning in the future.

b. Diversification. Use Agricultural Land Preservation Program funds to offer matching grants for farms to diversify their agriculture operations through agribusiness innovations. (DPZ, HCEDA)

The Agriculture Innovation Grant awarded \$104,000 in funds to 27 projects.

c. Mentoring. Create a mentoring program that will connect the younger generation of farmers with experienced farmers and also with farmers who may have property but no one to farm it. (DPZ, HCEDA)

HCEDA's mentoring program was evaluated. Implementation will follow and be considered as part of the General Plan update.

d. New Leaders. Establish an agricultural leadership program for middle / high school students to teach a broad range of skills both specific to agriculture and also general skills such as team building and public speaking. Work with the Howard County public schools to introduce elements of agricultural education back into the public school curriculum.

The following action items were undertaken during the reporting period:

- HCEDA and HCPSS collaborated to develop a high school agriculture education program and worked on developing teaching opportunities for elementary and middle school students. In FY 2018-19, HCPSS implemented a new agricultural [science program](#) for high school students at the Applications and Research Laboratory.
- HCPSS added a High School Honors Credit program for juniors and seniors at the Applications and Research Laboratory.

Chapter 6 – Growth

Policy 6.1 Limited Planned Service Area Expansion. Zoning requirements for approved PSA expansions should include a development proposal that is consistent with the General Plan and establishes a transition that is compatible with and enhances surrounding communities and provides an environmental benefit.

- a. Limited Planned Service Area Expansion. Zoning requirements for approved PSA expansions should include a development proposal that is consistent with the General Plan and establishes a transition that is compatible with and enhances surrounding communities and provides an environmental benefit. (DPW)**

Completed in short-term reporting period. No further action is needed.

- b. Place Types and Tiers. Obtain State concurrence on *PlanHoward 2030* place designations and tiers in accordance with *PlanMaryland's* final criteria and procedures and the Sustainable Growth and Agricultural Preservation Act, on or before December 31, 2012. (DPZ)**

Completed in short-term reporting period. No further action is needed.

- c. Revise APF Regulations. Amend the current Adequate Public Facilities (APFO) regulations to reduce allocation categories and reflect designated places. (DPZ)**

Changes to APFO:

- CB1-2018 revised school capacity for elementary, middle, and high school tests. Adjustments were also made to the school capacity chart, including regional testing. Legislation also included modifications to the road test provisions.
- CB2-2018 amended [PlanHoward 2030](#) by reducing the number of allocations in the Growth and Revitalization category and increasing the number of allocations in the Established Communities category, beginning in 2020.

d. APF Housing Allocations. Incorporate the *PlanHoward 2030* housing forecasts into the Adequate Public Facilities Housing Allocation Chart. (DPZ)

Completed in short-term reporting period. No further action is needed.

e. Zoning. Reduce competition for land resources by promoting more compact development in appropriate growth and revitalization areas. (DPZ)

During the reporting period, three Community Enhancement Floating (CEF) Districts were evaluated and approved ZB1115-M (2017); ZB1116-M (2018); and ZB1118-M (2019). CEF zoning district allows for creative development and redevelopment of commercial and residential properties through flexible zoning so that the proposed development complements and enhances the surrounding uses and creates a more coherent, connected development.

The Route 1 Corridor Master Plan was launched in 2018 to recommend a revitalization strategy to improve vibrancy and quality of life aspects throughout the Rt. 1 corridor.

f. Density Exchange Option. Review and, as appropriate, amend the density exchange provisions of the DEO zoning district during the Comprehensive Zoning process to help mitigate subdivision restrictions due to Growth Tiers. (DPZ)

DPZ initiated assessment of the current Zoning and Subdivision and Land Development Regulations in 2016. A review of the density exchange provisions was conducted. More information can be found regarding the DEO zoning district in the 2018 [Howard County Development Regulations Assessment](#).

g. Targeted Funding. Optimize the use of State and County infrastructure funding and program resources targeted to County-designated place types, with particular emphasis on targeted growth and revitalization areas. (DPZ)

The County's Planned Service Area for public water and sewerage (PSA) is aligned with the State's Priority Funding Area (PFA) for targeting growth in areas served by public infrastructure.

h. Schools. Make efficient use of existing school capacity avoiding unnecessary capital outlays. (HCPSS)

HCPSS redistricted to open Hannover Hills Elementary School in school year 2018/19. Population growth along the US 1 Corridor necessitated the construction of approximately 1,850 high school seats, including 1,650 at new High School #13 and 200 seats at Hammond High School. New seats are slated to be available for school year 2023/24.

HCPSS began the process of comprehensive boundary adjustments for implementation in school year 2020/21 during this monitoring period.

Policy 6.2 Ensure that the County's needs for land for government facilities and land preservation are met in light of competing needs for housing and economic development.

a. Infrastructure Concurrency. Determine the amount and location of land needed for future schools and other facilities, including park and green infrastructure preservation priorities. (HCPSS)

HCPSS advanced the design of High School #13 to open in 2023. HCPSS is currently evaluating the County's 14th high school.

b. Capital Improvements Master Plan (CIMP). Implement land acquisition priorities and funding via the ten-year *Capital Improvement Master Plan*. (DPW, OB)

DPW worked with the Office of Budget (OB) to determine land needs and funding priorities through the annual capital budget process.

c. Connectivity. Ensure that planning for government and public school facilities should incorporate consideration of transportation connectivity and access for pedestrians, bicyclists, and individuals with disabilities. (OT)

OT incorporated access to schools as one of the evaluation criteria in [WalkHoward](#), and worked with school planners and design staff to identify new and updated facilities to connect students to schools.

Policy 6.3 Use PlanHoward 2030 job and housing forecasts to guide County, regional, and State agency decision making regarding infrastructure and services.

- a. Baltimore Metropolitan Council. Incorporate *PlanHoward 2030* housing, population, and job forecasts into the Baltimore Metropolitan Council's official regional forecasts. (DPZ)**

DPZ reported housing, population, and job forecasts on an annual basis, as part of the [Baltimore Metropolitan Council](#) (BMC) Cooperative Forecasting process.

- b. Monitoring. Monitor the amount, type, and location of actual housing, population, and job growth for comparison with *PlanHoward 2030* forecasts. (DPZ)**

DPZ compiled and published this information in the annual [Development Monitoring System Report](#) (DMS).

DPZ provided additional information in the DMS report as required by the Maryland State Smart, Green and Growing legislation, which included land use density, regulatory activity, newly constructed infrastructure, and any restrictions resulting from the County's [Adequate Public Facilities Ordinance](#) (APFO).

Policy 6.4 Ensure that the County continues to capture future job and business growth opportunities.

- a. Economic Development. Partner with the Economic Development Authority to develop County policies and programs to implement the County's Strategic Plan for Economic Development. (HCEDA, DPZ)**

The following action items were undertaken by HCEDA during the reporting period:

- Implemented its [2017-2022 Strategic Plan](#).
- Held monthly meetings with DPZ, DPW, and DILP to coordinate economic development initiatives within targeted areas, including the Route 1 Corridor and Downtown Columbia.

- b. Zoning Regulations. Update zoning and other regulations to address the evolving commercial and industrial markets and development trends. (DPZ)**

The following action items were undertaken by DPZ during the reporting period:

- Council approved ZRA 156 in 2015 which proposed commercial use flexibility in the form of a fee-in-lieu of providing commercial space for developments with more than 800 dwelling units. Also, in 2015, Council approved ZRA 159 that reflects current market trends related to vehicle fueling stations.
- Council approved ZRA 164 in 2016 which proposed to eliminate a land area limitation related to Commercial Solar Facilities on Agricultural Preservation parcels. This amendment will allow for the expansion of the alternative energy/solar market in the rural west.

c. Commercially and Industrially Zoned Properties. Establish policies to protect and promote commercially and industrially zoned land for future job and business growth opportunities. (DPZ)

See Policies 5.4, a and 5.4, b. These recommendations will be evaluated further beginning in 2020, with the General Plan update.

Policy 6.5 Plan well designed and complete communities through the Comprehensive Zoning process.

a. Zoning Regulations. Revise the Zoning Regulations to better promote compact redevelopment and appropriate infill including consideration of connectivity and safe routes to school. (DPZ)

DPZ initiated assessment of the current Zoning and Subdivision and Land Development Regulations in 2016. The Assessment focused on evaluating the strengths and weaknesses of the current land development regulations and made recommendations for improvement. Zoning regulation recommendations on access, connectivity and block and lot design/layout are identified in the Assessment. The [Howard County Development Regulations Assessment](#) was completed in January 2018.

b. Development Opportunities. Designate appropriate additional areas within the County’s Priority Funding Area for well-designed, compact development in order to accommodate future job and housing growth. (DPZ)

Completed in short-term reporting period. No further action is needed.

c. Planned Unit Development. Consider Planned Unit Development (PUD) zoning to allow increased flexibility for unique, well-designed, site-specific developments, which provide benefits and protections to surrounding communities. (DPZ)

Completed in short-term reporting period. No further action is needed.

- d. Compact Development. Encourage compact development with adequate green spaces and connectivity within and between developments which provide residents with a high quality of life and allows residents to take advantage of the benefits of the compact development. (OCS, DPZ)**

The following action items were undertaken during the reporting period:

- Amendments to the New Town Preliminary Development Plan were considered for redevelopment of the Long Reach and Hickory Ridge Village Centers.
- Approved three CEF (Community Enhancement Floating) District proposals: ZB1115-M , ZB1116-M and ZB1118-M.
- Reviewed final development phases for Oxford Square, Howard County's second Green Neighborhood (GN). Oxford Square is a Transit Oriented Development (TOD), which connects residents with public transit and locally walkable amenities.

Chapter 7 – Transportation

Policy 7.1 Increase public awareness of the relationship between personal vehicle miles traveled and highway congestion, air quality, greenhouse gases, and energy independence, as well as how more compact growth patterns and alternate modes of travel can help achieve a sustainable and more environmentally and personally healthy balance.

- a. Green Website. Update the County's website that is devoted to providing information to consumers designed to help make Howard County greener, healthier, and sustainable, to address transportation's role in achieving a healthy community. Include emissions calculators and other tools residents can use to measure greenhouse gas savings, map walking or biking distances, organize ridesharing, and access car sharing. (OCS, OT)**

The following action items were undertaken by the County during the reporting period:

- Remodeled Green Central Station into the website LiveGreenHoward.com, which includes information on local and regional transportation services and promotes alternative travel choices. Information on the website is continuously updated as new Howard County and regional programs evolve.

- Revamped the [Howard Commuter Solutions website](#) to include options for ridesharing, transit, biking, and other environmentally-friendly transportation modes.

b. Awareness. Expand resident and business awareness and use of alternative transportation modes, including transit, carpooling, walking, and cycling. (OT)

The [Regional Transportation Agency of Central Maryland](#) (RTA) provides a comprehensive resource for transit. Integrated social media platforms expand access to information and allow administrators to quickly update riders on changing conditions.

The following actions were undertaken by OT to promote transportation choice:

- Collaborated with the [Baltimore Metropolitan Council](#) (BMC) annually on Bike to Work Day. In 2019, over 1,800 participants registered regionally and nearly 300 registered at Howard County's pit stop in Columbia.
- Coordinated with the Downtown Columbia Partnership (DTCP) to develop a [Transportation Demand Management Plan](#) (TDMP) for Downtown Columbia.
- Completed an overhaul of the [Howard Commuter Solutions website](#) in 2016 to include sections on ridesharing, transit, biking, and walking alternatives to single car commuting during peak hours, and regional resources, including a Guaranteed Ride Home program and incentive programs.
- Participated as a vendor in other County agency public events to educate the public on alternative transportation modes.
- Presented on alternative transportation modes at County employment sites and administered surveys to employees regarding preferences for desired alternative transportation mode choices that could be offered by their employer.
- Partnered with HCPSS in piloting a summer school student bus pass program.

c. Safe Routes. Expand, support and promote programs, such as the Safe Routes to School Program that will enable communities to make walking and bicycling to school a safe and routine activity. Safe routes to school should also be part of the capital and development planning process. (OT)

The following Office of Transportation (OT) action items were undertaken during the reporting period:

- Evaluated development projects for accessibility and connections and made recommendations to enhance access to and from schools for walking and biking.
- Organized bike and walk to school events on a school-by-school basis for parents, students and educators. Many schools track participation through the National Center for Safe Routes to School.
- Partnered with HCPSS on connection projects to reduce busing demand. The following initiatives were completed:
 - Centennial Lane: Installed a crosswalk, new sidewalk segment, and bike lanes to increase walking and biking to Centennial Lane Elementary School.
 - Wilde Lake Middle School: Improved various pathways that provide access to the school.

Policy 7.2 Coordinate State, regional, and local planning and implementation for critical improvements and new transportation facilities based on evaluation of options using a wide range of performance, health, environmental, and financial criteria.

- a. Key Projects. Refine transportation plans and fund the County’s share of projects as identified in: Key Transportation Improvements Anticipated by 2025 (Map 7-1); Key Transportation Improvements Anticipated by 2035 (Map 7-2); Road, Bicycle and Pedestrian Improvements (Figure 7-3); and Transit Priorities (Figure 7-4). (OT)**

The following Office of Transportation (OT) action items were undertaken during the reporting period:

- Coordinated with DPZ, DPW, and County Administration on the annual [priority letter](#) to refine and prioritize projects. The letter is sent to the [Maryland Department of Transportation](#) (MDOT) for its consolidated transportation plan. The annual priority letter includes endorsements from the State Delegation and the County Council. Many of the General Plan’s key transportation improvements anticipated by 2025 and 2035 are still in the planning phase, while others have progressed into construction. These include:
 - MD 32 Projects.
 - Safety and capacity improvements on the US 1 corridor.
 - Bike and pedestrian projects. See Policy 8.5.
 - Capacity and access projects on US 29.

- Transit planning on corridors.
- The 2019 priority letter can be found [here](#).

See Policy 5.5, f.

b. Regional Cooperation. Engage in State and regional discussions to develop solutions to transportation funding shortfalls. (OT)

The following action items were undertaken by the County during the reporting period:

- Worked with the MDOT and the Maryland Transit Administration on the development of a new [Regional Transit Plan for Central Maryland](#). The focus areas of the plan include: state of good repair, funding, new mobility, customer experience, service quality and integration, access, and corridors of opportunity.
- Worked with the MDOT on funded road and transit projects in Howard County, including the following project:
 - MD 32 Expansion: Significant funding was increased for the MD 32 project for capacity (see Policy 7.2, a). State funding for local transit service continued, but has not increased and is not forecasted to increase to meet the County's current or future transit demand.

Policy 7.3 Prioritize and pursue cost-effective, long-term capacity improvements to the road and highway network to support future growth in accordance with place type designations.

a. Capital Planning. Use Howard County's Capital Improvement Master Plan (CIMP) to provide predictable funding for the County's highest priority road projects. (OT)

Office of Transportation (OT) incorporated priority road project funding into the [County's capital budget](#) process, which lays out capital expenditures for each fiscal year, as well as the projected ten-year CIMP.

b. Adequate Public Facilities Regulations. Evaluate adequate public facilities (APF) regulations to determine the merit of adding alternative modes of travel as well as whether the APF road excise tax amount is appropriate and whether a portion of it should be used for safety, transit, bicycle, or pedestrian improvements. (DPZ, OT)

No changes to APF for roads have been made since the previous comprehensive review. Complete Streets will consider all modes of transportation once implemented.

c. Targeted, Strategic Investments. Evaluate new and innovative approaches to maximize the use of highway investments such as High Occupancy Vehicle (HOV) lanes and/or express toll lanes, focus road improvements to support existing communities and future growth areas, and limit rural road improvements to safety, rather than capacity improvements. (OT)

Road capacity improvements are developed through the capital budget to address local impacts from development projects and forecasted growth on existing communities and growth areas. The following action items were undertaken by Office of Transportation (OT) during the reporting period:

- Coordinated with DPW on the development of bicycle facilities with annual repaving schedules, to advance the implementation of [BikeHoward](#) projects and reduce costs. Between 2016 and 2018, a total of 7.8 miles of bicycle lanes were constructed, either as part of a structured *BikeHoward* project or a road resurfacing project.
- Initiated discussions with Montgomery County, Maryland to cooperatively plan and engineer a bus rapid transit project from Columbia to Silver Spring. The project will include specific branding, new buses, coordinated service plans, and on-shoulder high occupancy vehicle lanes.

Policy 7.4 Enhance the accessibility and quality of existing and future transit services.

a. Transit Operations Facility. Develop a transit operations facility to reduce costs by centralizing fleet maintenance and opening competitive bidding to additional transit service operators. (OT)

Completed in short-term reporting period. No further action is needed.

b. Howard Transit. Maximize efficiency of Howard Transit and HT Ride operations via route alignment and paratransit taxi services, paying particular attention to improving access to government facilities and health and human service locations. (OT)

The following Office of Transportation (OT) action items were undertaken during the reporting period:

- A short-range *Transit Development Plan* (TDP) was completed and adopted by the Howard County Council in 2018. The TDP provided recommendations for improving the efficiency and effectiveness of fixed routes and expanding service over the next five years.
 - In May 2019, RTA implemented the first phase of the recommendations by restructuring the fixed routes to maximize efficiency and increase access to government facilities and health and human service locations.
 - The first phase added over 5,600 service hours by providing more frequent service, evening, and Sunday service.

c. Regional Transit. Expand and maximize the efficiency, investment and connectivity of mid-corridor regional transit with Anne Arundel County, Baltimore County, Montgomery County, Prince George's County, the City of Laurel, and Fort Meade, as well as connectivity with Baltimore and Washington regional transit service.

The following Office of Transportation (OT) action items were undertaken during the reporting period:

- Recommended additional fixed routes in the second phase of the 2018 TDP to provide more local service and regional service to Baltimore County, to connect with MTA services.
- Reviewed the feasibility of implementing Bus Rapid Transit (BRT) service along Route 29 between Howard County and Montgomery County. Still under review, this service would connect with Montgomery County's planned BRT service, the Flash.

d. Multijurisdictional Agencies. Evaluate potential and, if advantageous, establish a new multijurisdictional agency for the administration and operation of public transportation services that would improve the efficiency and effectiveness of regional transit services, improving connectivity and coordination among public and private providers and maximizing the use of federal, state and local funding. (OT)

Completed in short-term reporting period. No further action is needed.

e. Service Frequency. Enhance Howard Transit by implementing half-hour service frequencies, increasing connectivity to other Baltimore-Washington regional transportation facilities (MARC, park-and-ride, pedestrian and bicycle facilities, and Transportation Demand Management initiatives), and instituting other service improvements identified in the *Transit Development Plan*. (OT)

The following Office of Transportation (OT) action items were undertaken during the reporting period:

- In May 2019, RTA implemented the first phase of the recommendations in the 2018 TDP by restructuring the fixed routes to maximize efficiency and increase access to government facilities and health and human service locations.
 - Added over 5,600 service hours by providing more frequent service, evening, and Sunday service.
 - Implemented all of the routes on either half-hour or one-hour service frequency. There are no more routes that operate on a two-hour service frequency.

See Policies 5.7, d and 7.4, b, c.

f. Land Use Decisions. Establish and enhance policies and regulations that integrate land use decisions with connectivity and transportation accessibility. (OT)

Office of Transportation (OT) participated in the Zoning and Subdivision and Land Development Regulations review process.

See Policies 5.4, e and 5.5, f.

Policy 7.5 Utilize regional studies to develop an effective plan for significantly expanded regional transit service.

a. Corridor Evaluation. Evaluate existing and potential transit corridors for future ridership, transit mode options, and cost-effectiveness in order to prioritize public investment within transit corridors. (OT)

The following Office of Transportation (OT) action items were undertaken during the reporting period:

- Worked with the MDOT and Maryland Transit Administration on the development of a new regional [Transit Plan for Central Maryland](#). The focus areas of the plan include: state of good repair, funding, new mobility, customer experience, service quality and integration, access, and corridors of opportunity. The County is a part of a commission that was formed under this effort.
- Advanced studies to measure ridership for BRT on US 29, as well as increasing transit services on the US 1 corridor, as part of the Route 1 Corridor Master Plan.

See Policy 5.4, e.

b. Rights-of-Way. Preserve transit rights-of-way within existing and potential transit corridors. (OT)

Office of Transportation (OT) identified future generalized transit rights-of-way in their Bus Rapid Transit studies. Reservations are requested, as needed, during the subdivision and land development review process for future routes and/or bus stops.

c. Transit Nodes. Identify locations within the Growth and Revitalization areas for more detailed planning for the development of transit-supportive densities and land uses, as well as pedestrian and bicycle connectivity. (OT)

Office of Transportation (OT) identified the following areas in [BikeHoward](#) that need additional planning and development for pedestrian and bicycle connections: Dobbin Road Commercial Area, Gateway Commerce Center, Route 40 Corridor in Ellicott City, MD 216 Corridor, Maple Lawn, various segments of the Route 1 Corridor, Clarksville (River Hill), and Historic Ellicott City. OT is advancing the design and engineering on several corridors/areas.

See Policy 5.4, d, e.

d. Compact Development. Adopt land use policies and regulations to promote compact development patterns that support transit demand through sufficient densities and interconnected street and pedestrian networks. (OT)

No action occurred in the reporting period.

e. Downtown Columbia. Work with the Downtown Columbia Partnership to develop the Downtown Columbia Transportation Demand Management Plan, multimodal transit facility and circulator. (OT)

The following Office of Transportation (OT) action items were undertaken during the reporting period:

- Coordinated with the Downtown Columbia Partnership in 2016 to begin developing a [Transportation Demand Management Plan](#) (Final Draft, May 2019) for Downtown Columbia, to be completed in 2019.
- Participated in meetings to identify the future location of Downtown Columbia's multimodal transit facility, commensurate with its Community Enhancements Programs and Public Amenities (CEEPA) requirement. A circulator component for Downtown Columbia's transportation system will be coordinated with transit facility assessments.

f. Baltimore Metropolitan Council. Cooperate with the Baltimore Metropolitan Council (BMC) to develop a new regional transit study. (OT)

The following initiatives were undertaken during the reporting period:

- [Baltimore Metropolitan Council](#) (BMC) approved funding to supplement development of a Transit Development Plan in 2016.
- OT began working with regional partners in 2019 on the development of the [Central Maryland Transit Development Plan](#).

See Policy 7.4, b.

Policy 7.6 Reduce highway congestion, energy consumption, and greenhouse gases by increasing the number of residents using alternate modes of transportation.

- a. Bicycle Master Plan. Develop a Bicycle Master Plan that defines priority projects and identifies those that can be integrated with pedestrian improvements and transit facilities. Establish an implementation schedule and identify funding. (OT)**

CR35-16 adopted the [BikeHoward](#) Master Plan.

- b. Pedestrian Master Plan. Assess progress and refine priorities of the existing Pedestrian Master Plan. (OT)**

Completed an update to the pedestrian master plan ([WalkHoward](#)), which is expected to be adopted in 2019.

- c. Bus Stops. Expand the study of bus stop infrastructure needs to identify gaps in bicycle and pedestrian connections between bus stops and surrounding destinations. (OT)**

The following initiatives were undertaken by the Office of Transportation (OT) during the reporting period:

- Upgraded 90 bus stops with a variety of amenities, including shelters, pads, benches, and sidewalk connections.
- Conducted field surveys of existing bus stop infrastructure to determine needs and identify gaps in bicycle and pedestrian connections between bus stops and surrounding destinations, for facility master planning. A total of 500 bus stops, over 250 miles of sidewalk, and over 750 intersections were surveyed.

- d. Evaluate Alternative Mobility Options. Evaluate the options to meet the needs of seniors and people with disabilities. (OT)**

The following initiatives were undertaken during the reporting period:

- OT instituted a free fare policy for seniors and people with disabilities on RTA's fixed-route service on July 1, 2018. This made the fixed routes more accessible to seniors and people with disabilities and improved their independence and mobility throughout the community.
- DPW incorporated Americans with Disabilities Act (ADA) upgrades to sidewalks and ramps in coordination with road resurfacing projects.

- e. Complete Streets. Promote complete streets by amending the Design Manual for road improvements to address bus stops and transit shelters, as well as pedestrian pathways, crossings, and bicycle improvements. (OT)**

CR120-2019 adopted the Howard County Complete Streets Policy.

- f. Capital Projects. Establish an interdepartmental team including the Howard County Office of Transportation, Department of Planning and Zoning, Department of Public Works, and Department of Recreation and Parks to prioritize and coordinate implementation of the Bicycle and Pedestrian Master Plans through both capital projects and review of private sector development plans. (OT)**

The County incorporated pedestrian and bike master plan projects into the [Capital Budget](#) - K5061 (pedestrian) and K5066 (bike).

- g. Public Outreach. Develop strategies to promote public awareness and use of alternative travel modes for work, errands, and recreation. (DPZ, OT)**

See Policy 7.7, a

Policy 7.7 Reduce highway congestion, energy consumption, and greenhouse gases.

- a. Ride Sharing. Promote car share and bike share systems, HOV programs, and expanded park and ride lots. (OT)**

The following initiatives were undertaken during the reporting period:

- Howard Commuter Solutions, the County's Transportation Demand Management (TDM) program, promoted alternative transportation modes through public outreach, served as a resource for employers, and maintained a comprehensive [website](#). The website was overhauled to expand beyond carpooling, vanpooling, and the Guaranteed Ride Home program, to include other aspects of transportation demand management (e.g., telework, multimodal commuting), as well as new ride-hailing technologies (e.g., Uber and Carpool Now). Ride Share initiatives for Downtown Columbia will be implemented through its [Transportation Demand Management Final Draft Plan](#), anticipated to be completed in 2019. Park & Ride lots are also monitored monthly for usage.
- Howard County launched the Howard County Bikeshare program with 70 bikes in seven locations in 2017, mostly funded through partnerships with community organizations. Two additional stations and eight bikes were added in 2018. The program facilitated around 10,000 trips in the first two years of operation.

- b. TDM Program. Study and develop the Downtown Columbia Transportation Demand Management Plan as well as additional TDM programs as mechanisms to mitigate traffic/congestion impacts and expand transit services. (OT)**

See Policy 5.7, d.

c. Data Sharing. Investigate sharing of bus location data generated by Howard Transit for potential use by independent software developers to promote transit and transit alternatives. (OT)

The Regional Transportation Agency of Central Maryland (RTA) made updates available on the General Transit Feed Specification (GTFS), an open data format for public transportation schedules, routes, and bus stop locations, to independent software developers. RTA bus stop location, route, and schedule information are currently published on Google Transit and the Transit app. Riders use these and other applications to plan their trips. RTA made real-time bus arrival information available on an application called RouteShout, which can be downloaded onto a mobile device.

d. Innovative Technologies. Leverage the County's investment in the intra-County broadband network to develop a Howard County traffic control center to monitor traffic conditions and coordinate with Maryland State Highway Administration traffic control. (OT)

No action occurred in the reporting period. This action will be addressed beginning in 2020, with the General Plan update.

e. Alternative Modes of Transportation. Make pedestrian, bicycle, and transit modes of transportation attractive and viable options. (OT)

See Policies 5.4, e, 5.5, f, and 7.3, c.

SECTION IV – COMMUNITY

Chapter 8 – Public Facilities and Services

| | |
|---|---|
| <p>Policy 8.1 Refine the Capital Improvement Master Plan process by further strengthening the project evaluation criteria, the prioritization process, and the project implementation phasing schedule.</p> | |
| <p>a. Agency Master Plans. Direct County agencies to regularly update facility master plans that include maintenance and systemic renovations, as well as new or expanded facilities.</p> | <p>Completed in short-term reporting period. No further action is needed.</p> |
| <p>b. Capital Budget Review Committee. Continue to strengthen the interagency review committee’s assessments to assist in setting capital project priorities, phasing, and funding strategies. (OB)</p> | <p>Completed in short-term reporting period. No further action is needed.</p> |
| <p>c. State Funds. Explore how under <i>PlanMaryland</i>, State agency funds and programs can be targeted to priority projects within designated Growth and Revitalization areas and Existing Communities. (DPZ)</p> | <p>Applied for designation renewal in 2019 to the Maryland DHCD to continue the Sustainable Communities designation in the North Laurel – Savage. The application for re-designation indicates the County’s continued support for and commitment to enhancing livability and vitality of the North Laurel – Savage area through a partnership with residents, property owners, business and local organizations. Since its Sustainable Community designation in 2013, North Laurel-Savage has benefited from various state funds and resources including the following:</p> <ul style="list-style-type: none"> • 2018 DHCD Grant for \$70,000 for Carroll Baldwin Hall Renovation: DPZ received Community Legacy funding from the state for the renovation the historic Hall in Savage. The project was primarily an exterior renovation, with minor interior changes to restore historic elements of the Hall (built in 1921). • A \$100,000 state bond initiative: Passed in the 2019 legislative session to support additional improvements to the Hall. |
| <p>d. Innovative Funding. Identify new or creative funding sources and methods such as public-private partnerships. (DPZ, OT)</p> | |

Completed in short-term reporting period. No further action is needed.

e. Transportation Planning. When evaluating new facilities and capital projects, consider transportation infrastructure, including availability of public transit, and opportunities for bicycle and pedestrian access. (OT)

As part of the subdivision and land development review process, the Office of Transportation (OT) evaluated private and public development and encouraged transit, pedestrian, and cycling connections and access.

Policy 8.2 Continue to lead by example in further reducing Howard County Government's environmental impacts and incorporating green building practices into new and renovated public facilities.

a. Enhance Sustainability. Expand the use of cost-effective, resource-conserving green technologies in new and renovated County facilities. (OT, OCS, DPW)

The following initiatives were undertaken by County agencies during this monitoring period:

- Participated in the Baltimore Regional Cooperative Purchasing Agreement (BRCPC) with surrounding jurisdictions to reduce energy consumption, and more importantly, reduce demand charges through energy monitoring, load shedding, and co-generation.
- Awarded second Energy Savings Performance Contract Purchasing Agreement to renovate and improve 68 County facilities to reduce energy usage. The performance contract with DPW was completed and verification measures were met to reach energy reduction goals of \$14 million over 17 years.
- Mandated all new County buildings greater than 10,000 square feet be LEED Silver certified. During the 2016-2019 reporting period, new LEED Silver facilities included the Elkridge Library and Elkridge Fire Station. The new County courthouse was designed as a LEED Gold building and is currently under construction.
- DPW and OCS coordinated on Building Automation Systems (BAS) to control the performance of heating, ventilation, and air-conditioning (HVAC), and lighting remotely. A program was initiated in 2019 for retro-conditioning and installation of sensors into HVAC systems to monitor energy performance. The program's initial phase includes seven buildings and is scheduled to expand to additional facilities in FY19-20. Current funding comes from capital project C0329 Energy Management Improvements. Allocation of additional funding will be needed in out years for program continuation. The County is in the process of expanding the number of buildings with continuous, real-time, energy use monitoring and building automation systems. This allows the County to identify and address spikes in energy use as they happen by making adjustments to lighting, heating, cooling, and ventilation equipment, when needed to conserve energy.
- The Howard County Library System (HCLS) utilized resource-conserving green technologies with the redevelopment of the Savage Library, including numerous stormwater treatment facilities with educational signage.

- Worked toward streamlining utility billing management across the entire portfolio to correct billing errors, and to identify and prioritize energy efficiency projects.
- Tracked fleet fuel usage and vehicle miles driven on a monthly basis.

b. Monitoring. Monitor County buildings and vehicles to document environment, health, and safety benefits, as well as cost-effectiveness. (DPW, OCS)

The following initiatives were undertaken by the County during the reporting period:

- DPW continued to monitor County facility energy usage, to advise the Baltimore Regional Energy Cooperative Purchasing Committee on energy procurement.

See Policy 8.2 a.

c. Public Outreach and Education. Communicate the monitoring data and results of demonstration projects to the public. (OCS)

The following initiatives were undertaken by the County during the reporting period:

- Demonstration project incorporated into planning and design of East Columbia Library's 55+ site is scheduled to be completed in 2021.
- Incorporated monitors in the George Howard Building and the Miller Library, which provide information about the environmental features of each building.
- Howard County regularly reports progress on its environmental and sustainability monitoring results and demonstration projects through the [LiveGreenHoward](#) website, an email newsletter, press releases, and social media.

d. Multimodal Transportation Strategies. Promote and implement strategies to enable access to government facilities via bicycle, pedestrian and transit. (OT)

The following initiatives were undertaken during the reporting period:

- OT worked directly with agencies responsible for the design and construction of government buildings (e.g., High School #13 and the new County Courthouse) and new parks, to address access issues early in the development review process. In addition, OT prioritized multimodal access improvements to existing government facilities (e.g., pedestrian and accessibility improvements between the North Laurel Community Center and MultiService Center and ensuring that the Howard Hughes Multi Use Pathway—also known as the [Downtown Columbia Trail](#)—provided access to the Central Branch of the Howard County Library System).
- The [Design Advisory Panel](#) (DAP) reviewed the Elkridge Library and new elementary school in Oxford Square for consistency with the [Route 1 Design Manual](#) and the TOD zoning requirements. DAP commented on pedestrian circulation, sidewalks, bus shelters, and crosswalks.
- OT coordinated with development of the new County courthouse on Bendix Road to ensure adequate transit access.

Policy 8.3 Use the operating budget process to optimize public services and use of funds.

- a. Ongoing Management. Continue to provide high-quality services to the County’s residents and businesses while maintaining fiscally-prudent budget assumptions. (OB)**

The Office of Budget (OB) monitored the service level of Departments and performs an annual Spending Affordability review.

- b. Regular Review. Direct County agencies to continue their annual review of services and service delivery to address evolving needs and changing demographics. (OB)**

See Policy 8.3, a.

Policy 8.4 Ensure the adequacy of water and sewer services.

- a. Wastewater Treatment Plant Capacity. Monitor flows to the Little Patuxent Water Reclamation Plant to ensure sufficient capacity for projected growth in the Planned Service Area. (DPW)**

The [Little Patuxent Water Reclamation Plant](#) (LPWRP) seventh addition expanded capacity from 22 to 29 million gallons/day (MGD). The increase delivered enough capacity for compliance with state nutrient reduction requirements for nitrogen and phosphorus. An eighth addition is currently in progress, targeting only bio-solids and not capacity. Current LPWRP operating levels:

- Current Permitted Public Sewerage Capacity: 29.0 MGD.
- Current Sewer Flows (2018): 19.5 MGD (67% capacity).

b. Master Plan for Water and Sewerage. Identify capital project priorities for capacity expansion and systemic renovations, as well as innovative approaches to reduce water consumption and recycle treated waste water. (DPW)

The County's [draft interim amendment](#) to the [2015 Water and Sewer Master Plan](#) was completed in March of 2019. This Plan is used to evaluate annual capital project priorities.

Policy 8.5 Continue to invest in multimodal transportation infrastructure to enhance mobility and access to diverse transportation options.

a. Road Improvements. Continue to use APF-generated excise tax revenues to leverage State and Federal funding for highway capacity improvements. Consider legislation to allow use for other transportation modes. (OT)

The County continued to use excise taxes to fund local road improvements, as well as using funding, if applicable, to leverage state investments.

b. Transit Development Program. Update the County's Transit Development Program every five years to evaluate and prioritize Howard Transit improvements, as well as connections to regional transit. (OT)

The following initiatives were undertaken by OT during the reporting period:

- Completed a five-year update of the [Central Maryland Transit Development Plan](#) (TDP) in 2018. The Plan serves as a guide for transit services in the Central Maryland region and will provide a roadmap for implementing service and organizational improvements, including potential service expansion, during the next five years.
 - Implemented some of the recommendations outlined in the Plan in May 2019.
 - Evaluated that more recommendations will be implemented in the next few years, as funding for capital and operating projects becomes available.

c. Innovative Transit Funding. Explore additional public and private funding sources to expand and improve the quality of fixed-route and paratransit service. (OT)

The following initiatives were undertaken by OT during the reporting period:

- Received a Statewide Transit Innovation Grant in FY19 to implement a mobile fare ticketing system, which will allow riders to use their mobile phones to purchase and pay for bus fares.
- Studied and developed scenarios for private sector investment in public transit.

d. Pedestrian and Bicycle Connections. Implement priority pedestrian and bicycle improvement projects and, whenever possible, include as part of road construction or maintenance projects. (OT)

The following initiatives were undertaken by OT during the reporting period:

- Collaborated with DPW and the State to implement and advance bicycle and pedestrian projects.
- Implemented a bike-parking program. The grant-funded project focuses on marketing and outreach to install racks at employment centers, shopping centers, transit hubs, park and ride lots, schools, libraries, parks, and other cycling destinations. The goal of the project is to install 100 racks a year over the two-year grant period, for a total of 200 racks. Thus far, the program has installed 45 bike racks at 24 locations throughout Howard County. The program includes:
 - An inventory of bike parking in the County,
 - A bikeshare [website](#)/interactive mapping product to track installation and locations,
 - Bike rack installation guidelines,
 - Outreach materials to solicit requests for bike rack locations,
 - Permits or agreements for bike rack installations, when necessary,
 - Bike racks and mounting hardware, and
 - A contractor to install the bike racks.

Policy 8.6 Provide for environmentally sound and cost-effective solid waste management.

- a. Promote Solid Waste Reduction. Continue to expand programs for solid waste reduction, reuse, recycling, and composting. Expand recycling programs to include additional materials as technologies and markets become available, including the possibility of recovery of items from the landfill. (DPW)**

In FY16, DPW updated the [Solid Waste Management Plan](#). The Plan is required by state regulation and provides guidance for the County's solid waste management system through the year 2024.

- b. Plan for Future Capacity. Ensure that the County has reliable options for solid waste processing and disposal that allow sufficient lead time for planning and construction of a new cell at the Alpha Ridge Landfill or other new facilities, or for instituting new programs. (DPW)**

See Policy 8.6, a.

Policy 8.7 Identify and fund the most cost-effective strategies for Watershed Implementation Plan execution.

- a. Funding. Evaluate options and adopt a dedicated funding mechanism.**

See Policy 3.2, a.

- b. Best Management Practices. Monitor and evaluate the cost-effectiveness of diverse best management practices to maximize nutrient reduction from the funds expended. (OCS)**

The following initiatives were undertaken during the reporting period:

- The Office of Community Sustainability (OCS) reviewed and incorporated findings from the Chesapeake Bay Program expert research panels and the Chesapeake Stormwater Network on best management practices.
- OCS utilized and explored innovative strategies for awarding work, including design, build, maintenance contracts based on amount of stormwater treated, as well as public private partnerships and innovative technologies.
- DPW prioritized individual watershed projects based on their effectiveness and cost-per-pound of nutrient removed.

Policy 8.8 Optimize planning and use of available funds to ensure school facilities continue to support high-quality school programs.

- a. Accuracy of Enrollment Projections. Continue to collaborate with the Public School System to improve enrollment projections by refining the methodology for assessing the varying impacts of growth and neighborhood population cycles on individual schools. (HCPSS)**

The following initiative was undertaken during the reporting period:

- DPZ and the Howard County Public School System (HCPSS) collaborated each year to update the projection model. Enrollment projection accuracy is reported annually. In the most recent projection year, 82 percent of schools were within 5 percent accuracy or better. Detailed accuracy reports are available on BoardDocs.

b. Maximize Use of Existing School Facilities. Balance enrollment between under- and over-capacity schools by redistricting or alternative strategies to encourage full use of schools that have additional capacity. (HCPSS)

HCPSS approved alternative strategies to encourage full use of schools that have additional capacity.

c. Minimize New School Construction. Accommodate the projected enrollments by using modular classrooms and additions whenever possible. (HCPSS)

The following initiatives were undertaken by HCPSS during the reporting period:

- Utilized modular classrooms where new capital projects were not possible.
- Added approximately 400 seats at all school levels in the last three years through renovations. Detailed reports are available on BoardDocs.

d. Land Bank. Acquire additional sites inside the PFA to hold in reserve if needed for future school construction. Consider more urban school prototypes to reduce land acquisition requirements. (HCPSS)

The following initiative was undertaken by HCPSS during the reporting period:

- Reviewed opportunities to purchase land for future school construction.

e. Fund Maintenance, Renovation, and Program Initiatives. Provide sufficient funding to maintain and renovate school facilities and to allow program initiatives that will sustain and enhance the quality of the Public School System. (HCPSS)

The following initiative was undertaken by HCPSS during the reporting period:

- Reported annual maintenance and systemic renovations in the capital budget. Detailed reports are available on [BoardDocs](#).

Policy 8.9 Continue to support Howard Community College's expanding ability to provide higher education for County residents and workers.

a. Expansion of Howard Community College. Continue the County's commitment to fund expansion to accommodate enrollment and program growth. Support HCC in obtaining funds from the State or other sources. (HCC, HCEDA)

The following initiatives were undertaken during the reporting period:

- Howard Community College (HCC) continued to receive County and state funds for capital projects. The newly renovated Howard Hall and Academic Commons are opening in the summer of 2019. The college is also starting the design of the new Mathematics and Athletics Complex, which is proposed for funding over the next four years.
- Howard County Economic Development Authority (HCEDA) worked closely with HCC to link state training resources and community college capacities to address local business needs.
- Howard Technology Council partnered with the HCC, Johns Hopkins University APL, and other entities to create a STEM Task Force that provided recommendations and resources to the HCC for the next generation of STEM majors. The task force explored and recommended proven strategies to attract and retain STEM majors, in addition to identifying meaningful research opportunities.

b. Workforce Training. Continue to work with the Economic Development Authority, the private sector, and other institutions of higher education to meet workforce development and retraining needs, especially in science and technology-related fields. (HCC, HCEDA)

HCC continued to look for partnership opportunities with HCEDA and other entities to meet workforce development and training needs in the County. The following initiatives were undertaken by HCEDA during the reporting period:

- Implemented an internship program in 2014 and worked with HCPSS ARL Academies to provide internships, workforce experience, and professional development skills to rising seniors in Howard County schools.
- Partnered with Howard Technology Council and the HCC's Business & Training Center to develop curriculum for non-traditional students in Health Care and Health Technology fields, as part of a Continuing Education Program.

c. Community Cultural Enrichment. Continue to expand noncredit course offerings and cultural programs that promote lifelong learning and enhance community life. (HCC)

The following initiatives were undertaken by HCC during the reporting period:

- Continued to develop non-credit offerings, including basic and intensive language courses.
- Expanded cultural enrichment programs to inspire Howard County residents.

Policy 8.10 Enhance residents' access to high quality library resources.

- a. Master Plan. Evaluate the need for additional library capacity to serve planned population and program growth, considering the impact of the Internet and other digital access to information. Provide necessary expansion via additions or new facilities within the Planned Service Area. (HCLS)**

The following initiative was undertaken by HCLS during the reporting period:

- Updated the Howard County Library System's strategic plan for 2015-2020, [Vision 2020: Education for All](#)
- Implemented the [2004 Facilities Assessment and Master Plan](#), which guides the system's capital improvement program. The Plan's assessment is based on projected population growth through the year 2040.

- b. Libraries as Educational and Community Focal Points. Enhance the design of existing and any future libraries to both optimize the delivery of service at each library branch and help create a civic focal point. Where feasible, integrate libraries with other complementary public or private facilities.**

The following initiatives were undertaken by HCLS during the reporting period:

- Completed the Elkridge Branch and Senior Center in 2017.
- Completed renovation of the East Columbia Branch in 2018.
- Completed renovation of the Elkridge Branch and DIY Education Center in 2018.

Policy 8.11 Ensure County residents and visitors have access to a wide variety of arts and cultural programs; cultivate artists; and develop creative workforce.

- a. Arts Council. Continue to support the operations and programs of the Arts Council through financial and in-kind resources and services. (HCAC)**

The [Howard County Arts Council](#) (HCAC) operates the Howard County Center for the Arts, a 32,000-square foot, multi-purpose facility owned by the County, which is open to the public seven days a week. The Center features two professional galleries, a community black box theatre, dance studio, and large conference/workshop room, three classrooms, 14 visual artist studios, and four offices for arts organizations (including HCAC). On average, 36,200 visitors, 4,000 artists, and 2,350 children participated in programs and activities at the Center for the Arts each year of the monitoring period.

b. Community Service Partnership. Continue to utilize the Community Service Partnership with the Howard County Arts Council to distribute public funds to local and regional arts organizations through competitive grant programs and to manage art facilities. (HCAC)

HCAC received County and state funds during the reporting period to support grants to local and regional arts organizations, resulting in the following:

- Awarded 65 grants totaling \$566,800 to organizations that served 317,000 residents and visitors in FY17.
- Awarded 61 grants totaling \$582,550 to organizations that served 277,000 residents and visitors in FY18.
- Awarded 60 grants totaling \$579,237 to organizations in FY19.
- Managed one art facility.

c. Business Partnerships. Encourage partnerships between the arts community and the Howard County Economic Development Authority, Howard County Tourism, and private and business sectors to increase awareness of the value of the arts and provide creative funding to support programs and facilities. (HCAC)

HCAC partnered with nearly 200 local businesses annually during this monitoring period to fund and advance the arts. New initiatives during the monitoring period:

- Partnered with the Howard Hughes Corporation to develop and implement the Merriweather District Artist-in-Residence Program (MD AIR). HCAC served as an advisor, administered the on-line artist application process, and served on the Artistic Review Panel that reviewed 73 applications in FY18 and 175 applications in FY19. The Panel selected three MD AIR artists for each year.
- Partnered with Visit Howard County to launch the pilot [Art For All](#) cooperative marketing campaign to promote county arts activities.

d. Arts and Entertainment Districts. Explore options to create one or more “Arts and Entertainment” districts in Howard County. (HCAC)

During the reporting period, the following initiatives were undertaken by HCAC:

- Promoted and supported Downtown Columbia's vision to create an arts and entertainment district, by working with Orchard Development and the Housing Commission on a concept for a mixed-use affordable housing and art center in Downtown Columbia.
- Hired consultant, Schultz & Williams, to conduct a [Campaign Feasibility Study & Plan](#) for the Downtown Columbia art center, which was published in FY17.
- Brought together arts and cultural groups, concerned citizens, and interested stakeholders, at the request of the Howard County State Delegation leadership, to discuss strategies for a more cohesive and collaborative approach for programming and scheduling capital financing for arts and cultural activities in Downtown Columbia. A series of facilitated group meetings and individual interviews, led by consultant Eliot Pfanstiehl and HCAC Executive Director Coleen West, were held and a report with recommendations was submitted to the Delegation leadership and the County in FY19.

e. Support for Artists. Increase opportunities for artists to live, work, learn, and present work in Howard County. (HCAC)

The following initiatives were undertaken by HCAC during the reporting period:

- Provided opportunities for an average of 5,500 artists, through re-grants in FY17, FY18, and FY19.
- Provided an average of \$97,500 in grants, honoraria, awards, contracts, and scholarships to artists per year. This included a total of \$40,800 to 34 artists affected by the 2016 flood in Ellicott City and \$39,350 to 48 artists affected by the 2018 flood, through the ReCREATE: Ellicott City Artist Relief Fund.
- Provided exhibit and performance opportunities for an average of 4,000 artists per year at the Center for the Arts.
- Provided affordable studio space for 14 visual artists, office space for three arts organizations, and workshop space for six arts advancement groups per year at the Center for the Arts.
- Provided affordable rehearsal, performance, dance studio, classroom, and meeting space for an average of 52 arts groups per year at the Center for the Arts.

f. Development. Include art or arts spaces in new public construction when appropriate. (HCAC)

The following public art initiatives were undertaken by HCAC during the reporting period:

- Served as an advisor and administered the on-line application process for public art at the new Howard County courthouse.
- Placed a permanent mosaic mural by artist Susan Stockman at the Center for the Arts in FY19, through the Head StART in ART partnership.
- Placed 12 temporary [ARTsites](#) sculptures at public and private sites in FY17, FY18, and FY19.
- Partnered with 11 PTAs to permanently place nine murals (seven mosaic, one fused-glass, and one painted) and three fiber installations at nine elementary, one middle, and one high school.
- Facilitated the purchase and permanent placement of:
 - The Aubergine sculpture by artist Jan Kirsh (part of HCAC's ARTsites 2015) to Art in Ellicott City, a new non-profit, which installed the sculpture at the Welcome Center in Ellicott City in FY19.
 - The Basalt Man by artist Glenn Zwegardt (part of ARTsites 2016) to Howard Community College in FY17.

Policy 8.12 Expand the County park system and recreational facilities.

- a. Land Acquisition. Establish acquisition goals for environmental conservation and active recreation in the 2012 update to the *Howard County Land Preservation and Recreation Plan (LPRP)*. Accelerate land acquisition to meet long-term recreation needs while suitable sites are still available, particularly inside the Planned Service Area where population is greatest. (DRP)**

The following initiatives were undertaken by DRP during the reporting period:

- Updated the [Howard County Land Preservation, Parks and Recreation Plan](#) (LPPRP) in 2017, which identified areas of need for acquiring and developing public parklands throughout the County to provide access to: parks, community centers, athletic fields, playgrounds, water recreation, pavilions, and trails.
- Maintained a land acquisition and conservation goal of at least 30 acres of parkland per 1,000 residents, while focusing on identified areas of need inside the Planned Service Area. Unfortunately, parkland acquisition opportunities within the Planned Service Area are very limited and expensive, compared to opportunities elsewhere in Howard County. Most of DRP's land acquisition funding comes from the Maryland Department of Natural Resources' [Program Open Space](#) (POS) grants, which require DRP spend at least 50% of POS funding on parkland acquisition, before spending on parkland development.
- Acquired two properties with POS funding in the past three fiscal years. Both were under four acres in size and only one was in the Planned Service Area. Efforts to acquire larger parcels were unsuccessful due to affordability or the existence of competing preservation covenants on the properties that made them ineligible for parkland development by DRP.

- Received and protected more parkland, in the form of open space and various conservation/preservation easements, through the private land development process than through active parkland acquisition efforts.

b. Recreation Planning. Update the LPRP regularly to establish countywide goals and priorities for development of facilities and recreation programs. (DRP)

The following initiatives were undertaken by DRP during the reporting period:

- Completed the [2017 LPPRP](#) and made it available to the public on the County's website. The [2017 LPPRP](#) identifies areas of need for access to and development of a variety of facilities, while establishing short-term, mid-term, and long-term facility development goals. The [2017 LPPRP](#) also provides a recreation program assessment to identify the strengths, weaknesses, and opportunities for DRP's future program direction to remain aligned with changing community needs. This assessment is developed through a review and analysis of Commission for Accreditation of Park and Recreation Agencies (CAPRA) requirements, current and projected demographics, community survey results, community input, program inventory, age segment analysis, major program areas, program lifecycles, facility space, seasonal reporting, marketing efforts, pricing and revenue policies, recreation and leisure trends, needs assessments, level of service standards, and other observations.
- Received two of five annual grant installments through POS to prepare the 2022 LPPRP, and work on that document will begin in FY20.

Policy 8.13 Enhance community recreational opportunities.

a. Cooperation with Howard County Public School System. Continue to collaborate on the design, development, management, and maintenance of shared recreation facilities and programs on school sites. (DRP)

The following initiatives were undertaken by DRP during the reporting period:

- Worked closely with the HCPSS community liaison to enhance communication regarding permitting of facilities.
- Increased communication regarding summer camp placement, in coordination with building maintenance issues. Implemented the following cooperation efforts:
 - Worked with HCPSS on school activity room spaces occupied by the Department. Dedicated program space is extremely limited, as it greatly affects preschool and licensed childcare programming areas.
 - Communicated with the representative from the School Board regarding pathway issues, especially during severe blizzards.
 - Managed after-school, weekend, and summer programs at Cedar Lane School for children with disabilities.
 - Continued swim opportunities in the water therapy tank at the Cedar Lane School.

- b. Coordinate the Columbia Association, Recreation Organizations, and Private Recreation Providers. Expand partnerships with other recreation providers so that the Department of Recreation and Parks programs complement and support efforts by other providers. Provide information on opportunities available through other organizations. Encourage programming across all age groups and abilities. (DRP)**

The following partnerships were undertaken with DRP during the reporting period:

- Worked with community associations, advisory groups, and committees to garner ideas, support, and insight into the development of programs, facilities, and parks. Examples of these groups include: Recreation and Parks Advisory Board, Elkridge Adult Athletic Association, Western County Youth Athletic Association, Sierra Club, Neighborhood park and playground committees, Ellicott City Youth Association, Horizon Foundation Neighborhood Councils, Horizon Foundation 'Connections' Youth Council, NAACP Howard County Youth Committee, Howard County Lacrosse, Western Howard County Baseball, various youth football organizations, Howard County Heritage Consortium, Glenwood Community Center Advisory Committee, North Laurel/Savage Community Center Advisory Committee, North Laurel Civic Association, HCPSS, CA, Howard County Office of Tourism, Local Children's Board, HCHD, HCPD, HCPL, Hershey Track and Field program, Friends of the Patapsco Female Institute Historic Park, Baltimore B & O Railroad Museum, Friends of the Ellicott City Colored School Restored, Historic Ellicott City, Friends of the Waverly Mansion, Baltimore's Child, Glenwood Lions Club, and DHCD.

Policy 8.14 Plan for Health and Human Services.

- a. Comprehensive and Coordinated Health and Human Services Planning. Continue to develop data-driven, measureable plans for both Health Services and Human Services. Plans should reflect comprehensive assessment of needs, resources, proposed actions, and implementation strategies with a clear identification of priorities, partner roles, and funding mechanisms. (DCRS, HCHD)**

The following initiatives were completed by the County during the reporting period:

- Updated the [Health Department Strategic Plan \(2016-2021\)](#), which outlines a series of outcomes identified by the department as future goals.
- Drafted the [2018 Annual Health Department Report, 2016](#), and [2017](#)
- Completed Response to a Crisis: Opioids in Howard County, [2018](#) and [2019](#)
- Completed the [2018 Howard County Health Assessment Survey Final Report](#).
- Drafted the [2019 Community Health Indicators Report Card](#).
- Completed the [2019 Report on the Status of People with Disabilities in Howard County](#).

b. Capacity Building. Continue to build positive, collaborative relationships with the Horizon Foundation, Association of Community Services, United Way, the Columbia Foundation, and other capacity-building organizations, as well as the business community, as essential resources for achieving health and human services goals. (HCHD, DCRS)

HCHD continued to collaborate with the [Horizon Foundation](#), [Healthy Howard Inc.](#), [United Way](#), [Foreign-Born Information and Referral Network \(FIRN\)](#), [Association of Community Services](#), [Columbia Association](#), [People Acting Together in Howard](#), and other local organizations to increase awareness of, advocate for, and reach underserved populations.

Policy 8.15 Enhance the delivery and accessibility of health and human services.

a. Access to Information. Enhance access to data and information technology to facilitate program coordination and strengthen health and human service delivery systems. (HCHD, DCRS)

See Policy 8.14, a.

b. Partnerships for Health and Human Services Delivery. Continue to expand partnerships among government, business, and nonprofit sectors, including faith-based nonprofit organizations, to coordinate health and human services delivery. (HCHD, DCRS)

See Policy 8.14, b.

c. Co-location of Services. Establish multiservice centers, where feasible, in prominent, transit-accessible locations. These centers should be used as focal points for the distribution of health and human services. (HCHD, DCRS)

The Community Resources Campus (CRC) opened in 2018 in Columbia. County service agencies co-located at CRC include the Department of Community Resources and Services, Department of Housing and Community Development, Office of Human Rights, and Community Action Council of Howard County.

Policy 8.16 Minimize loss of life, loss of property, and injury due to fire or medical emergencies.

- a. Fire Stations. Construct and staff the new and replacement fire stations in the current Capital Improvement Program (Waterloo, Elkridge, and Banneker). Renovate and rehabilitate existing fire stations as appropriate to ensure the continued provision of efficient service. (DFRS)**

The following initiatives were undertaken by DFRS during the reporting period:

- Completed replacement of the Elkridge station, which went into service on March 24, 2018. A Memorandum of Understanding (MOU) is in place between the County and the Elkridge Volunteer Fire Department regarding station use and their portion of the financial obligation for the stations' community hall.
- Conducted planning work to replace the Banneker station, with consideration being given to the station location, potential collaborative efforts regarding the property use with other agencies, and potential for a temporary site to ensure emergency service coverage of the Columbia area during the reconstruction period.
- Constructed a new station, Merriweather station 14, in a collaborative effort with Howard Hughes Corporation and in conjunction with the downtown revitalization construction. The new station was placed in service on August 19, 2019.
- Funded the construction of a new Waterloo station at Routes 1 and 175 to meet the service demand generated by new development and revitalization along the Route 1 Corridor. The groundbreaking occurred on August 29, 2019 and funding was secured within the Department of Fire and Rescue Services FY2020 operating budget. Data analysis shows a currently existing and growing need for added services in the Waterloo area.
- Inspected fire stations annually to identify necessary systematic improvements that are essential to each facility's functionality and the quality of life for assigned personnel during each respective 24-hour shift. Updates included alerting systems apparatus bay doors, security systems, HVAC systems, physical fitness equipment, visual learning systems, and kitchen amenities.
- Reviewed plans to construct a new fire station in the North Columbia area. Data analysis shows demand is currently being met, however, there is little margin for the impact of growth occurring in the Columbia area. Funding was placed in the FY2020 operational budget. DFRS continues to work with the County and other agencies to finalize a site for this facility.

- b. Underground Cisterns. Continue to construct underground cisterns to support fire suppression in the Rural West. (DFRS)**

The following initiatives were undertaken by DFRS during the reporting period:

- Added ten 30,000-gallon underground cisterns, bringing the total to 34 cisterns in service. Three additional cisterns are currently in the design process, which entails not only tank design, but property acquisition, any required MOU with the property owner, and site planning to ensure appropriate access for large apparatus. Current budget planning intends to allow for about two to three new cisterns each year, to continue until project completion. This project is in accordance with a 2008 strategic initiative to ensure adequate firefighting water supply in non-hydrant developed areas of the County. That initiative identified the most critical locations for ongoing installation of these resources, with about 100 potential areas.
- Updated the Fire Code in 2019 to require developers designate and provide appropriate land for a cistern when building developments of 10 residential housing units or more, in non-municipal water areas. This update will have a positive impact on this project, as finding appropriate sites for cisterns within an area identified as strategically valuable has proven to be a challenge. The new fire station in Glenwood (2013) and the addition of these cisterns were two key factors that contributed to an improved Public Protection Classification (PPC) Rating by the Insurance Services Office in 2012 and again in 2014. That rating now closely mirrors the rating in the areas of the County served by municipal fire hydrants. This PPC rating is one of several criteria used in calculating the cost of homeowner's insurance by most insurance companies.

c. Fire and Rescue Vehicles. Provide funding to replace fire and rescue vehicles when needed. (DFRS)

DFRS was challenged to maintain the replacement plan for apparatus, staff, and command vehicles in recent fiscal years, due to previous deferrals, budget reductions, and new services that redirected allocated funding to other acquisitions. A trial implementation of a limited master lease program did not demonstrate significant benefit. As a result, funds were budgeted over the next eight years that, given stability in the greater economic environment, should be sufficient to allow significant ground to be made up regarding appropriate replacement of vehicles.

Policy 8.17 Enhance Police protection.

a. Organizational and Facility Assessment. Evaluate the options for organizing Police functions and the need for a new central district to develop a plan for new or modified Police Department facilities. (HCPD)

The following initiatives were undertaken by HCPD during the reporting period:

- Initiated planning for a new Central District Station and selected an architectural and engineering firm for the project. The location selected for the Central District Station is in the Harpers Choice area of Columbia. This project is currently on hold for County funding reasons.
- Hired a firm to redesign both the Northern and Southern District Stations. Planning for the renovation of each district will begin during construction of the Central District. Each district will be renovated consecutively, following construction of the Central District. This project was placed on hold for funding reasons.

- Designed and completed the Grempler Building. All components were moved in, with full functionality improving local community access to police services. Resources were consolidated into a centrally-located Community Outreach building (Grempler), which houses Youth Services, Community Outreach, Operational Preparedness and Operations Staff. HCPD also added a new pathway patrol unit, which provides a year-round, highly-visible police presence on pathways and in residential areas. The team works to deter crime, address quality-of-life issues, and allow officers to interact more directly with community members.

b. Adequate Resources. Ensure the Police Department has adequate staff and equipment based on levels of crime and demand for services. (HCPD)

The following initiatives were undertaken by HCPD during the reporting period:

- Controlled the perimeter and conducted foot patrols during the 2016 and 2018 Flood Response and Recovery, to keep businesses and homes secure. Police coordinated the towing of a few hundred vehicles from Main Street and the Patapsco River, and arranged for their release to owners.
- Expanded the School Resource Officer (SRO) Program in 2019, by adding three officers and one supervisor to provide coverage in six additional middle schools in the County.
- Added new sworn officer positions for additional patrol officers, as well as three additional SROs to cover six more middle schools, and an Asian Liaison. This new liaison position was implemented in FY2018 to assist with the needs of the County's growing Asian population.

c. Community Policing and Youth Programs. Enhance and expand focus on community policing programs that allow police officers to work in partnership with communities to solve crimes and work proactively with schools. (HCPD)

The following new initiatives were undertaken by HCPD during the reporting timeframe:

- Completed a comprehensive, independent staffing study by Matrix Consulting that determined that "at an overall level, patrol has sufficient resources to handle calls for service and have some proactive capabilities" at this time. The consultant recommended "12 additional officer positions by the year 2020 in order to account for increased service needs that occur as a result of projected growth and development."
- Conducted joint active-shooter training with the Fire Department to get more immediate medical care to victims on-scene during a shooting incident or similar dangerous crisis. School resource officers also received specialized active shooter training inside Howard County schools.
- Continued use of the Specialized Traffic Enforcement Program (STEP), which uses data to target areas most at-risk for collisions, speeding, and Driving Under the Influence offenses.
- Launched in 2017, the Teen Court program offers the opportunity to first-time juvenile offenders to accept responsibility.

- Collaborated with partners to share information on overdoses, and strategies for prevention, intervention, education, and enforcement. In 2017, the HCPD hired an Opioid Coordinator and added a Vice and Narcotics Section position to focus on this growing problem.
- Reconfirmed the HCPD commitment to fair treatment for all members of the community, regardless of immigration status, with the release of a written policy formalizing the department's practices. The PD also entered into a formal partnership with FIRM in 2017 and continued to work closely with all concerned community partners in 2018 and 2019.
- Ran two body camera pilots with different vendors and contracted with a consultant from Loyola University to work with the body camera committee. The consultant assisted in capturing data and providing guidance for the committee to make recommendations. The research and testing process was comprehensive and lengthy and concluded at the end of 2018.
- Conducted a professional beat alignment analysis study in FY18 of 2019. The new beat configuration, effective July 1, 2019, is intended to better balance resources and workload. It provides that areas can be staffed consistently during all hours of the day and night, to best distribute officer workload levels more consistently across all beats/zones/districts.
- Achieved national meritorious re-accreditation in July of 2018, as awarded by the Commission on Accreditation for Law Enforcement Agencies.
- Launched a new flagging program that allows residents to voluntarily "flag" their addresses in the 911 system to make police aware of a family member with any intellectual or physical disability, in the event they wander off, go missing, or police respond to a call at their home.
- Conducted joint active-assailant training with the Fire Department in 2018 to get more immediate medical care to victims on-scene during a shooting incident or similar dangerous crisis. School resource officers also received specialized active shooter training inside Howard County schools. During FY2020, the HCPD will enhance active assailant preparation and participation in training with the Rescue Task Force.
- Evaluated the need for a comprehensive staffing study to address the current organizational structure and the need for additional resources in the 911 Center, especially as the state rapidly moves toward Next Generation 9-1-1. Howard County hired Mission Critical Partners, LLC. to conduct a comprehensive study of all aspects of 911 communications.
- Partnered with Howard County Public School System to have new legislation passed enabling the installation of exterior cameras on school buses to allow for automated enforcement. This program will place cameras on HCPSS-contracted school buses to capture images of vehicles which violate Section 21-706 of the Transportation Article of the Annotated Code of Maryland, that requires drivers to stop when the school vehicle is stopped and operating its flashing red lights. The technology was successfully used elsewhere in Maryland. The intent of the program is to modify driver behaviors to use more caution around school buses.
- Explored options to increase operational efficiency, using a workgroup to evaluate the potential benefits of using small Unmanned Aircraft Systems (sUAS), commonly referred to as drones, to support and enhance the HCPD's public safety mission.

Policy 8.18 Continue to invest judiciously to maintain and enhance County facilities.

- a. Funding Priorities. Use the Capital Improvement Program to evaluate and prioritize County investments in technology upgrades and systemic renovation for County offices and other facilities. (OB, DPW)**

DPW used the annual Approved [Howard County Capital Budget](#) to evaluate and prioritize funding.

b. Community Revitalization. Continue to invest in renovation of community infrastructure as well as catalytic community revitalization projects, seeking grants and public-private partnerships whenever possible. (OB, DPW)

See Policy 8.18, a.

DPZ managed three Community Legacy grants totaling \$200,000 in funding from the Maryland DHCD to create an Ellicott City Façade Improvement Program. DPZ was also awarded a \$500,000 Strategic Demolition Grant to assist with reconstruction of the St. Luke AME Church retaining wall, that was washed out in the Ellicott City May 2016 flood.

Chapter 9 – Housing

Policy 9.1 Increase public awareness of how combined housing and transportation costs affect housing affordability, traffic patterns, resource consumption, and pollution, to promote support for compact, mixed income, and mixed-use communities that meet the diverse housing needs.

- a. Education on Housing Costs. Utilize diverse strategies such as collaboration with the Board of Realtors, nonprofits, and business groups to educate residents, policy makers, and housing advocates on affordability/value of location efficiency. (HCHC, DHCD, DCRS)**

Initiatives from [Short-Term Monitoring Report](#) continued through the reporting period, in addition to the following actions:

- The County embarked on a new Housing Opportunities Master Plan in 2019, to comprehensively look at housing affordability needs and make recommendations on innovative affordable housing concepts and guidelines.

- b. Location Efficient Mortgages. Expand advocacy for location-efficient mortgages to continue to increase the number of households that qualify for homeownership. (HCHC, DHCD, DCRS)**

Initiatives from [Short-Term Monitoring Report](#) continued through the reporting period.

Policy 9.2 Expand full-spectrum housing for residents at diverse income levels and life stages, and for individuals with disabilities, by encouraging high quality, mixed income, multigenerational, well designed, and sustainable communities.

- a. Range of Affordable Options. Continue to expand current options for full-spectrum, affordable housing through affordable housing requirements in additional zoning districts; increased regulatory flexibility to provide low and middle alternatives to moderate income housing; institution of density or other incentives; use of fee-in-lieu option; accessory apartments; establishment of public, private, and nonprofit partnerships; and promotion of business community support for workforce housing. (HCHC, DHCD, DCRS)**

Initiatives from [Short-Term Monitoring Report](#) continued through the reporting period, in addition to the following actions:

- Provided housing choice vouchers to the Regional Project Based Voucher Program and applied for, and received, an allocation of regional vouchers.
- Provided funding through the Office of Community Partnerships to non-profit partners to complete home improvements and modifications.
- Provided home improvement and modification services to seniors and the disability community through the Office on Aging and Independence, including accessibility modifications.

- Commenced and completed construction on Burgess Mill Station 2, with 53 rental units.
- Partnered with developers to create affordable rental units, including Riverwatch II in Elkridge, a 58-unit mixed-income (25 market rate and 33 affordable), energy efficient, townhome community with amenities, and Robinson Overlook, a 48-unit mixed-income property between River Hill and Hickory Ridge, with community services and dedicated community space. Both properties received low income housing tax credits (LIHTC) from the State and are nearing construction start dates.
- Planned and applied for LIHTC for Ellicott Gardens II, an affordable family development on Waterloo Road in Ellicott City. The development will serve families with a wide-range of incomes and will provide resident services and community space that can fill the needs of both Ellicott Gardens II and Ellicott Gardens, HCHC's existing 106-unit development nearby.
- Acquired the 248-unit Azure at Oxford Square Apartments, expanding affordable options to the Route 100 area of the County. Increased affordability from 15 percent to 20 percent of units.

See Policy 9.1, a.

b. Diverse Rental Opportunities. Work with developers to provide increased full-spectrum rental choice for all incomes, ages, and abilities throughout Howard County, especially in areas designated for increased density and revitalization. (HCHC, DHCD, DCRS)

Initiatives from [Short-Term Monitoring Report](#) continued through the reporting period, in addition to the following actions:

- Commenced and completed construction on Burgess Mill Station 2, with 53 rental units.
- Partnered with developers to create affordable rental units, including Riverwatch II in Elkridge, a 58-unit mixed-income (25 market rate and 33 affordable), energy efficient, townhome community with amenities, and Robinson Overlook, a 48-unit mixed-income property between River Hill and Hickory Ridge, with community services and dedicated community space. Both properties received low income housing tax credits (LIHTC) from the State and are nearing construction start dates.
- Planned and applied for LIHTC for Ellicott Gardens II, an affordable family development on Waterloo Road in Ellicott City. The development will serve families with a wide-range of incomes and will provide resident services and community space that can full the needs of both Ellicott Gardens II and Ellicott Gardens, HCHC's existing 106-unit development nearby.
- Planned and applied for LIHTC for Artists Flats, the housing component of the New Cultural Center, the first affordable project to be built in the new downtown Columbia. Artists Flats will consist of 184 units, with 87 market rate and 87 affordable units, serving a range of incomes, and with units set aside for people with disabilities.
- Negotiated a master lease with Howard Hughes, to control 12 units in the first, new residential project in downtown Columbia. The units are to be rented to people in the Housing Choice Voucher program, creating a mix of affordability in the otherwise high-market rate deals.

See Policy 9.1, a.

c. Redevelop Older and Affordable Housing. Expand zoning or other financial incentives to redevelop older, lower income housing into full-spectrum mixed income, sustainable communities and make the communities accessible to individuals with disabilities. (DHCD, HCHC, DCRS)

Initiatives from [Short-Term Monitoring Report](#) continued through the reporting period, in addition to the following actions:

- Commenced and completed construction on Burgess Mill Station 2, a 53-unit mixed-income development in Ellicott City, that is the redevelopment of Ellicott Terrace apartments.
- Partnered with Woda Development to plan and obtain financing for Robinson Overlook, which has nine units dedicated at affordable rents to people with disabilities.
- Completed the Leola Dorsey Center, which provides permanent housing for people who are chronically homeless and, by definition, with disabilities. The Day Resource Center at Leola Dorsey, operated by Grassroots, also serves many chronically homeless people with disabilities.

d. Expanded Funding Sources. Pursue additional funding to enable DHCD to continue expanding supplies of affordable housing for low and moderate income households, seniors, and persons with disabilities. (DHCD, HCHC, DCRS)

Initiatives from [Short-Term Monitoring Report](#) continued through the reporting period, in addition to the following actions:

- Worked with [Maryland Affordable Housing Coalition](#) to expand State funding for affordable housing.
- Pursued additional funding through the federal Department of Housing and Urban Development (HUD) Continuum of Care Grant to support housing for seniors and persons with disabilities.
- Provided funds to non-profit partners to provide services for and rental subsidies to seniors and persons with disabilities.

See Policy 9.2, b.

e. Transportation Connections. Consider and include transportation in all planning and renovations. (DHCD, HCHC, DCRS)

Initiatives from [Short-Term Monitoring Report](#) continued through the reporting period, in addition to the following actions:

- Ensured that new developments had public transportation within walking distance.
- Participated in public meetings and transportation planning committees to ensure accessible transportation options for all persons, with a specific emphasis on accessibility for seniors and persons living with disabilities.

Policy 9.3 Expand innovative programs to enable existing housing to meet full spectrum housing needs and housing needs of individuals with disabilities.

- a. Education and Outreach. Continue DHCD and DCRS efforts to educate home seekers on existing affordable housing programs, Fair Housing law, location efficient mortgage concepts, and mortgage and lending requirements that assist with decision making on home rental or purchase. (HCHC, DHCD and DCRS)**

Initiatives from [Short-Term Monitoring Report](#) continued through the reporting period, in addition to the following actions:

- Conducted community outreach sessions on landlord/tenant rights and relations.
- Provided counseling through the Office on Consumer Protection to individuals seeking assistance in resolving landlord/tenant disputes.
- Created materials translated into multiple languages for accessibility, including Spanish, Korean, and Chinese.

- b. Preservation of Existing Units. Evaluate legislation to create a “right of first offer” for the County when rental projects are being converted into condominiums to allow for preservation of affordable units. (HCHC, DHCD)**

Initiatives from [Short-Term Monitoring Report](#) continued through the reporting period, in addition to the following action:

- Proposed Right of First Refusal legislation to the County Council and County Executive. Bill is in drafting stage.

- c. Protection during Conversions. Expand existing protections for low income and senior renters and renters with disabilities in buildings undergoing condominium conversions. (DCRS)**

Initiatives from [Short-Term Monitoring Report](#) continued through the reporting period, in addition to the following actions:

- Increased outreach and education through the Office of Consumer Protection to the community regarding existing protections, as indicated in the law and renters (tenant) rights.
- Provided individual counseling and guidance through the Office of Consumer Protection on specific case inquiries regarding protections.

- d. Condominium Financing. Evaluate the effects of condominium fee delinquency on the availability of mortgages and home prices to determine an appropriate response. (DHCD, DCRS)**

Initiatives from [Short-Term Monitoring Report](#) continued through the reporting period.

- e. Existing Homes. Continue to pursue programs to support use of existing, older homes as another means of addressing affordable housing needs. Facilitate the participation of nonprofits in efforts to promote full-spectrum housing. (DHCD)**

Initiatives from [Short-Term Monitoring Report](#) continued through the reporting period, in addition to the following actions:

- Provided funding through the Office of Community Partnerships to non-profit partners to complete home improvements, modifications, and energy assistance.
- Provided home improvement and modification services to seniors and the disability community through the Office on Aging and Independence, including accessibility modifications.

Policy 9.4 Expand housing to accommodate the County's senior population who prefer to age in place and people with special needs.

- a. Universal Design. Expand partnerships with public, private, and nonprofit organizations to assist senior citizens and residents with special needs by universal design renovations. (DHCD, DCRS)**

Initiatives from [Short-Term Monitoring Report](#) continued through the reporting period.

- b. Promoting Self-Sufficiency. Enhance the development of personal service and home maintenance businesses to promote self-sufficiency for those choosing to age in place. (DCRS)**

Initiatives from [Short-Term Monitoring Report](#) continued through the reporting period, in addition to the following actions:

- Continued to offer the Loan Closet, which provides multiple services from across DCRS and houses Rebuilding Together of Howard County. In the fall of 2019, the Loan Closet will expand into a larger space and provide equipment for children and adults across the lifespan.
- Provided in-home assessments, education, and home modifications through the Office on Aging and Independence's Aging in Place program.

- c. Increasing Awareness. Expand outreach to senior citizens and residents with disabilities to increase awareness of existing County, nonprofit, and business services. (DHCD, DCRS)**

Initiatives from [Short-Term Monitoring Report](#) continued through the reporting period, in addition to the following action:

- Prioritized housing and transportation needs for residents living with disabilities in the *Report on the Status of People with Disabilities in Howard County*. The report identifies current unmet needs of persons with disabilities, identifies best practices, and proposes recommendations to address those needs.

d. Transportation and Transit. Incorporate transportation options.

Initiatives from [Short-Term Monitoring Report](#) continued through the reporting period, in addition to the following action:

- DCRS staff (from the Office on Aging and the Office of ADA Coordination) served on a number of transportation related committees to ensure that the needs of the older adult and disability communities are met.

Policy 9.5 Support the efforts of County agencies, nonprofits, and other organizations to prevent temporary and chronic homelessness.

a. Partnering. Continue to partner with public, private, and nonprofit organizations on key actions to implement the *Plan to End Homelessness*. (DHCD, DCRS)

Initiatives from [Short-Term Monitoring Report](#) continued through the reporting period, in addition to the following actions:

- Led the work of the Board to Promote Self-Sufficiency and the Continuum of Care Board (CoC).
- Launched efforts to update the Howard County *Plan to End Homelessness*, a community-wide strategic plan to make homelessness rare, brief, and non-reoccurring in Howard County.
- Distributed funds through the Community Partnerships Grants process to non-profit partners focused on preventing homelessness and serving those who are homeless or at risk of being homeless.

b. Annual Review. Charge the Board to Promote Self-Sufficiency (BPSS) to annually review the *Plan to End Homelessness* and make recommendations for funding and implementation of targeted initiatives. (DHCD, DCRS)

Initiatives from [Short-Term Monitoring Report](#) continued through the reporting period, in addition to the following actions:

- DCRS established a separate Continuum of Care Board to work specifically on homelessness prevention and services. The work of the Board also includes updating and revising the Howard County *Plan to End Homelessness*. DCRS provides leadership, staff, and oversight of both the Board to Promote Self-Sufficiency and the CoC.

c. Housing Needs. Partner with DHCD, DCRS, and others to address the transitional housing needs of homeless individuals and families challenged by chronic disabilities, health, mental health, and substance abuse. (DCRS, DHCD)

Initiatives from [Short-Term Monitoring Report](#) continued through the reporting period, in addition to the following action:

- Awarded federal and local Community Partnership grant funds to Grassroots Crisis Intervention Center for leasing and utility expenses associated with the Day Resource Center (DRC). DRC provides critical social and support services to both sheltered and unsheltered homeless. The program anticipates serving approximately 100 individuals with this funding.

Policy 9.6 Promote design innovation for all housing types, utilizing cost-effective sustainability principles, to meet the housing and transportation needs of the County’s diverse households.

a. Universal Design Options. Promote the creation of additional housing developments with universal design features by incentivizing innovative and replicable design and building practices through the use of expedited review and permitting, density bonuses, property tax credits, fee reductions, grants, revolving loans, or marketing assistance as well as the creative use of mixed income developments. (HC, DHCD)

Initiatives from [Short-Term Monitoring Report](#) continued through the reporting period, in addition to the following action:

- The DCRS Office on Aging and Independence provided feedback and contributed to the promotion of universal design in projects being developed for older adults in the County.

b. Recognize Innovations. Continue to recognize and highlight design innovation in high quality, cost-effective, sustainable, mixed income and multigenerational housing. (HCHC, DHCD)

DHCD and HCHC promoted design innovation in their most recent projects: Leola Dorsey Community Center, Day Resource Center, and Burgess Mill Station 2. Additionally, structural and energy efficient renovations were performed at a variety of properties.

c. Design Review. Include innovative affordable housing concepts and guidelines in the documents used by the Design Advisory Panel in its review of projects. (DPZ)

See Policy 9.1,a.

d. Healthy Housing. Identify policies that promote affordable, safe, and healthy housing for residents. (DHCD)

Initiatives from [Short-Term Monitoring Report](#) continued through the reporting period, in addition to the following actions:

- The DCRS Office of ADA Coordination reviewed plans, provided feedback, and promoted accessible housing policies for people with disabilities in the County.

See Policy 9.1,a.

Chapter 10 – Community Design

Policy 10.1 Protect and enhance established communities through compatible infill, sustainability improvements, and strategic public infrastructure investments.

a. Infrastructure Maintenance. Identify and set priorities for aging infrastructure that requires maintenance or replacement. (DPW)

See Policy 8.18, a.

b. Infrastructure Gaps. Expand existing infrastructure for older communities that were constructed under prior regulations, so these communities could benefit from additional improvements such as storm drains and sidewalks. Enhance connectivity in accordance with Bicycle and Pedestrian Master Plans. (DPZ, OT)

Capital budget priorities included maintenance of infrastructure and transportation in support of agency planning.

See Policy 8.5, d.

c. Environmental Enhancement. Expand environmental remediation to address storm water management, stream bank erosion, and buffer conservation. (OCS)

The following OSC initiatives were undertaken during this monitoring period:

- Oversaw the work of [Howard EcoWorks](#), a local environmental non-profit with majority funding from Howard County. EcoWorks continued to increase and improve stormwater management at schools, HOAs, and houses of worship. EcoWorks also performed routine maintenance of the Tiber-Hudson stream channel to address stream blockages in areas where these blockages may increase stream bank erosion and threaten public and private properties with flooding during larger rain events.
- Performed maintenance on an array of DPW and DRP environmental enhancement efforts, including Forest Conservation Act mitigation sites, Forest Conservation Easement areas, stream restoration projects, and stormwater facilities through EcoWorks.

The County adopted the Tiber Branch Watershed and Plumtree Branch Watershed Safety Act (CB56-2018). This legislation requires stormwater management to be analyzed for both watersheds. Resolution CR123 amended [Volume I \(Storm Drainage\) of Howard County's Design Manual](#) to require the management of a 3.55-hour, 6.6-inch storm (equivalent to the July 30, 2016 storm) in both watersheds, as well as a requirement to address a 10-year, 24-hour (4.9 inch) and 100-year, 24-hour (8.51 inch) storm in the Plumtree Branch watershed.

d. Flexible Infill. Consider zoning modifications that would provide more flexibility in order to allow limited, compatible infill that enhances an existing community. (DPZ)

DPZ initiated an assessment of the current Zoning and Subdivision and Land Development Regulations in 2016. The Assessment discussed strengths and weaknesses of the current land development regulations and made specific recommendations for improvement including to provisions related to infill development. The [Howard County Development Regulations Assessment](#) was completed in January 2018.

Policy 10.2 Focus growth in Downtown Columbia, Route 1 and Route 40 Corridors, and some Columbia Village Centers, as well as some older commercial or industrial areas which have redevelopment potential.

a. Monitor Redevelopment. Monitor and, as needed, refine the redevelopment goals and strategies for Route 1, Route 40, Downtown, and Columbia Village Centers. (DPZ)

The [Oakland Mills Village Center Area Redevelopment Feasibility Study](#) was completed in 2017. During the reporting period, the following initiatives included:

- Launched the Route 1 Corridor Master Plan.
- Refined the strategy for revitalizing the Long Reach Village Center to stabilize the center through beautification, renovation, and strategic leasing.
- Drafted the [Downtown Columbia Redevelopment Monitoring Report](#) in September 2018.

b. Other Opportunities. Identify other older commercial or industrial areas such as the Snowden River Parkway area that are expected to have redevelopment potential by 2030. Determine redevelopment goals and implementing actions. (DPZ)

No action occurred during this reporting period.

c. Comprehensive Review of NT Zoning. Revise the NT Zoning Regulations to provide clear criteria for redevelopment of older residential, commercial, or industrial areas outside of Downtown Columbia or the Village Centers. (DPZ)

DPZ contracted with a consultant in 2018 to conduct an analysis of the existing development regulations, including a comprehensive review of the New Town Zoning District. The consultant provided recommendations on revising the New Town zoning regulations. These recommendations will be evaluated further beginning in 2020, with the General Plan update.

d. Incentives and Tools. Identify redevelopment tools that may be of assistance in Howard County, such as incentives to maintain and renovate vacant or obsolete commercial properties. (DPZ)

During the reporting period, the Route 1 Corridor Master Plan initiative was launched (2018). The consultant team was tasked to identify redevelopment tools such as incentives to renovate vacant or obsolete commercial properties. The effort will build on previous Rt. 1 studies and [the Development Regulations Assessment](#), an initial examination of the county's zoning code.

e. Leveraging Investment. Prioritize and leverage public and private investment to achieve revitalization goals. (DPZ)

Adopted CB54-2018 for the design, construction, financing, operation, and maintenance of the Howard County Circuit Courthouse, as a public-private partnership.

Policy 10.3 Enhance the County's existing high quality of life and sustainability through community-based planning and design for both Existing Communities and areas designated for Growth and Revitalization.

- a. Community Planning. Expand the range and scope of community planning to identify facilities, services, transportation options, environmental enhancements, arts and cultural opportunities, or other amenities that would create more complete communities and reflect community diversity. (DPZ)**

Current initiatives include developing the Ellicott City Watershed Master Plan and the Route 1 Corridor Master Plan.

- b. Sustainable Communities Program. Utilize community plans to guide public and private investment strategies and regulatory change. Seek State designation as Sustainable Communities, if State programs would be helpful. (DPZ)**

Current Sustainable Community Program designations include Ellicott City, North Laurel-Savage, and Long Reach. Completed designation reapplication for Ellicott City in 2017 and North Laurel-Savage in 2019.

- c. Healthy Communities. Identify priority health issues that can be addressed through community design and consider health in the design and implementation of community planning efforts. (DPZ, OCS)**

See Policy 10.3, b. [Sustainable Community Plans](#) include health goals and objectives.

- d. New Tools. Develop additional zoning and finance tools to continue to promote and expand complete communities and context sensitive design solutions. (DPZ)**

The County announced the launch of the next update to the County's General Plan on June 11, 2019. Beginning in 2020, this multi-year project will guide decisions related to development, land preservation, changing demographic and employment trends, environmental sustainability, capital projects, County services, and other key land use issues.

- e. Review Process. Review and update County development regulations to address changes in demographics and markets and to improve design quality. (DPZ)**

The following DPZ initiatives were undertaken during this monitoring period:

- Initiated assessment in 2016 of the current Zoning and Subdivision and Land Development Regulations. A review of the development regulations was conducted which included the Route 1 and Route 40 manuals. More information can be found in the 2018 report, [Howard County Development Regulations Assessment](#).
- Launched the Route 1 Corridor Master Plan in 2018 to recommend a revitalization strategy to include opportunity areas based on land use, zoning and market realities and to couple the strategy with an urban design framework.

Policy 10.4 Review and update all County development regulations to respond to County General Plan development goals and changing market conditions, and to improve the efficiency of the County's review process.

a. Zoning Regulation Review. Develop Zoning Regulations that better address infill and redevelopment goals and issues. (DPZ)

See Policy 10.3, d.

b. Streamlining Processes. Amend development regulations and manuals to streamline the review process to the maximum extent possible. (DLD, ZAD)

No action occurred during this reporting period.

c. Updated Conditional Use Regulations. Review and, as appropriate, amend the County's conditional use regulations to reflect updated land use policies. The regulations should reflect current best practices and policies to minimize the impact of development on the environment. For example, the regulations regarding gasoline service stations need to reflect changes in the gasoline industry in the last decade and the challenges of blight and environmental mitigation required for redevelopment of abandoned gasoline stations. (DPZ)

The following DPZ initiatives were undertaken during this monitoring period:

- In 2016, ZRA-169 was passed, which proposed adding a new Conditional Use category for storage of trailers, modular offices, and shipping containers on lots over 3 acres in RR/RC. These structures are commonly found on agricultural and contracting operations in the rural west but were not in the RC/RR zoning districts.
- In 2017, ZRA-181 was passed, which proposed adding Country Inns to the RVH as a Conditional Use to support the tourism/lodging industry in historic Ellicott City.
- In 2018, ZRA-183 was evaluated, which proposed adding a new Conditional Use category for Natural Wood Waste Recycling and Composting facilities to reflect current industry practices and align with state regulations.
- In 2019, ZRA-187 was passed, which proposed requiring Age-restricted Adult Housing Conditional Uses that result in increased density to have access to and frontage on collector or arterial roads to minimize impact on established neighborhoods. Also, in 2019, ZRA-188 was proposed, which added flexibility to the Conditional Use process by allowing the Hearing Authority to reduce certain Conditional Use bulk regulations.

Policy 10.5 Adjust County funding programs to reflect community investment needs and partnership opportunities.

a. Community Plans. Refine the County’s capital budget process using place types, geographic planning areas, and priorities established by community-based plans. (DPZ)

Areas designated in [Sustainable Community Plans](#) are included in the prioritization for the County’s capital budget.

b. Sustainable Communities. Seek State support through its Sustainable Communities program by developing action plans for identified areas and convening community work groups to guide planning and implementation. (DPZ)

Each sustainable Community Application was developed as a part of a stakeholder workgroup that DPZ convened.
See Policy 10.3, b.

Policy 10.6 Improve the competitiveness and design of commercial areas.

a. No Extension of Commercial Strips. Reaffirm the policy of past General Plans to not extend strip commercial development into residential areas along major roads beyond their present limits or allow new areas of strip centers on these roads unless there are adjacent strip centers on both sides. (DPZ)

Action of no extension of commercial strips continued through recording period.

b. Older Commercial Properties. Promote renovation or redevelopment of older commercial centers, particularly those showing indications of decline. Develop strategies to encourage older commercial centers to become stronger community focal points through design improvements and renovation. (DPZ)

See Policy 10.2, a

c. Building Design. Adopt standards that require commercial structures to be in scale with adjacent residences and to enhance design by articulating facades and roof lines. Require all façades that are visible from surrounding roads or properties to be similar to the front façade. Prohibit the use of blank rear or side walls in visible locations. (DPZ)

See Policy 10.3, d.

d. Parking Design. Discourage large parking lots in locations that dominate the public image of the site along main roads. Increase the requirements for internal parking lot landscaping to visually break up large lots, provide more shade, and improve the pedestrian environment. (DPZ)

See Policy 10.3, d.

e. Pedestrian Improvements. Install sidewalks along roads that provide access to commercial centers and connect store entrances to street crossings and transit stops for increased pedestrian safety and convenience. Consider the needs of seniors and individuals with disabilities in locating transit stops to offer greater accessibility. Adopt standards that encourage provision of pedestrian-scale spaces, such as landscaped plazas and sitting areas. (DPZ)

The following DPZ initiatives were undertaken during this monitoring period:

- Participated in the US 1 Safety Evaluation workshops. The February [2019 Report](#) identified short-term actions to improve safety for people walking and bicycling along US 1.
- Launched the Route 1 Corridor Master Plan in 2018. The consultant-led process will identify longer term pedestrian needs and transportation infrastructure.
- Hired a consultant to produce a master plan to guide long-term redevelopment in the Ellicott City watershed area. Pedestrian access and safety, and streetscape are being reviewed in the process.

f. Sign Code. Review the County Sign Code for possible revisions to commercial signs. (DPZ, DILP)

DILP is reviewed the sign code during the reporting period and will be recommending changes to comply with new legal requirements.

g. Design Advisory Panel. Explore an expanded role for the Design Advisory Panel (DAP) to include other commercial areas of the County, which, like the Route 1 and Route 40 Corridors, exhibit the need for improved design and would benefit from the adoption of appropriate design manuals or guidelines for the DAP to utilize in its reviews. (DPZ)

No changes to the [DAP](#) process occurred during the reporting period.

Policy 10.7 Improve the functioning and design of rural commercial crossroads.

a. Commercial Crossroads Plans. Identify and prioritize areas in the West that would benefit from planning activities that assess business and community needs and determine strategies to support the economic function and design of rural commercial crossroads. (DPZ)

In 2017 the BRX Zoning District was removed from the Zoning Regulations through CB29-2017, due to unintended consequences that were not consistent with Policy 10.7. This policy will be evaluated further beginning in 2020, with the General Plan update.

Chapter 11 – Implementation

Policy 11.1 Monitor progress in implementing *PlanHoward 2030* policies and actions.

- a. ***PlanHoward 2030* Monitoring Report.** Publish the reports required by Policy 2.1. Present the reports to the Planning Board and the County Council in public meetings for their recommendations and public comment. (DPZ)

The [2016 Short-Term Monitoring Report](#) and 2019 Mid-Term Monitoring Report were distributed to both the Planning Board and County Council, as informational updates of [PlanHoward 2030's](#) implementation. A copy of the [2014 Initial Review](#) is also available.

- b. **State-Required Indicators.** Include General Plan related, State-required indicators in the annual Development Monitoring System report.

In 2009, State reporting requirements on the County's development were enacted with the passage of Smart, Green and Growing legislation. DPZ incorporated the State's reporting measures into its [Development Monitoring System \(DMS\) Report](#) which tabulates and analyzes development activity at each stage of the County's development process (i.e. subdivision plans, site development plans, building construction permits, and use and occupancy permits). Additional reporting requirements adopted by the state in 2012 have also been incorporated into the DMS, using defined smart growth measures and indicators, and including planning-related regulatory and general plan amendments. The report is updated on an annual basis, as part of the Adequate Public Facilities (APF) monitoring process.

Chapter 12 – Stewardship

Policy 12.1 Howard County Government will continue to lead by example as a good steward of the shared resources within the community and the region.

- a. **Regional Collaboration.** Monitor regional efforts to conserve or restore environmental quality (i.e. air, land, water), while expanding all efforts to protect water and air quality and natural resources. Participate in regional efforts to promote methods of transportation that preserve and protect the environment. (OCS, DPZ)

OCS participated in and coordinated with numerous regional groups that monitor and implement sustainability efforts, including: the Baltimore [Urban Waters Program](#), [Maryland Water Monitoring Council](#), [Baltimore Metropolitan Council](#), [Maryland Municipal Stormwater Association](#), [Maryland SeaGrant College](#), [Chesapeake Bay Trust](#), [Farm Bureau](#), [Horizon Foundation](#), HCEA, HCC, [Patapsco Heritage Greenway](#), [Northeast Maryland Waste Disposal Authority](#), [Metropolitan Washington Council of Governments](#), [Greater Baltimore Wilderness Coalition](#), and others.

b. Continuous Innovation. Implement new strategies for improving the efficiency and sustainability of County services provided to the community. (OCS)

OCS is expanding the network of electric vehicle charging stations throughout the County. There are currently charging stations available to the public at the George Howard Building, Elkridge Library, and the Elkridge Fire Station. The County is planning additional stations at the new circuit courthouse currently under construction, the new East Columbia 50+ Center currently in design, and several parks facilities. The following initiatives were undertaken by County agencies during this monitoring period:

- Partnered with BGE to provide additional electric vehicle charging stations at libraries and other County buildings.
- Worked to improve comfort, indoor air quality, and energy efficiency at County facilities by using state-of-the-art technology to track and analyze a combination of monthly billing data, continuous real-time energy use data, and individual heating and cooling component data in each building. Information will be used to fine tune smart building controls to optimize energy efficiency, comfort, and indoor air quality.

c. New Opportunities. Identify additional solutions to assist County businesses and residents in implementing new, more sustainable technologies. (OCS)

The following OSC initiatives were undertaken during this monitoring period:

- Worked with other County departments to pilot many stormwater and energy programs and projects, and to share the data and information with businesses and residents. OCS oversaw credit and reimbursement programs for new stormwater facilities installed on commercial and residential properties. Numerous informational resources and tools for residents and businesses are available on the websites livegreenhoward.com and Cleanwaterhoward.com. The Commercial Stormwater Solutions Task Force provided recommendations to OCS to work toward a Commercial Stormwater partnership, install/update more stormwater facilities, and try new cost-effective technologies on commercial properties.
- Promoted C-PACE financing to businesses interested in low-cost, cash-flow positive ways to make capital improvements to improve the energy efficiency and comfort of their buildings.
- Partnered with local organizations to promote community-based solar energy as an option for residents who do not own their homes or who have properties that are not suitable for solar panel installations, so they can benefit from lower electricity costs and clean power.
- Added charging stations to more public buildings and required new home construction be EV-Ready, starting in 2019.

d. Reducing GHGs. Continue to reduce greenhouse gas emissions through an expanding focus on energy, mass transit, bicycle, and pedestrian initiatives. (OCS)

Howard County is leading by example in reducing greenhouse gas emissions through energy efficiency and the use of renewable energy. The following initiatives were undertaken by County agencies during this monitoring period:

Completed the second phase of an energy performance contract in 2018. The project included energy efficiency improvements in more than 65 County buildings, reducing energy use by 34 percent.

Committed to supply 20 percent of the electricity needed for government operations through new solar energy installations on County property within the next four years.

- Committed to increase the efficiency and effectiveness of public transportation services and walking and bicycling infrastructure in and around Howard County, and to improve connectivity with planning and system operations. The County provides fixed route bus and paratransit services through the Regional Transportation Authority. The County also is evaluating the implementation of a Bus Rapid Transit system. [BikeHoward](#), the Howard County bicycle master plan, provides guidance for improvements for transportation and recreational bicycling, including recommendations for infrastructure improvements, policies, and programs. The County's goal is to provide an integrated 48-mile network of bicycle infrastructure. A similar plan, [WalkHoward](#), provides guidance for improving walkability in the County.

e. Enhanced Recycling. Continue to look for additional ways to increase donation, recycling, and food waste collections to expand the County's progress in these areas. (OCS)

OCS worked with DPW to explore and implement new recycling efforts and improve the efficiency of current efforts. The Bureau of Environmental Services expanded its Green Bin program for curbside food waste collection to four communities: Elkridge, Jessup, Columbia and Clarksville. The Bureau also initiated construction of a 14-acre composting facility at Alpha Ridge Landfill, where collections from the program are processed.

f. Commercial Options. Consider reexamination of business recycling as an option for business and apartments in Howard County, if found to be cost-effective and efficient. (OCS)

CB2-2014 was adopted to comply with state law mandating weekly recycling services be provided by all apartment and condominium properties with 10 or more units. Business recycling programs remain optional and continue to be evaluated for cost-effectiveness.

g. Fiscal Responsibility. Continue to respect taxpayers' contributions by using public funds efficiently and effectively. (OCS, OF)

The following OSC initiatives were undertaken during this monitoring period:

Ensured the Watershed Protection and Restoration (WPR) Fee money was spent in the most effective manner.

Reviewed and incorporated findings from the Chesapeake Bay Program expert research panels and the Chesapeake Stormwater Network into best management practices.

Utilized and explored innovative strategies for awarding work, including design, build, maintenance contracts based on the amount of stormwater treated, as well as public-private partnerships.

Reported annually on the WPR fee spending and projects to the County Council and public on the website cleanwaterhoward.com

Oversaw phased-in energy efficiency projects, such as building upgrades and streetlight conversion to LED. These projects provide long-term cost savings.

Policy 12.2 Engage all members of the County's socially and economically diverse community and highlight stewardship goals specific to the unique situations of each audience and community group.

a. Multicultural Outreach. Continue to provide targeted outreach to minority populations, as well as multilingual outreach materials and approaches. (OCS)

Continued offering [GreenFest](#), the County's largest environmental stewardship event. GreenFest posters were created and taken to community centers and parks, where it is believed this outreach material was seen by a large cross section of the community. GreenFest advertising targeted more minority participation in the event and posted advertisement in the Epoch Times, which has a diverse readership. GreenFest advertisements were also posted on Facebook for broader community outreach.

b. Cross-Jurisdictional Outreach. Increase partnering efforts with public, private, and nonprofit communities to expand and coordinate all messages regarding sustainability efforts with a focus on outreach to immediately adjacent, neighboring jurisdictions. (OCS, DPZ)

OCS and DPZ continued to coordinate with the Greater Baltimore Wilderness Coalition, a focus group of public, private and nonprofit organizations within the Conservation Fund, to keep partners abreast of their progress, challenges, methods, and scope of work. This group coordinates and connects management activities to build cooperative projects and synergies among members.

c. Expanded Programming. Expand on current offerings and programs to provide more sustainability workshops and speaker series for individuals, businesses, and nonprofits. (OCS)

The following OSC initiatives were undertaken during this monitoring period:

- Continued to support the efforts of the Legacy Leadership Environmental Institute, [Watershed Stewards Academy](#), Master Gardeners, and Howard EcoWorks, by providing lessons to participants in their various education programs each year.
- Presented on the Howard County Green Infrastructure Network to 12 constituent groups, comprising about 525 people.
- Piloted a citizen science and outreach program using motion detection cameras (game cameras) to encourage citizens to look more closely at the life in their backyards and share pictures with the wider community via social media. To date, 23 individuals/families have participated.
- Assisted with the County's [Farm Academy](#) program, an educational program to help promote communication and understanding between various stakeholders in the County's rural west.
- Presented educational information to the public on the benefits of stormwater management and the County's various reimbursement and credit programs.
- Visited private, commercial, and nonprofit sites to consult on the most practical program measures to pursue, while trying to manage multiple environmental stressors on their properties, such as invasive species or stormwater control.
- Reached out to new commercial and nonprofit groups in order to provide a different sampling of environmental education opportunities for the workshops at [GreenFest](#), the County's biggest Earth Day celebration. GreenFest provides a plethora of educational opportunities to the Howard County public, and to some degree, to the greater Baltimore-Washington Metropolitan Area.

d. Youth Leaders. Continue to create public and private opportunities for young people to engage in sustainability efforts.

The following OSC initiatives were undertaken during this monitoring period:

Supported the County-funded non-profit, [Howard EcoWorks](#), which is a 'green' job skills development program. EcoWorks encourages participants to become leaders within the program by taking on additional responsibilities from year to year.

Coordinated with the HCPSS student representative on the Environmental Sustainability Board (ESB) to promote the various environmental initiatives currently being addressed by HCPSS 'green' groups. The student representative is usually a member of the Howard County Association of Student Councils. The position on the ESB and coordination with OCS encourages the individual to develop their leadership skills by communicating between the HCPSS interests and County Government and ESB interests.

Mentored unpaid interns and GT mentees, often high school students, who are then given a chance to learn and engage in environmental initiatives.

Policy 12.3 Increase currently successful, collaborative efforts between residents, businesses, nonprofit groups, and the County to continue implementing state-of-the art, cost-effective, sustainability practices and techniques.

a. Networking. Expand networking and resource sharing for businesses and nonprofits, such as expanding networking opportunities at GreenFest, through the Green Business Council, and via the Office of Environmental Sustainability. (OCS)

The following OSC initiatives were undertaken during this monitoring period:

- Coordinated with the Howard County Environmental Sustainability Board to make connections between businesses and nonprofits that stand to gain from each other's services or needs.
- Met with the Commercial Stormwater Solutions Task Force and increased communications between property owners and the County, opening new opportunities for partnerships.
- Convened three meetings with DPZ, the Environmental Sustainability Board, the development community, and other stakeholders to find ways to create additional sustainable neighborhoods through the Green Neighborhoods Program.
- Reached out to different sectors of the business and non-profit community to be vendors or presenters at [GreenFest](#), so that different parts of the community are represented each year.

- Administered the READY program through Howard EcoWorks, The County-funded READY program encourages its applicant pool to seek employment with local businesses looking for semi-skilled laborers.

b. Demonstration Projects. Increase demonstration sites and provide tours throughout the County of various techniques for living more sustainably, such as rain water reuse, alternative energy, and protection of natural resources and habitat areas.

OCS designed signage for the award-winning Lot E Stormwater Staircase in Historic Ellicott City. The sign explains how the facility works and provides insight into the challenges faced when controlling stormwater, especially in a heavily developed area.

c. Public Education Resources. Expand work with schools and educational centers to incorporate case studies and demonstration projects into curricula and lessons.

The following OSC initiatives were undertaken during this monitoring period:

- Involved students in the majority of tree plantings organized by OCS (see Policy 3.5, a).
- Assisted in creating the signs installed at each elementary school as part of the HCPSS Elementary [Monarch Program](#), in which students learn about monarch butterfly lifecycles through hands-on experiences with milkweed plots at each school.

Provided Fulton Elementary School with large-size printout maps for use in watershed planning lessons.

d. Ongoing Advancement. Revise regulations, such as Green Building Legislation, and implement new cost-effective requirements in order to maintain cutting-edge sustainability standards

Howard County is the first jurisdiction in Maryland and one of the first in the U.S. to require that new residential construction with driveways or garages have the electric wiring to enable EV charging. The following County initiatives were undertaken during this monitoring period:

Required multi-family residential buildings to provide one EV charging station for every twenty-five residential units, allowing apartment, townhome, and condominium owners and renters the opportunity to charge EVs at home.

- Required new home construction in Howard County to be “EV-Ready”, meaning that it will include infrastructure for plug-in electric vehicles (EVs). Installing EV infrastructure during construction is more cost-effective than adding it later.