

Amendment 129 to Council Bill No. 28 -2023

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Legislative Day 12

Date: 10/11/2023

Amendment No. 129

(This Amendment makes the following changes to HoCo by Design Chapter 9 and Chapter 11):

Chapter 9: Supporting Infrastructure - *Adds a new INF-9 Policy Statement and Implementing Actions to continue to support the County's Hospital to improve emergency room wait times;*

Chapter 11: Implementation - *Adds a new INF-9 Policy Statement and Implementing Actions to continue to support the County's Hospital to improve emergency room wait times.)*

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3 In the *HoCo By Design* General Plan, attached to this Act as Exhibit A, amend the following
4 pages as indicated in this Amendment:

5 • Chapter 9: Supporting Infrastructure: 31, 34, 40, 47, 48, and 49.

6 • Chapter 11: Implementation: 57, and 58.

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8 Correct all page numbers, numbering, and formatting within this Act to accommodate this
9 amendment.

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Allied Agency Agencies' facilities and Private Partners

Howard County Library System

The Howard County Library System (HCLS) is an allied agency, like the Howard County Public School System and Howard Community College, and is governed by a Board of Trustees. However, HCLS' annual capital and operating budgets are largely funded by and must be approved by the County each year.

Howard County Library consists of six branches. Three of these facilities—the East Columbia, ElkrIDGE, and Savage branches—are approximately 20 years old. The 30-year-old Central Branch in Downtown Columbia was renovated in 2001. The Glenwood Branch was renovated in 2000, and the Miller Library in Ellicott City in 2011.

INF-7 Policy Statement

Partner with the Howard County Library System to provide training and resources needed in the community.

Implementing Actions

1. Evaluate the need for additional library capacity in the County to serve planned population and program growth. Provide necessary expansion of resources via additions or new facilities within the Planned Service Area.
2. 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.



Howard Community College

The Howard Community College (HCC) is another allied agency and is governed by a Board of Trustees. However, the HCC's annual capital and operating budgets are largely funded by and must be approved by the County each year.

In addition to serving the varied academic needs of younger students, the college plays a significant role in workforce development by offering a wide range of career training services and professional certification programs. Additionally, lifelong learning programs and personal enrichment courses serve many senior residents. HCC's operating funds come from tuition and fees, Howard County, the State of Maryland, and other sources. Given the limitations on County bond funding, the burden of financing higher education activities cannot fall solely on the County.

HoCo By Design's Future Land Use Map (FLUM) designates HCC as a Campus character area. As more fully described in the Character Areas technical appendix, the Campus character area supports academic, medical, or office buildings; athletic facilities; event spaces; equipment; or other ancillary uses needed to support an educational, medical, or other large institution. This character area provides flexibility in that building uses and intensities may vary widely based on the institution's mission, available space, and site topography.

Health Services

Howard County residents benefit from a wide variety of high-quality local health care providers and services, and from close proximity to excellent health care facilities and academic medical centers in the Baltimore/Washington region. The health care delivery system is complex and depends upon the resources of many organizations, including the Howard County Health Department, Howard County General Hospital, the Horizon Foundation, Sheppard Pratt, special nursing and assisted-living facilities, hospice services, urgent care clinics, numerous nonprofit providers, and private practitioners.

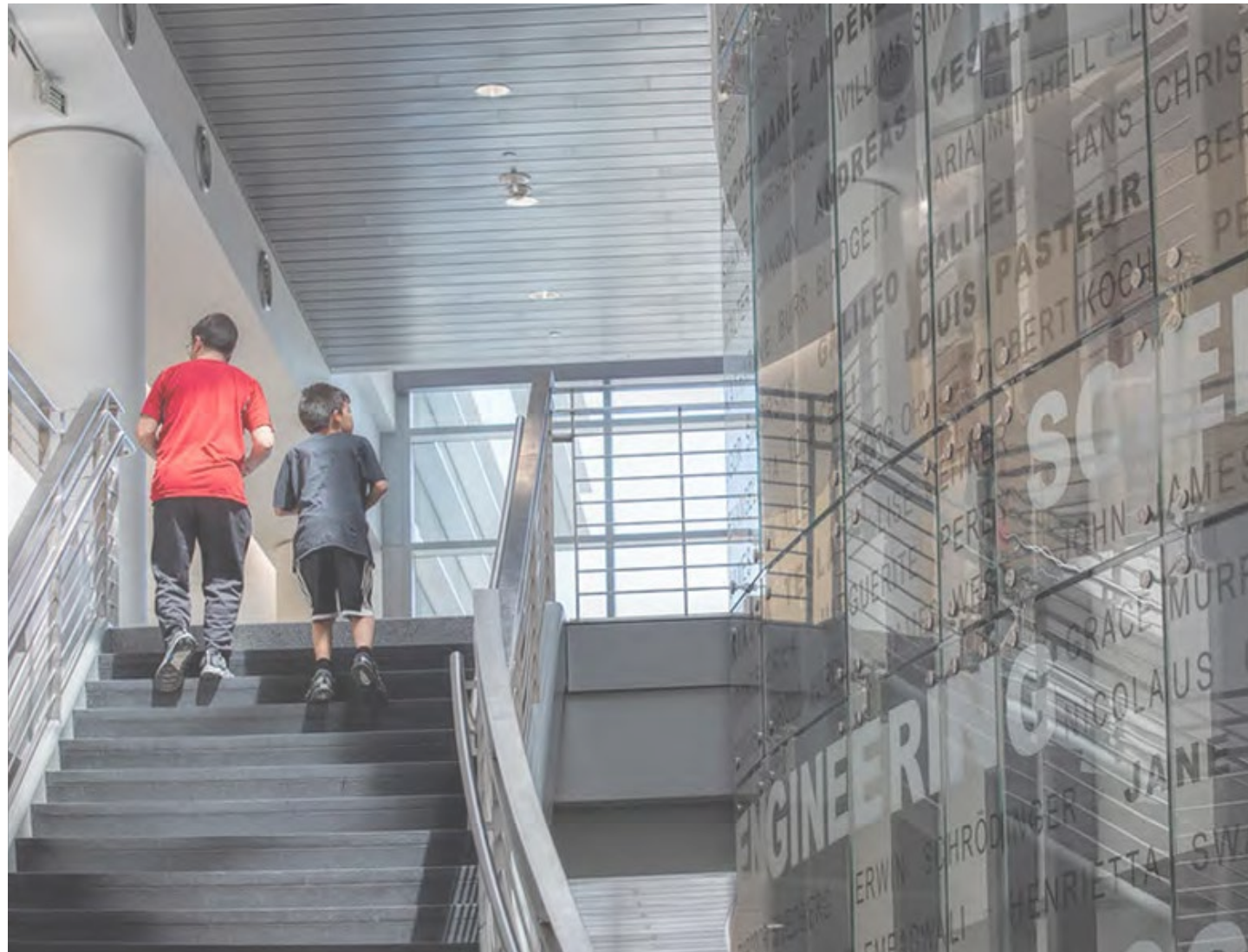
Recognizing the flexibility needed for large institutional campuses, HoCo By Design's Future Land Use Map includes a Campus character area that applies to Howard County General Hospital. Additional details are provided in the Character Areas technical appendix.

INF-8 Policy Statement

Continue to support the Howard Community College's expanding abilities to provide higher education for county residents and workers.

Implementing Actions

1. Continue the County's commitment to fund expansion of the Howard Community College (HCC) to accommodate enrollment and program growth. Support the HCC in obtaining funding from the State of Maryland and others to invest in the campus.
2. Continue to work with the Howard County Economic Development Authority, the private sector, and other institutions of higher education to meet workforce development and re-training needs, especially in science and technology-related fields.
3. Continue to expand non-credit course offerings and cultural programs that promote life-long learning and enhance community life.



INF-9 Policy Statement

Continue to support medical service providers and help resolve emergency room wait times.

Implementing Actions

1. Pursue immediate and long-term solutions to the County's overburdened hospital to reduce emergency room wait times.
2. Continue to support and enhance financial assistance for behavioral health programs established by the Hospital, Shepard Pratt and other nonprofit agencies.

drinking Water Supply and WasteWater treatment

Public Water and Sewer Services

The location of Howard County's public water and sewer services are inextricably linked to the type, location, and intensity of future growth in the County. With these public services, businesses can operate more efficiently and homes can be located on smaller lots.

The County plans for the provision of public water and sewer facilities in the Master Plan for Water and Sewerage (the Master Plan). The Master Plan and any proposed amendments must be consistent with the General Plan. For capital project planning and the orderly extension of facilities, the Master Plan delineates service priority areas within the Planned Service Area (PSA). The County also implements a Water and Sewer Capacity Allocation Program that assigns priorities for new connections to the public water and sewer systems during the development plan review process to ensure demand does not exceed the available system capacity. At times, a developer may want service to a property earlier than specified by the Master Plan and is willing to construct planned facilities in advance of the County's capital project construction schedule. If the proposed development is an orderly extension of the system and is consistent with the General Plan and Subdivision and Land Development Regulations, the County grants a service priority area change so the development can occur. These service priority area changes are reflected in the annual updates to the Master Plan.

Prior to the provision of public water or sewer service, a property in the PSA must enter the County's Metropolitan District. All properties in the Metropolitan District are subject to fees, assessments, and charges that are dedicated to the Enterprise Fund, which pays for the construction, operation, maintenance, and administration of the public water and sewer systems. Maintenance of the existing water and sewer systems is an ongoing concern as portions of each system reach the design life of 50 years.

The County's Capital Budget and ten-year Capital Improvement Program (CIP), the Metropolitan District entry process, the development plan review process, and the Water and Sewer Capacity Allocation Program ensure the orderly expansion of the public water and sewer system. Through the self-sustaining Enterprise Fund, the County pays the construction costs for major facilities in the public water and sewer system and the developer pays the cost for the system extension to their individual development.



Source Water Assessments

The federal Safe Drinking Water Act Amendments of 1996 require source water assessments (SWA) for public water supplies. The SWA evaluates the susceptibility of the public water supply source to various contaminants and contains recommendations to protect the source from these contaminants. Source water assessments are designed to promote local, voluntary source water protection programs. For more information about SWAs and other water quality issues, please see Technical Appendix A: Environment.

Water Conservation

Clean safe drinking water is a valuable resource that should be used as wisely as possible. Potable water is currently used to flush toilets, water lawns and gardens, and wash vehicles, when non-potable water would suffice. To help conserve water, the State requires low-flow toilets and showerheads in all new residential construction. As a result of these fixture requirements and other water saving measures, such as new water efficient dishwashers and washing machines, per capita water consumption continues to decrease in the County.

Hot dry summer days place the greatest demand and strain on the public drinking water supply, as large volumes of water are used for landscape irrigation and other outdoor uses, such as pools, spas, and vehicle washing. Climate change is projected to bring warmer temperatures and more intense droughts, which could further increase demand for outdoor water use. Additional water conservation in homes, gardens, and businesses would help the County manage water resources more sustainably. Public outreach and education, as well as financial incentives, can encourage increased water conservation by residents and businesses.

Relatively easy conservation measures include using rain barrels to collect rainwater for outdoor watering, replacing lawns with native plants that require less watering once established, and installing water conserving fixtures and appliances. More complex measures include using cisterns to collect rainwater for irrigation of commercial landscapes and playing fields, or for indoor non-potable uses, and reusing greywater. Greywater reuse or recycling takes water from washing machines, sinks, and bathtubs for non-potable uses, such as flushing toilets and irrigation. Rainwater harvesting and greywater reuse for non-potable indoor uses have been discouraged or prohibited due to human health concerns. Building codes and regulations should be reviewed and modified where necessary to remove impediments for retrofitting existing and building new homes and businesses with water conservation and reuse practices and technology.

INF-910 Policy Statement

Ensure the safety and adequacy of the drinking water supply and promote water conservation and reuse.

Implementing Actions

1. Continue to program capital projects for capacity expansion and systemic renovations in the public drinking water system through the Master Plan for Water and Sewerage.
2. Encourage large development sites added to the current Planned Service Area (PSA) and large redevelopment sites within the PSA to implement water conservation and reuse practices and technology.
3. Modify codes and regulations, as needed, to remove impediments for existing development, new development, and redevelopment to implement water conservation and reuse practices and technology.
4. Allow and promote greywater reuse for non-potable uses.
5. Conduct public outreach and education to encourage greater water conservation in homes, gardens, and businesses.
6. Provide incentives to encourage property owners to install water conserving fixtures and appliances.

Wastewater Treatment Plant Capacity

Howard County's public wastewater treatment system is managed by the Department of Public Works' Bureau of Utilities, which manages both the collection system and the Little Patuxent Water Reclamation Plant. In 2020, approximately 84% of the County's residences and businesses were served by the public sewer system. The remaining 16% were generally located in the Rural West and were served by private septic systems.

Howard County is split between two major river watersheds. Approximately 75% of the County falls inside the Patuxent River watershed, and the remaining 25% falls inside the Patapsco River watershed. Where possible, the County uses the natural topography of the Patuxent River and Patapsco River watersheds to provide sewer service, and relies on a gravity-fed system of smaller pipes to collect and convey wastewater into progressively larger main collector lines. If needed, a pumping station is used to convey wastewater over hills or difficult terrain. Depending on the watershed where the wastewater originated, the wastewater will end up at either the Little Patuxent Water Reclamation Plant (WRP) in Savage or Baltimore City's Patapsco Wastewater Treatment Plant (WWTP) for treatment.

The Route 108 Pumping Station service area, as shown in Map 8-4, is a large sub-service area that provides system flexibility. This area is geographically part of the Little Patuxent WRP service area but, if needed, the County may divert flows from this area to the Patapsco WWTP service area.

INF-1011 Policy Statement

Ensure the adequacy of the public wastewater treatment system.

Implementing Actions

1. Continue to program capital projects for capacity expansion and systemic renovations in the public wastewater treatment system through the Master Plan for Water and Sewerage.
2. Encourage large development sites added to the current Planned Service Area (PSA) and large redevelopment sites within the PSA to minimize increases in flow and minimize the nutrient concentration in flow sent to the wastewater treatment plants.
3. Expand reclaimed water reuse and nutrient trading to reduce nutrient flows and help maintain the nutrient cap at the Little Patuxent Water Reclamation Plant and the Patapsco Wastewater Treatment Plant.
4. Continue regular coordination with Baltimore City to ensure Howard County can meet some of its wastewater treatment needs via the Patapsco Wastewater Treatment Plant.

Septic Systems

Homes and businesses in the County that are not served by public sewer—nearly all of which are located outside of the Planned Service Area (PSA)—use septic systems to treat their wastewater. Septic disposal systems may be individual sewerage systems that serve single lots, multi-use sewerage systems that serve a group of individuals on a single lot and have a treatment capacity greater than 5,000 gallons per day, or community sewerage systems that serve two or more lots. New privately owned or operated community sewerage systems are no longer permitted outside the PSA, and the only publicly owned and operated community sewerage systems permitted are shared sewage disposal systems. In 2020, approximately 17,361 households and a small number of businesses and institutions used private septic systems or shared sewage disposal systems to treat an estimated 5.3 million gallons of wastewater annually.

Generally, soils throughout the Rural West can support septic system drain fields, except for Lisbon—a problem area because of small lot sizes, marginal soils in some areas, and aging systems. The County evaluated Lisbon for well and septic system concerns and proposed a shared sewage disposal system in 2008; however, residents were not supportive of the proposal. Some of the problem lots may need holding tanks if suitable repair areas are not available. The Health Department also receives reports on a small number of individual failing septic systems in other areas of the County. Repairs to these systems are based on individual property conditions and available septic system repair areas.

Previous General Plans recommended the use of shared sewage disposal systems (SSDS) in limited cases for cluster subdivisions to protect groundwater and agricultural land in the Rural West. Generally, soils that are well-suited for septic systems are also well-suited for agriculture. With an SSDS, the common treatment system and drain field are placed on optimum soils, and this allows homes to be located in areas that are marginally or poorly suited for agriculture.

SSDSs are operated and maintained by the County, and operation, maintenance, repair, and replacement costs are financed by the system users. In 2020, there were 28 existing or planned SSDSs in the County. Six of these systems are large enough (with more than six dwellings served) to require an MDE groundwater discharge permit. Because the maintenance cost per house is very high for large systems, the County no longer allows any new large systems requiring an MDE permit.

Individual septic systems can be a water quality concern because of the amount of nitrogen the systems discharge to groundwater. Excess nitrogen in groundwater limits the use of groundwater as a water supply source. In addition, since groundwater is a source of base flow in streams, excess nitrogen in groundwater can also contribute to nutrient enrichment problems in streams and the Chesapeake Bay.

A variety of on-site treatment technologies have been developed to reduce the amount of nitrogen discharged from septic systems. Nitrogen reducing septic systems provide substantially better treatment, but they cost significantly more than a standard system and have ongoing operation and maintenance costs.

Maryland's Chesapeake Bay Restoration Fund has grant funds available for adding nitrogen reducing technology to existing septic systems; however, the priority area for these funds is the Chesapeake Bay and Coastal Bays Critical Areas. The County could also provide financial incentives, such as tax credits, to encourage the use of nitrogen reducing treatment for new and upgraded septic systems. As these systems become more numerous, the County should investigate options to establish a long-term inspection and maintenance program.

INF-112 Policy Statement

Reduce nitrogen loads from septic systems.

Implementing Actions

1. Explore financial incentives to promote the use of nitrogen reducing treatment for new and upgraded septic systems.
2. Investigate options to establish and maintain a long-term septic system inspection and maintenance program for nitrogen reducing systems.

Solid Waste Management

Howard County provides weekly curbside solid waste, recyclables, yard waste, and food scrap collections for most County residents, while private, commercial, and industrial enterprises contract with private waste collection companies.

One of Howard County's chief solid waste management goals is waste diversion through a program that promotes reduction, reuse, and recycling of materials within the County. Most of the solid waste collected is exported out of the County courtesy of a service agreement with the Northeast Maryland Waste Disposal Authority. All single-stream recyclables are sent to a contracted privately owned material recycling facility (MRF) in the County for further processing, marketing, and sales. Yard waste and food scrap collections are brought to the Alpha Ridge Landfill (ARL) and composted at the county-operated compost facility. Compost is then sold to commercial customers and landscapers, as well as residents, for gardens, lawns, and other uses.

The ARL is county-owned and operated, and is the sole operating landfill located inside the County's borders. County residents may also deposit recyclables free of charge at the Alpha Ridge Residents' Convenience Center, and deposit compostable materials at the Alpha Ridge Composting Facility.

In addition, Howard County is encouraging new solid waste technologies, such as the private construction and operation of bio-digester facilities. These facilities convert the methane gas generated by food waste decomposition into renewable clean energy at many food processing businesses within the County. The County should explore ways to intentionally support existing businesses pursuing sustainable initiatives, which will also serve to attract new businesses to the County.

The ARL site also includes the Alpha Ridge Transfer Station, which exports waste out of the County. The projected total waste generation rate of 2.26 tons per person per year is expected to remain stable for the foreseeable future, and the ARL's current landfill cell is not expected to reach capacity for many years. Moreover, there is additional space at the ARL site to develop approximately 6.79 million cubic yards of additional landfill if needed. As a result, the ARL should meet the County's waste disposal needs for the next 120 years.

INF-1213 Policy Statement

Divert waste from landfills using a program that promotes reduction, reuse, and recycling materials within the County.

Implementing Actions

1. Minimize the tons of waste each year that are exported from the County under an agreement with the Northeast Maryland Waste Disposal Authority.
2. Expand business opportunities in the County that focus on the recycle, reuse, or repurpose components of solid waste management.
3. Consider new solid waste technologies in the future to further reduce the waste footprint for Howard County.



Table 10-1: Implementation Matrix		
Policy and Implementing Actions	Lead Agency	Timeframe (Mid-Term five-year, Long-Term six+ years, Ongoing)
INF-9 - Continue to support medical service providers and help resolve emergency room wait times.		
1. Pursue immediate and long-term solutions to the County's overburdened hospital to reduce emergency room wait times.	Private Partners	Ongoing
2. Continue to support and enhance financial assistance for behavioral health programs established by the Hospital, Shepard Pratt and other nonprofit agencies.	Private Partners Health Dept	Ongoing
INF-9 10 - Ensure the safety and adequacy of the drinking water supply and promote water conservation and reuse.		
1. Continue to program capital projects for capacity expansion and systemic renovations in the public drinking water system through the Master Plan for Water and Sewerage.	DPW	Ongoing
2. Encourage large development sites added to the current Planned Service Area (PSA) and large redevelopment sites within the PSA to implement water conservation and reuse practices and	DPZ DPW DILP	Ongoing
3. Modify codes and regulations, as needed, to remove impediments for existing development, new development, and redevelopment to implement water conservation and reuse practices and technology.	DPZ DPW DILP	Ongoing
4. Allow and promote greywater reuse for non-potable uses.	DPW DILP	Long-term
5. Conduct public outreach and education to encourage greater water conservation in homes, gardens, and businesses.	DPW OCS	Ongoing
6. Provide incentives to encourage property owners to install water conserving fixtures and appliances.	DPW OCS Private Property Owners	Long-term
INF-10 11 - Ensure the adequacy of the public wastewater treatment system.		
1. Continue to program capital projects for capacity expansion and systemic renovations in the public wastewater treatment system through the Master Plan for Water and Sewerage.	DPW	Ongoing
2. Encourage large development sites added to the current Planned Service Area (PSA) and large redevelopment sites within the PSA to minimize increases in flow and minimize the nutrient concentration in flow sent to the wastewater treatment plants.	DPZ DPW DILP	Ongoing
3. Expand reclaimed water reuse and nutrient trading to reduce nutrient flows and help maintain the nutrient cap at the Little Patuxent Water Reclamation Plant and the Patapsco Wastewater Treatment Plant.	DPW	Long-term
4. Continue regular coordination with Baltimore City to ensure Howard County can meet some of its wastewater treatment needs via the Patapsco Wastewater Treatment Plant.	DPW	Ongoing

Table 10-1: Implementation Matrix		
Policy and Implementing Actions	Lead Agency	Timeframe (Mid-Term five-year, Long-Term six+ years, Ongoing)
INF-11 12- Reduce nitrogen loads from septic systems.		
1. Explore financial incentives to promote the use of nitrogen reducing treatment for new and upgraded septic systems.	HCHD DPW OCS	Long-term
2. Investigate options to establish and maintain a long-term septic system inspection and maintenance program for nitrogen reducing systems.	HCHD DPW OCS	Long-term
INF-12 13 - Divert waste from landfills using a program that promotes reduction, reuse, and recycling materials within the County.		
1. Minimize the tons of waste each year that are exported from the County under an agreement with the Northeast Maryland Waste Disposal Authority.	DPW	Ongoing
2. Expand business opportunities in the County that focus on the recycle, reuse, or repurpose components of solid waste management.	DPW	Ongoing
3. Consider new solid waste technologies in the future to further reduce the waste footprint for Howard County.	DPW	Long-term