

Amendment 31 to Council Bill No. 28 -2023

BY: The Chairperson at the Request
of the County Executive

Legislative Day 11
Date: 10/02/2023

Amendment No. 31

(This Amendment makes a technical correction to use updated tree canopy information.)

- 1 In the *HoCo By Design* General Plan, attached to this Act as Exhibit A, amend the following
- 2 pages as indicated in this Amendment:
 - 3 • Chapter 3, Ecological Health – pages 33, 35 and 36
 - 4
 - 5 Correct all page numbers, numbering, and formatting within this Act to accommodate this
 - 6 amendment.

I certify this is a true copy of

Am 31 CB28-2023

passed on

10/11/2023

Michael J. [Signature]

Council Administrator

— CC —
Trees are infrastructure.
— CC —
- HoCo By Design process participant

EXPANDING TREE CANOPY AND FOREST COVER

Tree canopy and forest cover help reduce and filter stormwater runoff, minimize erosion and sedimentation of streams, create wildlife habitats, sequester carbon, improve air quality, provide health benefits, and moderate local temperatures. They form visual buffers and are scenic in their own right. Increasing tree and forest cover is also an effective measure for climate change mitigation and adaptation. For these reasons, establishing goals for forest cover and forested stream buffers by watershed helps to achieve multiple objectives. In more developed watersheds, it may be more appropriate to establish a tree canopy goal.

Existing Tree Canopy and Forest Cover

~~A Report on Howard County, Maryland's Existing and Possible Tree Canopy was published in 2011 by the U.S. Forest Service and the University of Vermont. This report defined tree canopy is defined as the layer of leaves, branches and stems of trees that cover the ground when viewed from above. Tree canopy includes individual trees, such as those found within a parking lot or residential lawn, as well as trees within a forest. Using 2007 Based on 2018 tree canopy data, the report found that the County contained approximately 79,460 80,000 acres of tree canopy or 50 49% of the County had tree canopy cover. The County tree canopy cover in 2007 2018 is shown in Map 3-3.~~

A forest is a natural ecological community dominated by trees, generally including woody understory plants such as shrubs and young trees, and herbaceous vegetation such as grasses and flowers. To be fully effective as a complex environmental community, forest areas need to be large enough to provide space for a variety of native plant and animal species, to afford protection from outside intrusions, and to be able to mature and regenerate themselves.

Based on a separate analysis by the County of 2009 forest cover data, the County contained approximately 45,460 acres of forest or 28% of the County was in forest cover (distinctive from tree canopy). Forest cover in the eastern portion of the County is prevalent primarily within stream valley areas where sensitive resources have discouraged development or within publicly-owned conservation areas, such as the Patapsco Valley State Park and the Middle Patuxent Environmental Area. In the Rural West, upland and stream valley forests are more extensive. County forest cover in 2009, the most recent data available when the HoCo By Design scenarios were developed, is shown in Map 3-1. Countywide forest cover data should be updated on a regular and consistent basis to help assess changes in forest cover and manage forest resources over time.

Forest loss and fragmentation result in a continuing decline in forest interior habitat, which is generally defined as forest at least 300 feet from the forest edge. Forest interior habitat is generally more isolated from disturbance than forest edge habitat, and has a closed canopy that creates moist, shaded growing conditions, with less predation by forest edge species (raccoons, crows, cats) and fewer invasive species. In 2009, only 17% of the forest cover in the County was forest interior habitat. The loss of forest interior habitat threatens the survival of species that require this type of habitat, such as reptiles, amphibians and migratory songbirds.

Tree Planting Priorities for Economically-Vulnerable Communities

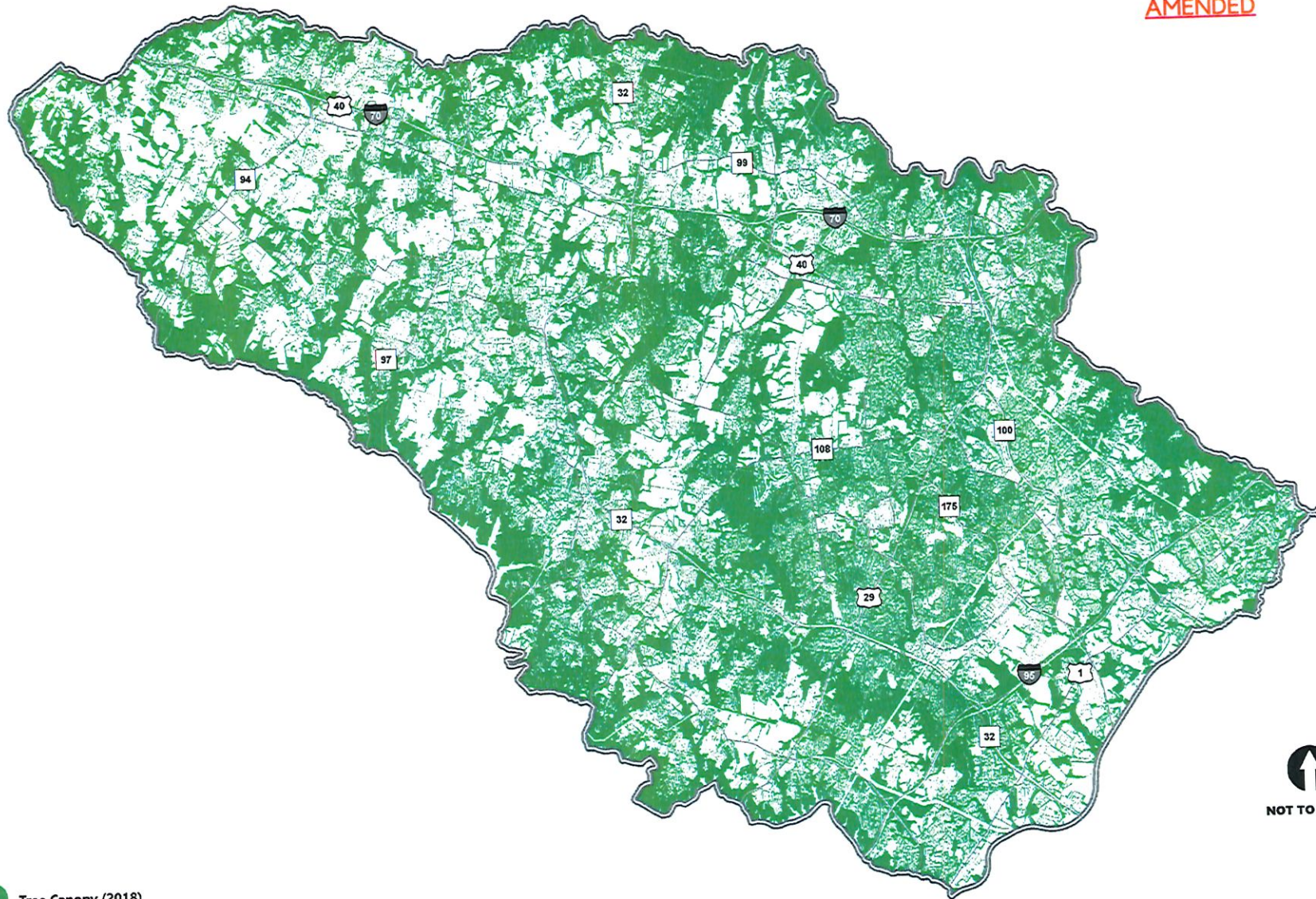
Howard County does not have an overall goal for tree canopy or forest cover, but Maryland has a policy that 40% of all land in the State should be covered by tree canopy. The County has several programs that provide free native trees to help increase tree canopy cover on qualifying residential properties, including the Stream ReLeaf and Turf to Trees Programs, along with an annual tree giveaway.

Map 3-4 shows tree canopy cover by watershed and census tracts with average household annual median income under \$50,000. There are four subwatersheds with less than 40% tree canopy coverage that contain one or more of these census tracts. Map 3-5 shows subwatersheds that have less than 40% tree canopy cover and impervious cover over 25%, along with census tracts with average household annual median income under \$50,000. Watersheds with higher levels of impervious cover and lower levels of tree canopy cover will experience greater heat island impacts, and households in these census tracts may have economic difficulty addressing these impacts. There are three subwatersheds that reflect these conditions and contain one or more of these census tracts. These subwatersheds should be prioritized for native tree planting programs, with a focus on residential areas within these census tracts, where there are willing participants.



MAP 3-3: TREE CANOPY

AMENDED



● Tree Canopy (2018)

↑
NOT TO SCALE

Amendment 32 to Council Bill No. 28 -2023

BY: The Chairperson at the Request
of the County Executive

Legislative Day 11
Date: 10/02/2023

Amendment No. 32

(This Amendment makes a technical correction to include more recent tree canopy data and to indicate the year for census tract income data on the legend for Maps 3-4 and 3-5.)

- 1 In the *HoCo By Design* General Plan, attached to this Act as Exhibit A, amend the following
2 pages as indicated in this Amendment:
- 3 • Chapter 3, Ecological Health – pages 37, 38, 39 and 40
- 4
- 5 Correct all page numbers, numbering, and formatting within this Act to accommodate this
6 amendment.

I certify this is a true copy of

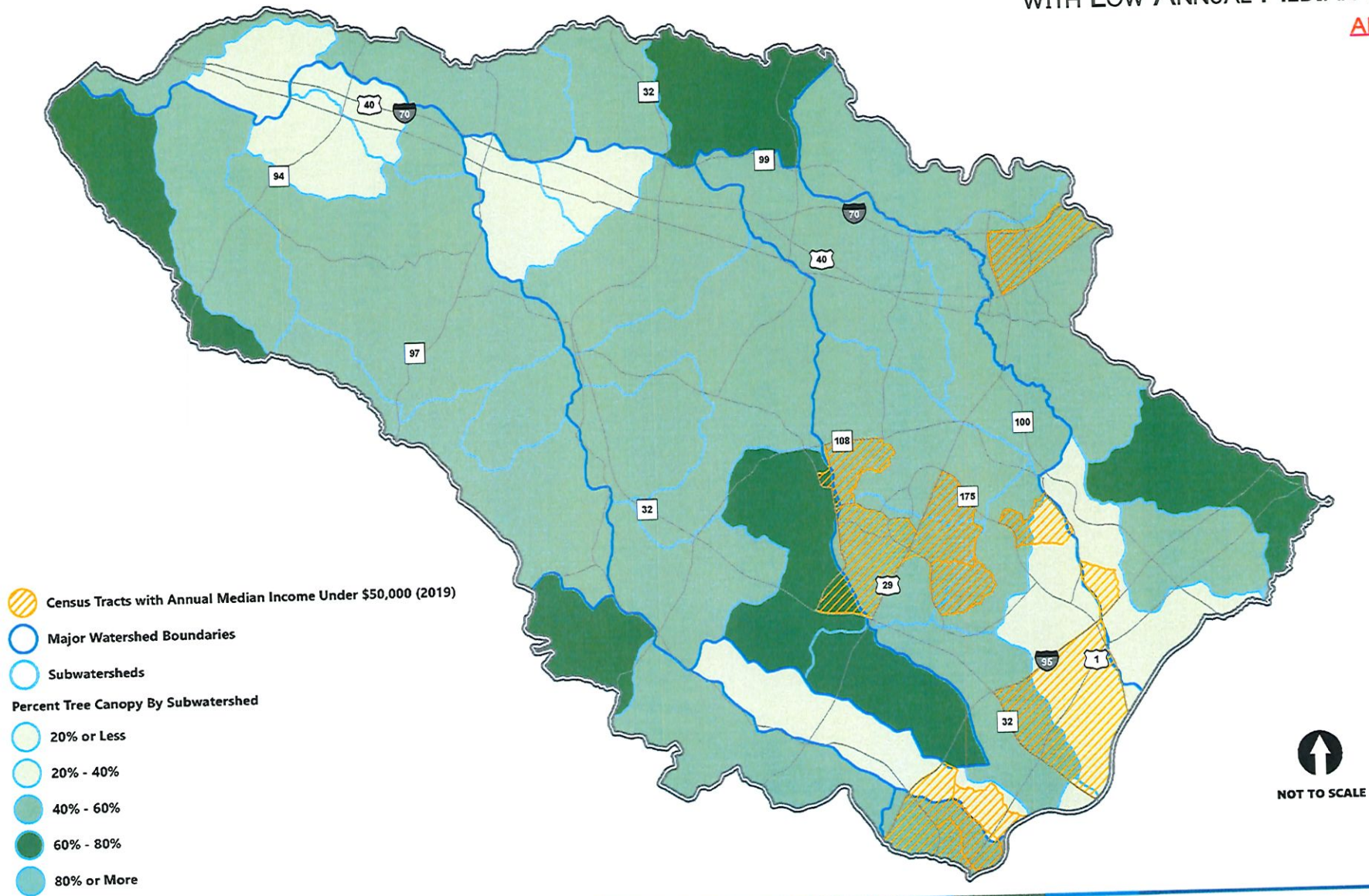
Am 32 CB28-2023

passed on

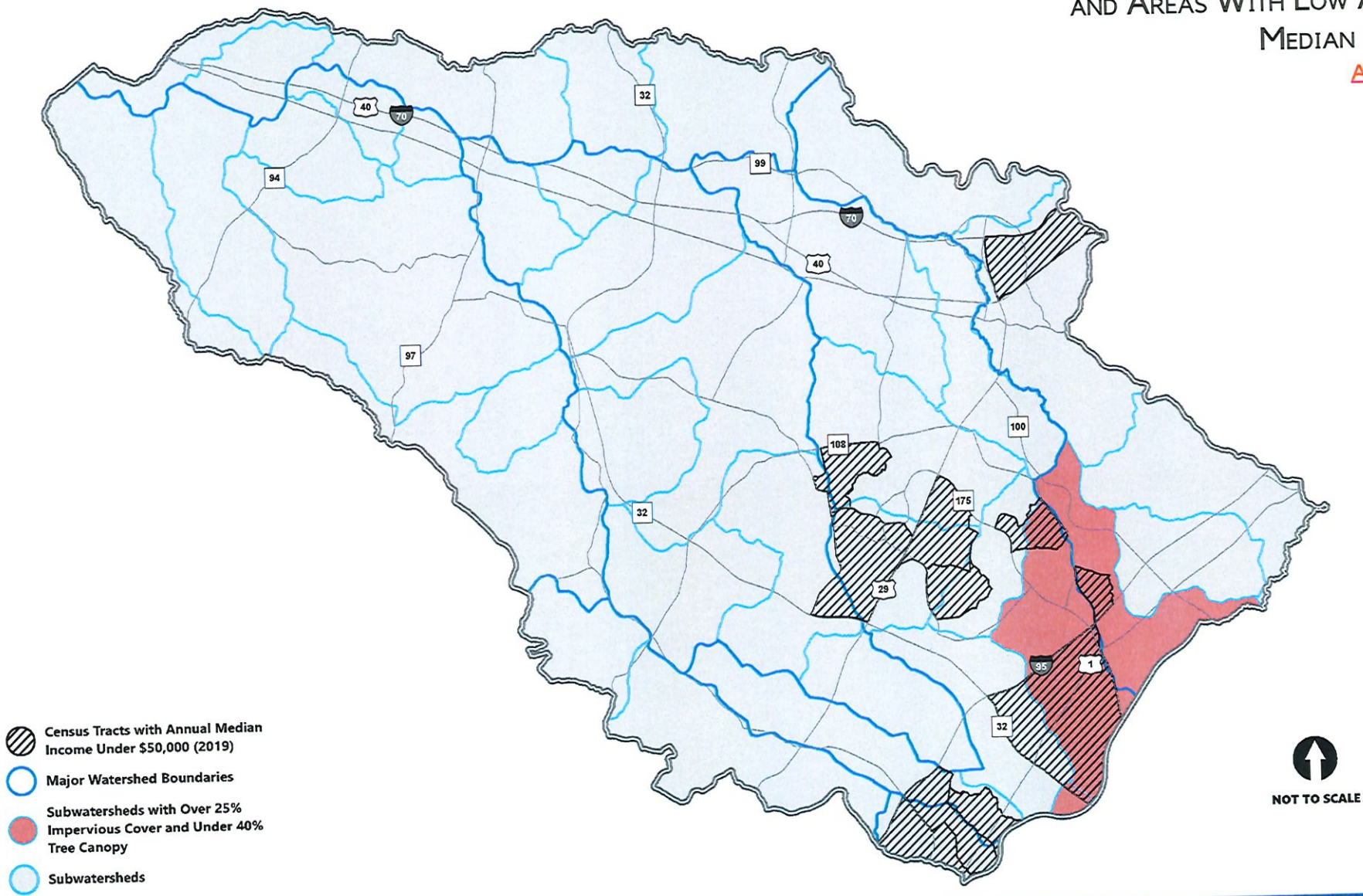
10/11/2023

Michelle Herrod
Council Administrator

MAP 3-4: TREE CANOPY AND AREAS WITH LOW ANNUAL MEDIAN INCOME
AMENDED



MAP 3-5: POTENTIAL HEAT ISLANDS
AND AREAS WITH LOW ANNUAL
MEDIAN INCOME
AMENDED



Amendment 33 to Council Bill No. 28 -2023

**BY: The Chairperson at the Request
of the County Executive**

**Legislative Day 11
Date: October 2, 2023**

Amendment No. 33

(This Amendment makes the following changes to HoCo by Design Chapter 4, County in Motion, and Chapter 11, Implementation:

1. *Improves language surrounding regional transportation connections with high frequency train service provided by the Penn Commuter Rail Line*
2. *Adds language surrounding the engagement of regional partners to support and advance connections included in local and regional plans*
3. *Adds language that Development Regulations should require site plans that address access by transit, bicycle, walking and micromobility services*
4. *Adds language to work with State and Regional agencies to develop methods to measure bike and pedestrian activity*
5. *Clarifies what is meant by "electric vehicles"*
6. *Makes a technical correction to group electric bikes and cars together, separate from charging stations.)*

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

- 3 • Chapter 4, County in Motion – pages 25, 26 and 32
- 4 • Chapter 11, Implementation – pages 24, 25 and 27

5

6 Correct all page numbers, numbering, and formatting within this Act to accommodate this
7 amendment.

I certify this is a true copy of

Am 33 CB28-2023


passed on

10/11/2023

Michelle D'Amico

Council Administrator

CIM-3 Policy Statement

 Make the transportation system equitable, close mobility gaps, and improve access to jobs, housing, health care, education, and social services.

Implementing Actions

1. Continue to monitor system performance, gather input from current riders, and allocate existing resources to maximize ridership and enhance service for current public transit riders.
2. Ensure investments in the Regional Transportation Agency system balance improving service frequencies and adding new routes to unserved areas with transit-supportive land use.
3. Continue to support community-based mobility programs and non-governmental organizations that serve seniors and people with disabilities.
4. Explore flexible transit routing, mobility as a service, and other micro-mobility concepts to provide efficient and economic transit service in lower-density areas of the County.


CIM-4 Policy Statement

Leverage Howard County's position in the Baltimore and Washington regions to advance transportation projects and policies with regional and local impacts, including focusing efforts on governance, accountability, funding policies, and strategies to address unmet transportation service needs.

Implementing Actions

1. Continue to engage in regional discussions regarding state and federal investment in regional transit systems to ensure funding and support for Howard County projects, meet the County's goals to enhance and improve access to regional job centers, and maintain the County's position as an attractive location to live and work.
2. Continue to support the collaborative efforts to improve the Regional Transportation Agency of Central Maryland.
3. Continue to partner with Montgomery County and the Maryland Department of Transportation to extend the Flash Bus Rapid Transit Service to Howard County.
4. Support and partner with Maryland Department of Transportation and other regional organizations to expand service and improve reliability on the Camden Commuter Rail Line and improve transit connections from Howard County to existing Penn Commuter Rail Line Stations.
5. Continue to engage and participate in regional and state planning and coordination activities to ensure the needs of freight and goods movements are considered and supported.
6. Continue to engage with neighboring, regional and state partners to support and advance regional high-quality connections articulated in local and regional functional plans.

CIM-5 Policy Statement

 Deliver transportation system improvements that support efforts to reduce reliance on automobile trips, improve air quality, and give people cost-effective and sustainable choices on how they get to work, home, school, and play.

Implementing Actions

1. Construct and enhance transportation facilities to increase connections across Howard County and support the goals of WalkHoward, BikeHoward, and the Complete Streets Policy, with a focus on the equity goals outlined in the Complete Streets Policy.
2. Continue to plan and implement projects that enhance transportation connections to regional job centers and high-quality transit.
3. Sustain and expand efforts to develop and implement Transportation Demand Management programs (such as car share, bikeshare, and shared e-scooter systems; telecommute policies; and vanpools) and expand Park and Ride lots, where appropriate.
4. Continue to plan and coordinate investments with the Howard County Public School System to increase safe routes to schools, enhance access to the local transit system, reduce demand for school bus service, and decrease driving to school.
5. Partner with the Maryland Department of Transportation to align commuter bus routes and funding priorities with current and expected travel patterns and complementary regional public transit initiatives.
6. Continue to work with federal, state, and regional partners on preliminary studies for high-quality connections.
7. Implement Development Regulations that require site plans that allow access to buildings by transit, bicycle, walking and micromobility services.
8. Work with State and Regional Agencies to develop reliable and sustainable methods to measure bike and pedestrian activity.

CIM-6 Policy Statement

Focus on improvements to the transportation system that improve travel reliability.

Implementing Actions

1. Evaluate the use of Transportation Systems Management and Operations concepts to manage the County's road system.
2. Develop real-time traffic monitoring and coordinate transportation and emergency resources to address non-recurring congestion due to weather and crashes on the local and regional transportation system.
3. Focus on operations at key intersections while ensuring improved safety for bicycle and pedestrian movements.
4. Optimize signal timing and phasing at key intersections in coordination with efforts to improve pedestrian and bicycle movements and safety, and coordinate signals in major commute corridors during peak time periods.
5. Increase street connections in key locations that provide more route choices to system users.
6. Develop access management approaches through updates to the Zoning Regulations and the Subdivision and Land Development Regulations, design approvals, and coordination with the Maryland Department of Transportation State Highway Administration.

Climate Change and Air Quality

As outlined in the Ecological Health chapter, climate change can be generally defined as a significant long-term shift in weather patterns for a specific geographic region. Emissions of the long-lived greenhouse gases carbon dioxide (CO₂), methane, nitrous oxide, and fluorinated gases are causing climate change as they build up and trap heat in the atmosphere. A significant contributor to emissions is the transportation sector. In the United States, transportation accounts for 33% of CO₂ emissions, with 65% of that total resulting from gasoline consumption in cars and light trucks. Annual vehicle miles traveled (VMT) in Howard County has grown slightly in recent years, increasing by just over 400,000 between 2013 and 2018. This growth in VMT represents nearly 500 additional miles driven by every county resident per year. On a per capita basis, the county VMT is approximately 37% higher than the regional average. This difference is a function of slightly longer commuting distances to Baltimore and Washington, DC, high per capita auto ownership, and a limited number of transit options for most commute trips.

Air pollution levels are reported to the general public via the Air Quality Index (AQI), which measures the level of criteria pollutants (air pollutants that contribute to the formation of ozone and particulate matter, including hydrocarbons, carbon monoxide, and oxides of nitrogen, which can have adverse short- and long-term health effects). In the Baltimore-Washington region, the AQI is driven by ground level ozone and particulate matter. The Clean Air Act enables interstate commissions to develop regional strategies for reducing air pollution. Maryland is part of the Northeast Ozone Transport Region, which includes 12 states and the District of Columbia. At the local level, Howard County is a member of the Baltimore Metropolitan Council (BMC) and its Baltimore Regional Transportation Board (BRTB), which coordinate regional transportation planning and work to reduce emissions from transportation. Under the Clean Air Act, the BRTB cannot approve any project, program, or plan that does not conform to Maryland's State Implementation Plan, which guides Maryland's actions to attain and meet air quality standards.

Reducing emissions and air pollutants from the transportation system will take multiple approaches, including the following: 1) reducing direct emissions from vehicles; 2) shifting demand to more efficient transportation modes with fewer direct emissions; and 3) reducing VMT. The national, state, and local vehicle fleet is still primarily comprised of gasoline and diesel vehicles; however, electric and hybrid vehicles are becoming more common. In 2022, less than 1% of the US vehicle fleet was electric but sales were increasing rapidly. Meaningful market penetration of electric vehicles will depend on availability of government incentives, alleviating buyers' range anxiety, and facilitating investment in charging infrastructure. The high cost of electric vehicles is often cited as a barrier, as approximately two-thirds of households that own electric or hybrid vehicles have incomes over \$100,000. Therefore any incentives and supporting policies will need to address the County's equity goals. Shifting demand to other modes, such as transit, walking, and biking, is another reliable and equitable method to reduce VMT and emissions. By investing in reliable transit and safe walking and cycling facilities, the County can ensure that community members will have the option to shift their vehicle trips. Additionally, increasing frequency of transit service not only benefits those who depend on it out of necessity, but also improves the attractiveness of transit to those who are able to choose their mode of travel.

Climate change is also forecast to impact the reliability of the transportation system as periods of higher temperatures increase wear on road surfaces; stronger and more sustained rain events increase flooding on roads, bridges, and culverts; and long-term droughts dry out subsurface soils, leading to subsidence. Additionally, reduced capacity, detours, and crashes from flooding impact travel time, reliability, and safety. As articulated in the BMC's Capital Improvement Program study, viewing asset management and county design standards through a resiliency lens will be critical to ensuring the County's transportation system can continue to operate safely and effectively.

CIM-8 Policy Statement

Actively plan for and evaluate the impact of technology and climate change on the transportation system.

Implementing Actions

1. Evaluate and update parking and land development requirements to reflect greater use of mobility and delivery as service models.
2. Amend design standards and asset management approaches to ensure resilience.
3. Support the installation of electric ~~vehicle-vehicles~~ (EV), such as electric cars, cars and electric bikes, and charging stations in private and public space, with particular attention to shared parking lots to ensure they are EV ready by including connections and infrastructure.
4. Evaluate and address the potential impact of electric vehicle charging stations on electric power requirements.
5. Participate in regional and state coordination efforts to ensure federal and state regulations on connected and autonomous vehicles account for vulnerable road users such as pedestrians and cyclists.

CIM-9 Policy Statement

Support efforts to improve air quality with an emphasis on communities and populations most threatened by high levels of pollution.

Implementing Actions

1. Develop land use and environmental policy strategies that reduce the impact of diesel particulate matter in communities adjacent to industrial areas.
2. Develop a plan to transition the County's fleet (including school buses and contracted services) to low/no emission vehicles.
3. Continue to invest in increasing public transit frequency and walking and cycling infrastructure to support both a more equitable transportation system and shifts away from automobiles to non-automobile modes.
4. Consider targeted financial incentives and the removal of regulatory barriers for property owners and companies that deploy electric vehicle charging infrastructure, idle reduction technology, and other technologies that capture or mitigate diesel emissions at the source.
5. Consider a subsidy program to support low emission vehicles, bicycles, and scooters in traditionally underserved communities.

Table 10-1: Implementation Matrix

Policy and Implementing Actions	Lead Agency	Timeframe (Mid-Term five-year, Long-Term six+ years, Ongoing)
CIM-1 - Maintain transportation system assets to ensure the viability of the system and safety of users.		
1. Develop and regularly update a risk-based asset inventory and management program for all transportation assets and ensure adequate maintenance funding.	OOT DPW	Mid-Term
2. Closely coordinate system maintenance activities with utilities and private development to minimize future roadway damage.	OOT Private Partners	Ongoing
3. Develop fiscally unconstrained plans for each asset class to communicate the deferred maintenance needs and a pipeline of unfunded projects for consideration.	DPW	Ongoing
4. Consider equity emphasis areas in the prioritization of maintenance needs.	OOT DPW	Ongoing
CIM-2 - Design and operate an equitable transportation system that prevents and mitigates the most severe types of crashes for motorists, transit riders, bicyclists, and pedestrians.		
1. Prioritize and fund measures outlined in the Strategic Road Safety Plan using a safe system approach to focus education, enforcement, and engineering efforts and investments.	OOT DPW Elected Officials OOB	Mid-Term
2. Advance the Complete Streets Policy by updating the Subdivision and Land Development Regulations to provide accommodations and improve safety, particularly for pedestrians and bicyclists who are the most vulnerable roadway users.	OOT DPZ DPW	Ongoing
3. Execute the priorities of WalkHoward and BikeHoward through dedicated funding in the capital budget and efficient project delivery.	OOT Elected Officials OOB	Ongoing
4. Ensure that all transportation capital projects include review of potential safety improvements during the project scoping process.	OOT DPW	Ongoing

Table 10-1: Implementation Matrix

Policy and Implementing Actions	Lead Agency	Timeframe (Mid-Term five-year, Long-Term six+ years, Ongoing)
CIM-3 - Make the transportation system equitable, close mobility gaps, and improve access to jobs, health care, education, and social services.		
1. Continue to monitor system performance, gather input from current riders, and allocate existing resources to maximize ridership and enhance service for current public transit riders.	OOT	Ongoing
2. Ensure investments in the Regional Transportation Agency system balance improving service frequencies and adding new routes to unserved areas with transit-supportive land use.	OOT	Ongoing
3. Continue to support community-based mobility programs and non-governmental organizations that serve seniors and people with disabilities.	DCRS OOT	Ongoing
4. Explore flexible transit routing, mobility as a service, and other micro-mobility concepts to provide efficient and economic transit service in lower-density areas of the County.	OOT	Mid-Term
CIM-4 - Leverage Howard County's position in the Baltimore and Washington regions to advance transportation projects and policies with regional and local impacts, including focusing efforts on governance, accountability, funding policies, and strategies to address unmet transportation service needs.		
1. Continue to engage in regional discussions regarding state and federal investment in regional transit systems to ensure funding and support for Howard County projects, meet the County's goals to enhance and improve access to regional job centers, and maintain the County's position as an attractive location to live and work.	OOT DPW Elected Officials OOB	Ongoing
2. Continue to support the collaborative efforts to improve the Regional Transportation Agency of Central Maryland.	OOT	Ongoing
3. Continue to partner with Montgomery County and the Maryland Department of Transportation to extend the Flash Bus Rapid Transit Service to Howard County.	OOT	Mid-Term
4. Support and partner with Maryland Department of Transportation and other regional organizations to expand service and improve reliability on the Camden Commuter Rail Line <u>and improve transit connections from Howard County to existing Penn Commuter Rail Lines.</u>	OOT	Mid-Term
5. Continue to engage and participate in regional and state planning and coordination activities to ensure the needs of freight and goods movements are considered and supported.	OOT	Ongoing
6. <u>Continue to engage with neighboring, regional, and state partners to support and advance regional high-quality connections articulated in local and regional functional plans.</u>	OOT DPW DRP	Ongoing

Table 10-1: Implementation Matrix		
Policy and Implementing Actions	Lead Agency	Timeframe (Mid-Term five-year, Long-Term six+ years, Ongoing)
CIM-5 - Deliver transportation system improvements that support efforts to reduce reliance on automobile trips, improve air quality, and give people cost-effective and sustainable choices on how they get to work, home, school, and play.		
1. Construct and enhance transportation facilities to increase connections across Howard County and support the goals of WalkHoward, BikeHoward, and the Complete Streets Policy, with a focus on the equity goals outlined in the Complete Streets Policy.	OOT DPW	Ongoing
2. Continue to plan and implement projects that enhance transportation connections to regional job centers and high-quality transit.	DPZ OOT	Ongoing
3. Sustain and expand efforts to develop and implement Transportation Demand Management programs (such as car share, bikeshare, and shared e-scooter systems; telecommute policies; and vanpools) and expand Park and Ride lots, where appropriate.	OOT DPW	Ongoing
4. Continue to plan and coordinate investments with the Howard County Public School System to increase safe routes to schools, enhance access to the local transit system, reduce demand for school bus service, and decrease driving to school.	OOT DPW HCPSS	Ongoing
5. Partner with the Maryland Department of Transportation to align commuter bus routes and funding priorities with current and expected travel patterns and complementary regional public transit initiatives.	OOT	Ongoing
6. Continue to work with federal, state, and regional partners on preliminary studies for high-quality connections.	OOT	Ongoing
7. <u>Implement Development Regulations that require site plans that allow access to buildings by transit, bicycle, walking, and micro-mobility services.</u>	DPZ OOT	Mid-Term
8. <u>Work with state and regional agencies to develop reliable and sustainable methods to measure bike and pedestrian activity.</u>	OOT	Mid-Term

Table 10-1: Implementation Matrix		
Policy and Implementing Actions	Lead Agency	Timeframe (Mid-Term five-year, Long-Term six+ years, Ongoing)
CIM-6 - Focus on improvements to the transportation system that improve travel reliability.		
1. Evaluate the use of Transportation Systems Management and Operations concepts to manage the County's road system.	OOT DPW	Mid-Term
2. Develop real-time traffic monitoring and coordinate transportation and emergency resources to address non-recurring congestion due to weather and crashes on the local and regional transportation system.	OOT OEM DPW	Mid-Term
3. Focus on operations at key intersections while ensuring improved safety for bicycle and pedestrian movements.	DPW OOT	Mid-Term
4. Optimize signal timing and phasing at key intersections in coordination with efforts to improve pedestrian and bicycle movements and safety, and coordinate signals in major commute corridors during peak time periods.	DPW OOT	Mid-Term
5. Increase street connections in key locations that provide more route choices to system users.	OOT DPW	Mid-Term
6. Develop access management approaches through updates to the Zoning Regulations and the Subdivision and Land Development Regulations, design approvals, and coordination with the Maryland Department of Transportation State Highway Administration.	DPZ OOT	Long-Term
CIM-7 - Refine processes and policies to deliver transportation improvements strategically, efficiently, and equitably.		
1. Review existing rules, policies, processes, and procurement procedures to identify opportunities to accelerate the planning, design, permitting, or construction of new and equitable transportation projects, including the recommendations from the Capital Improvement Program study.	OOT DPW	Mid-Term
2. Identify opportunities to minimize the time needed to acquire right-of-way for planning road, sidewalk, or bicycle projects while respecting the rights of private property owners. Alternatively, reevaluate the scope of projects earlier in the planning process if it is determined that there is strong opposition to land acquisition.	OOT DPW Private Property Owners	Ongoing
3. Implement contracting methods that shorten construction activities for a project, including, but not limited to, design-build provisions for small projects like sidewalks or intersection improvements, contracts that share risk with contractors and support flexible project phasing for larger projects, and incentives for early project completion.	DPW OOT OOP	Long-Term

Table 10-1: Implementation Matrix

Policy and Implementing Actions	Lead Agency	Timeframe (Mid-Term five-year, Long-Term six+ years, Ongoing)
CIM-8 - Actively plan for and evaluate the impact of technology and climate change on the transportation system.		
1. Evaluate and update parking and land development requirements to reflect greater use of mobility and delivery as service models.	DPZ OOT	Mid-Term
2. Amend design standards and asset management approaches to ensure resilience.	DPW OOT DPZ	Mid-Term
3. Support the installation of electric vehicle-vehicles (EV), such as electric cars, cars and electric bikes, and charging stations in private and public space, with particular attention to shared parking lots to ensure they are EV ready by including connections and infrastructure.	DPW OCS OOT Private Partners	Ongoing
4. Evaluate and address the potential impact of electric vehicle charging stations on electric power requirements.	DPW OOT OCS	Long-Term
5. Participate in regional and state coordination efforts to ensure federal and state regulations on connected and autonomous vehicles account for vulnerable road users such as pedestrians and cyclists.	OOT	Ongoing
CIM-9 - Support efforts to improve air quality with an emphasis on communities and populations most threatened by high levels of pollution.		
1. Develop land use and environmental policy strategies that reduce the impact of diesel particulate matter in communities adjacent to industrial areas.	OCS OOT	Long-Term
2. Develop a plan to transition the County's fleet (including school buses and contracted services) to low/no emission vehicles.	OOT OCS	Mid-Term
3. Continue to invest in increasing public transit frequency and walking and cycling infrastructure to support both a more equitable transportation system and shifts away from automobiles to non-automobile modes.	OOT	Ongoing
4. Consider targeted financial incentives to property owners and companies that deploy electric vehicle charging infrastructure, idle reduction technology, and other technologies that capture or mitigate diesel emissions at the source.	OOT OCS Private Property Owners	Mid-Term
5. Consider a subsidy program to support low emission vehicles, bicycles, and scooters in traditionally underserved communities.	OOT	Long-Term

Table 10-1: Implementation Matrix

Policy and Implementing Actions	Lead Agency	Timeframe (Mid-Term five-year, Long-Term six+ years, Ongoing)
CIM-10 - Advance transportation planning and transportation investments to support an economically and environmentally sustainable transportation system that moves people safely and efficiently throughout the County and supports the land use and equity goals in HoCo By Design, including its emphasis on mixed-use activity centers.		
1. Develop a countywide transportation plan and conduct a focused transportation study for each activity center in the Route 1 Corridor.	OOT DPW	Mid-Term
2. Continue to use the Functional Road Classification Map to guide the design, capacity, and function of roads as they are built or improved.	DPW OOT DPZ	Ongoing
3. Implement HoCo By Design's recommendations for transit service through future transit service functional plans or master plans.	OOT DPZ	Long-Term
4. Continue to implement recommendations from WalkHoward and BikeHoward as methods to advance the broad concepts and recommendations in the General Plan.	OOT	Ongoing
5. Ensure the Design Manual is consistent with the General Plan as part of the regular update process for the Design Manual.	OOT	Long-Term
EP-1 - Retain and expand the use of industrial land to support employment opportunities that pay a living wage.		
1. As part of the Zoning Regulations update, consider protective measures to ensure an adequate long-term supply of industrial land, such as additional requirements or impact statements for rezoning industrial land, zoning that discourages incompatible uses in heavy industrial areas, heavy buffer requirements for non-industrial users locating near heavy industrial land, or industrial overlay zoning for prime industrial land.	DPZ	Mid-Term
2. Determine how compatible uses can co-locate in designated Industrial Mixed-Use character areas to support industrial operations and create an active sense of place.	DPZ	Long-Term
3. Prioritize for retention industrial land that is uniquely accessible to regional highways for continued industrial use.	DPZ	Mid-Term
4. During the Zoning Regulations update or via Zoning Amendments, favorably consider context-sensitive industrial uses along the Interstate 70 corridor.	DPZ	Mid-Term
EP-2 - Ensure redevelopment is consistent with the character of industrial areas.		
1. Update the Route 1 Design Manual to include Industrial Mixed-Use character areas and incorporate buffers between redevelopment areas and industrial areas.	DPZ	Long-Term

Amendment 1 Amendment No. 33 to Council Bill No. 28 -2023

BY: The Chairperson at the Request
of the County Executive

Legislative Day 12
Date: October 11, 2023

Amendment No. 1 to Amendment No. 33

(This Amendment to Amendment No. 33 makes a technical correction to group electric bikes and cars together, separate from charging stations.)

- 1 In Chapter 4, County in Motion, substitute page CIM 32 attached to Amendment No. 33 with the
- 2 page CIM 32 attached to this Amendment to Amendment.
- 3
- 4 In Chapter 11, Implementation, substitute page IMP 27 attached to Amendment No. 33 with the
- 5 page IMP 27 attached to this Amendment to Amendment.

I certify this is a true copy of

Am 1 Am 33 CB 28-2023

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Michelle Hogg
Council Administrator

Climate Change and Air Quality

As outlined in the Ecological Health chapter, climate change can be generally defined as a significant long-term shift in weather patterns for a specific geographic region. Emissions of the long-lived greenhouse gases carbon dioxide (CO₂), methane, nitrous oxide, and fluorinated gases are causing climate change as they build up and trap heat in the atmosphere. A significant contributor to emissions is the transportation sector. In the United States, transportation accounts for 33% of CO₂ emissions, with 65% of that total resulting from gasoline consumption in cars and light trucks. Annual vehicle miles traveled (VMT) in Howard County has grown slightly in recent years, increasing by just over 400,000 between 2013 and 2018. This growth in VMT represents nearly 500 additional miles driven by every county resident per year. On a per capita basis, the county VMT is approximately 37% higher than the regional average. This difference is a function of slightly longer commuting distances to Baltimore and Washington, DC, high per capita auto ownership, and a limited number of transit options for most commute trips.

Air pollution levels are reported to the general public via the Air Quality Index (AQI), which measures the level of criteria pollutants (air pollutants that contribute to the formation of ozone and particulate matter, including hydrocarbons, carbon monoxide, and oxides of nitrogen, which can have adverse short- and long-term health effects). In the Baltimore-Washington region, the AQI is driven by ground level ozone and particulate matter. The Clean Air Act enables interstate commissions to develop regional strategies for reducing air pollution. Maryland is part of the Northeast Ozone Transport Region, which includes 12 states and the District of Columbia. At the local level, Howard County is a member of the Baltimore Metropolitan Council (BMC) and its Baltimore Regional Transportation Board (BRTB), which coordinate regional transportation planning and work to reduce emissions from transportation. Under the Clean Air Act, the BRTB cannot approve any project, program, or plan that does not conform to Maryland's State Implementation Plan, which guides Maryland's actions to attain and meet air quality standards.

Reducing emissions and air pollutants from the transportation system will take multiple approaches, including the following: 1) reducing direct emissions from vehicles; 2) shifting demand to more efficient transportation modes with fewer direct emissions; and 3) reducing VMT. The national, state, and local vehicle fleet is still primarily comprised of gasoline and diesel vehicles; however, electric and hybrid vehicles are becoming more common. In 2022, less than 1% of the US vehicle fleet was electric but sales were increasing rapidly. Meaningful market penetration of electric vehicles will depend on availability of government incentives, alleviating buyers' range anxiety, and facilitating investment in charging infrastructure. The high cost of electric vehicles is often cited as a barrier, as approximately two-thirds of households that own electric or hybrid vehicles have incomes over \$100,000. Therefore any incentives and supporting policies will need to address the County's equity goals. Shifting demand to other modes, such as transit, walking, and biking, is another reliable and equitable method to reduce VMT and emissions. By investing in reliable transit and safe walking and cycling facilities, the County can ensure that community members will have the option to shift their vehicle trips. Additionally, increasing frequency of transit service not only benefits those who depend on it out of necessity, but also improves the attractiveness of transit to those who are able to choose their mode of travel.

Climate change is also forecast to impact the reliability of the transportation system as periods of higher temperatures increase wear on road surfaces; stronger and more sustained rain events increase flooding on roads, bridges, and culverts; and long-term droughts dry out subsurface soils, leading to subsidence. Additionally, reduced capacity, detours, and crashes from flooding impact travel time, reliability, and safety. As articulated in the BMC's Capital Improvement Program study, viewing asset management and county design standards through a resiliency lens will be critical to ensuring the County's transportation system can continue to operate safely and effectively.

CIM-8 Policy Statement

Actively plan for and evaluate the impact of technology and climate change on the transportation system.

Implementing Actions

1. Evaluate and update parking and land development requirements to reflect greater use of mobility and delivery as service models.
2. Amend design standards and asset management approaches to ensure resilience.
3. Support the installation of electric ~~vehicle-vehicles~~ (EV), such as electric cars and electric bikes, and charging stations in private and public space, with particular attention to shared parking lots to ensure they are EV ready by including connections and infrastructure.
4. Evaluate and address the potential impact of electric vehicle charging stations on electric power requirements.
5. Participate in regional and state coordination efforts to ensure federal and state regulations on connected and autonomous vehicles account for vulnerable road users such as pedestrians and cyclists.

CIM-9 Policy Statement

Support efforts to improve air quality with an emphasis on communities and populations most threatened by high levels of pollution.

Implementing Actions

1. Develop land use and environmental policy strategies that reduce the impact of diesel particulate matter in communities adjacent to industrial areas.
2. Develop a plan to transition the County's fleet (including school buses and contracted services) to low/no emission vehicles.
3. Continue to invest in increasing public transit frequency and walking and cycling infrastructure to support both a more equitable transportation system and shifts away from automobiles to non-automobile modes.
4. Consider targeted financial incentives and the removal of regulatory barriers for property owners and companies that deploy electric vehicle charging infrastructure, idle reduction technology, and other technologies that capture or mitigate diesel emissions at the source.
5. Consider a subsidy program to support low emission vehicles, bicycles, and scooters in traditionally underserved communities.

Table 10-1: Implementation Matrix		
Policy and Implementing Actions	Lead Agency	Timeframe (Mid-Term five-year, Long-Term six+ years, Ongoing)
CIM-8 - Actively plan for and evaluate the impact of technology and climate change on the transportation system.		
1. Evaluate and update parking and land development requirements to reflect greater use of mobility and delivery as service models.	DPZ OOT	Mid-Term
2. Amend design standards and asset management approaches to ensure resilience.	DPW OOT DPZ	Mid-Term
3. Support the installation of electric <u>vehicle-vehicles</u> (EV), such as <u>electric cars, and electric bikes, and</u> charging stations in private and public space, with particular attention to shared parking lots to ensure they are EV ready by including connections and infrastructure.	DPW OCS OOT Private Partners	Ongoing
4. Evaluate and address the potential impact of electric vehicle charging stations on electric power requirements.	DPW OOT OCS	Long-Term
5. Participate in regional and state coordination efforts to ensure federal and state regulations on connected and autonomous vehicles account for vulnerable road users such as pedestrians and cyclists.	OOT	Ongoing
CIM-9 - Support efforts to improve air quality with an emphasis on communities and populations most threatened by high levels of pollution.		
1. Develop land use and environmental policy strategies that reduce the impact of diesel particulate matter in communities adjacent to industrial areas.	OCS OOT	Long-Term
2. Develop a plan to transition the County's fleet (including school buses and contracted services) to low/no emission vehicles.	OOT OCS	Mid-Term
3. Continue to invest in increasing public transit frequency and walking and cycling infrastructure to support both a more equitable transportation system and shifts away from automobiles to non-automobile modes.	OOT	Ongoing
4. Consider targeted financial incentives to property owners and companies that deploy electric vehicle charging infrastructure, idle reduction technology, and other technologies that capture or mitigate diesel emissions at the source.	OOT OCS Private Property Owners	Mid-Term
5. Consider a subsidy program to support low emission vehicles, bicycles, and scooters in traditionally underserved communities.	OOT	Long-Term

Table 10-1: Implementation Matrix		
Policy and Implementing Actions	Lead Agency	Timeframe (Mid-Term five-year, Long-Term six+ years, Ongoing)
CIM-10 - Advance transportation planning and transportation investments to support an economically and environmentally sustainable transportation system that moves people safely and efficiently throughout the County and supports the land use and equity goals in HoCo By Design, including its emphasis on mixed-use activity centers.		
1. Develop a countywide transportation plan and conduct a focused transportation study for each activity center in the Route 1 Corridor.	OOT DPW	Mid-Term
2. Continue to use the Functional Road Classification Map to guide the design, capacity, and function of roads as they are built or improved.	DPW OOT DPZ	Ongoing
3. Implement HoCo By Design's recommendations for transit service through future transit service functional plans or master plans.	OOT DPZ	Long-Term
4. Continue to implement recommendations from WalkHoward and BikeHoward as methods to advance the broad concepts and recommendations in the General Plan.	OOT	Ongoing
5. Ensure the Design Manual is consistent with the General Plan as part of the regular update process for the Design Manual.	OOT	Long-Term
EP-1 - Retain and expand the use of industrial land to support employment opportunities that pay a living wage.		
1. As part of the Zoning Regulations update, consider protective measures to ensure an adequate long-term supply of industrial land, such as additional requirements or impact statements for rezoning industrial land, zoning that discourages incompatible uses in heavy industrial areas, heavy buffer requirements for non-industrial users locating near heavy industrial land, or industrial overlay zoning for prime industrial land.	DPZ	Mid-Term
2. Determine how compatible uses can co-locate in designated Industrial Mixed-Use character areas to support industrial operations and create an active sense of place.	DPZ	Long-Term
3. Prioritize for retention industrial land that is uniquely accessible to regional highways for continued industrial use.	DPZ	Mid-Term
4. During the Zoning Regulations update or via Zoning Amendments, favorably consider context-sensitive industrial uses along the Interstate 70 corridor.	DPZ	Mid-Term
EP-2 - Ensure redevelopment is consistent with the character of industrial areas.		
1. Update the Route 1 Design Manual to include Industrial Mixed-Use character areas and incorporate buffers between redevelopment areas and industrial areas.	DPZ	Long-Term

Amendment 33 to Council Bill No. 28 -2023

BY: The Chairperson at the Request
of the County Executive

Legislative Day 11
Date: 10/02/2023

Amendment No. 33

(This Amendment makes the following changes to HoCo by Design Chapter 4, County in Motion, and Chapter 11, Implementation:

- 1. Improves language surrounding regional transportation connections with high frequency train service provided by the Penn Commuter Rail Line*
- 2. Adds language surrounding the engagement of regional partners to support and advance connections included in local and regional plans*
- 3. Adds language that Development Regulations should require site plans that address access by transit, bicycle, walking and micromobility services*
- 4. Adds language to work with State and Regional agencies to develop methods to measure bike and pedestrian activity*
- 5. Clarifies what is meant by "electric vehicles".)*

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

- 3 • Chapter 4, County in Motion – pages 25, 26 and 32
- 4 • Chapter 11, Implementation – pages 24, 25 and 27

5
6 Correct all page numbers, numbering, and formatting within this Act to accommodate this
7 amendment.

CIM-3 Policy Statement

Make the transportation system equitable, close mobility gaps, and improve access to jobs, housing, health care, education, and social services.

Implementing Actions

1. Continue to monitor system performance, gather input from current riders, and allocate existing resources to maximize ridership and enhance service for current public transit riders.
2. Ensure investments in the Regional Transportation Agency system balance improving service frequencies and adding new routes to unserved areas with transit-supportive land use.
3. Continue to support community-based mobility programs and non-governmental organizations that serve seniors and people with disabilities.
4. Explore flexible transit routing, mobility as a service, and other micro-mobility concepts to provide efficient and economic transit service in lower-density areas of the County.

CIM-4 Policy Statement

Leverage Howard County's position in the Baltimore and Washington regions to advance transportation projects and policies with regional and local impacts, including focusing efforts on governance, accountability, funding policies, and strategies to address unmet transportation service needs.

Implementing Actions

1. Continue to engage in regional discussions regarding state and federal investment in regional transit systems to ensure funding and support for Howard County projects, meet the County's goals to enhance and improve access to regional job centers, and maintain the County's position as an attractive location to live and work.
2. Continue to support the collaborative efforts to improve the Regional Transportation Agency of Central Maryland.
3. Continue to partner with Montgomery County and the Maryland Department of Transportation to extend the Flash Bus Rapid Transit Service to Howard County.
4. Support and partner with Maryland Department of Transportation and other regional organizations to expand service and improve reliability on the Camden Commuter Rail Line [and improve transit connections from Howard County to existing Penn Commuter Rail Line Stations.](#)
5. Continue to engage and participate in regional and state planning and coordination activities to ensure the needs of freight and goods movements are considered and supported.
6. [Continue to engage with neighboring, regional and state partners to support and advance regional high-quality connections articulated in local and regional functional plans.](#)

CIM-5 Policy Statement

Deliver transportation system improvements that support efforts to reduce reliance on automobile trips, improve air quality, and give people cost-effective and sustainable choices on how they get to work, home, school, and play.

Implementing Actions

1. Construct and enhance transportation facilities to increase connections across Howard County and support the goals of WalkHoward, BikeHoward, and the Complete Streets Policy, with a focus on the equity goals outlined in the Complete Streets Policy.
2. Continue to plan and implement projects that enhance transportation connections to regional job centers and high-quality transit.
3. Sustain and expand efforts to develop and implement Transportation Demand Management programs (such as car share, bikeshare, and shared e-scooter systems; telecommute policies; and vanpools) and expand Park and Ride lots, where appropriate.
4. Continue to plan and coordinate investments with the Howard County Public School System to increase safe routes to schools, enhance access to the local transit system, reduce demand for school bus service, and decrease driving to school.
5. Partner with the Maryland Department of Transportation to align commuter bus routes and funding priorities with current and expected travel patterns and complementary regional public transit initiatives.
6. Continue to work with federal, state, and regional partners on preliminary studies for high-quality connections.
7. [Implement Development Regulations that require site plans that allow access to buildings by transit, bicycle, walking and micromobility services.](#)
8. [Work with State and Regional Agencies to develop reliable and sustainable methods to measure bike and pedestrian activity.](#)

CIM-6 Policy Statement

Focus on improvements to the transportation system that improve travel reliability.

Implementing Actions

1. Evaluate the use of Transportation Systems Management and Operations concepts to manage the County's road system.
2. Develop real-time traffic monitoring and coordinate transportation and emergency resources to address non-recurring congestion due to weather and crashes on the local and regional transportation system.
3. Focus on operations at key intersections while ensuring improved safety for bicycle and pedestrian movements.
4. Optimize signal timing and phasing at key intersections in coordination with efforts to improve pedestrian and bicycle movements and safety, and coordinate signals in major commute corridors during peak time periods.
5. Increase street connections in key locations that provide more route choices to system users.
6. Develop access management approaches through updates to the Zoning Regulations and the Subdivision and Land Development Regulations, design approvals, and coordination with the Maryland Department of Transportation State Highway Administration.

Climate Change and Air Quality

As outlined in the Ecological Health chapter, climate change can be generally defined as a significant long-term shift in weather patterns for a specific geographic region. Emissions of the long-lived greenhouse gases carbon dioxide (CO₂), methane, nitrous oxide, and fluorinated gases are causing climate change as they build up and trap heat in the atmosphere. A significant contributor to emissions is the transportation sector. In the United States, transportation accounts for 33% of CO₂ emissions, with 65% of that total resulting from gasoline consumption in cars and light trucks. Annual vehicle miles traveled (VMT) in Howard County has grown slightly in recent years, increasing by just over 400,000 between 2013 and 2018. This growth in VMT represents nearly 500 additional miles driven by every county resident per year. On a per capita basis, the county VMT is approximately 37% higher than the regional average. This difference is a function of slightly longer commuting distances to Baltimore and Washington, DC, high per capita auto ownership, and a limited number of transit options for most commute trips.

Air pollution levels are reported to the general public via the Air Quality Index (AQI), which measures the level of criteria pollutants that contribute to the formation of ozone and particulate matter, including hydrocarbons, carbon monoxide, and oxides of nitrogen, which can have adverse short- and long-term health effects). In the Baltimore-Washington region, the AQI is driven by ground level ozone and particulate matter. The Clean Air Act enables interstate commissions to develop regional strategies for reducing air pollution. Maryland is part of the Northeast Ozone Transport Region, which includes 12 states and the District of Columbia. At the local level, Howard County is a member of the Baltimore Metropolitan Council (BMC) and its Baltimore Regional Transportation Board (BRTB), which coordinate regional transportation planning and work to reduce emissions from transportation. Under the Clean Air Act, the BRTB cannot approve any project, program, or plan that does not conform to Maryland's State Implementation Plan, which guides Maryland's actions to attain and meet air quality standards.

Reducing emissions and air pollutants from the transportation system will take multiple approaches, including the following: 1) reducing direct emissions from vehicles; 2) shifting demand to more efficient transportation modes with fewer direct emissions; and 3) reducing VMT. The national, state, and local vehicle fleet is still primarily comprised of gasoline and diesel vehicles; however, electric and hybrid vehicles are becoming more common. In 2022, less than 1% of the US vehicle fleet was electric but sales were increasing rapidly. Meaningful market penetration of electric vehicles will depend on availability of government incentives, alleviating buyers' range anxiety, and facilitating investment in charging infrastructure. The high cost of electric vehicles is often cited as a barrier, as approximately two-thirds of households that own electric or hybrid vehicles have incomes over \$100,000. Therefore any incentives and supporting policies will need to address the County's equity goals. Shifting demand to other modes, such as transit, walking, and biking, is another reliable and equitable method to reduce VMT and emissions. By investing in reliable transit and safe walking and cycling facilities, the County can ensure that community members will have the option to shift their vehicle trips. Additionally, increasing frequency of transit service not only benefits those who depend on it out of necessity, but also improves the attractiveness of transit to those who are able to choose their mode of travel.

Climate change is also forecast to impact the reliability of the transportation system as periods of higher temperatures increase wear on road surfaces; stronger and more sustained rain events increase flooding on roads, bridges, and culverts; and long-term droughts dry out subsurface soils, leading to subsidence. Additionally, reduced capacity, detours, and crashes from flooding impact travel time, reliability, and safety. As articulated in the BMC's Capital Improvement Program study, viewing asset management and county design standards through a resiliency lens will be critical to ensuring the County's transportation system can continue to operate safely and effectively.

CIM-8 Policy Statement

Actively plan for and evaluate the impact of technology and climate change on the transportation system.

Implementing Actions

1. Evaluate and update parking and land development requirements to reflect greater use of mobility and delivery as service models.
2. Amend design standards and asset management approaches to ensure resilience.
3. Support the installation of electric ~~vehicle-vehicles~~ (EV), such as electric cars, electric bikes, and charging stations in private and public space, with particular attention to shared parking lots to ensure they are EV ready by including connections and infrastructure.
4. Evaluate and address the potential impact of electric vehicle charging stations on electric power requirements.
5. Participate in regional and state coordination efforts to ensure federal and state regulations on connected and autonomous vehicles account for vulnerable road users such as pedestrians and cyclists.

CIM-9 Policy Statement

Support efforts to improve air quality with an emphasis on communities and populations most threatened by high levels of pollution.

Implementing Actions

1. Develop land use and environmental policy strategies that reduce the impact of diesel particulate matter in communities adjacent to industrial areas.
2. Develop a plan to transition the County's fleet (including school buses and contracted services) to low/no emission vehicles.
3. Continue to invest in increasing public transit frequency and walking and cycling infrastructure to support both a more equitable transportation system and shifts away from automobiles to non-automobile modes.
4. Consider targeted financial incentives and the removal of regulatory barriers for property owners and companies that deploy electric vehicle charging infrastructure, idle reduction technology, and other technologies that capture or mitigate diesel emissions at the source.
5. Consider a subsidy program to support low emission vehicles, bicycles, and scooters in traditionally underserved communities.

Table 10-1: Implementation Matrix

Policy and Implementing Actions	Lead Agency	Timeframe (Mid-Term five-year, Long-Term six+ years, Ongoing)
CIM-1 - Maintain transportation system assets to ensure the viability of the system and safety of users.		
1. Develop and regularly update a risk-based asset inventory and management program for all transportation assets and ensure adequate maintenance funding.	OOT DPW	Mid-Term
2. Closely coordinate system maintenance activities with utilities and private development to minimize future roadway damage.	OOT Private Partners	Ongoing
3. Develop fiscally unconstrained plans for each asset class to communicate the deferred maintenance needs and a pipeline of unfunded projects for consideration.	DPW	Ongoing
4. Consider equity emphasis areas in the prioritization of maintenance needs.	OOT DPW	Ongoing
CIM-2 - Design and operate an equitable transportation system that prevents and mitigates the most severe types of crashes for motorists, transit riders, bicyclists, and pedestrians.		
1. Prioritize and fund measures outlined in the Strategic Road Safety Plan using a safe system approach to focus education, enforcement, and engineering efforts and investments.	OOT DPW Elected Officials OOB	Mid-Term
2. Advance the Complete Streets Policy by updating the Subdivision and Land Development Regulations to provide accommodations and improve safety, particularly for pedestrians and bicyclists who are the most vulnerable roadway users.	OOT DPZ DPW	Ongoing
3. Execute the priorities of WalkHoward and BikeHoward through dedicated funding in the capital budget and efficient project delivery.	OOT Elected Officials OOB	Ongoing
4. Ensure that all transportation capital projects include review of potential safety improvements during the project scoping process.	OOT DPW	Ongoing

Table 10-1: Implementation Matrix

Policy and Implementing Actions	Lead Agency	Timeframe (Mid-Term five-year, Long-Term six+ years, Ongoing)
CIM-3 - Make the transportation system equitable, close mobility gaps, and improve access to jobs, health care, education, and social services.		
1. Continue to monitor system performance, gather input from current riders, and allocate existing resources to maximize ridership and enhance service for current public transit riders.	OOT	Ongoing
2. Ensure investments in the Regional Transportation Agency system balance improving service frequencies and adding new routes to unserved areas with transit-supportive land use.	OOT	Ongoing
3. Continue to support community-based mobility programs and non-governmental organizations that serve seniors and people with disabilities.	DCRS OOT	Ongoing
4. Explore flexible transit routing, mobility as a service, and other micro-mobility concepts to provide efficient and economic transit service in lower-density areas of the County.	OOT	Mid-Term
CIM-4 - Leverage Howard County's position in the Baltimore and Washington regions to advance transportation projects and policies with regional and local impacts, including focusing efforts on governance, accountability, funding policies, and strategies to address unmet transportation service needs.		
1. Continue to engage in regional discussions regarding state and federal investment in regional transit systems to ensure funding and support for Howard County projects, meet the County's goals to enhance and improve access to regional job centers, and maintain the County's position as an attractive location to live and work.	OOT DPW Elected Officials OOB	Ongoing
2. Continue to support the collaborative efforts to improve the Regional Transportation Agency of Central Maryland.	OOT	Ongoing
3. Continue to partner with Montgomery County and the Maryland Department of Transportation to extend the Flash Bus Rapid Transit Service to Howard County.	OOT	Mid-Term
4. Support and partner with Maryland Department of Transportation and other regional organizations to expand service and improve reliability on the Camden Commuter Rail Line <u>and improve transit connections from Howard County to existing Penn Commuter Rail Lines.</u>	OOT	Mid-Term
5. Continue to engage and participate in regional and state planning and coordination activities to ensure the needs of freight and goods movements are considered and supported.	OOT	Ongoing
6. <u>Continue to engage with neighboring, regional, and state partners to support and advance regional high-quality connections articulated in local and regional functional plans.</u>	OOT DPW DRP	<u>Ongoing</u>

Table 10-1: Implementation Matrix		
Policy and Implementing Actions	Lead Agency	Timeframe (Mid-Term five-year, Long-Term six+ years, Ongoing)
CIM-5 - Deliver transportation system improvements that support efforts to reduce reliance on automobile trips, improve air quality, and give people cost-effective and sustainable choices on how they get to work, home, school, and play.		
1. Construct and enhance transportation facilities to increase connections across Howard County and support the goals of WalkHoward, BikeHoward, and the Complete Streets Policy, with a focus on the equity goals outlined in the Complete Streets Policy.	OOT DPW	Ongoing
2. Continue to plan and implement projects that enhance transportation connections to regional job centers and high-quality transit.	DPZ OOT	Ongoing
3. Sustain and expand efforts to develop and implement Transportation Demand Management programs (such as car share, bikeshare, and shared e-scooter systems; telecommute policies; and vanpools) and expand Park and Ride lots, where appropriate.	OOT DPW	Ongoing
4. Continue to plan and coordinate investments with the Howard County Public School System to increase safe routes to schools, enhance access to the local transit system, reduce demand for school bus service, and decrease driving to school.	OOT DPW HCPSS	Ongoing
5. Partner with the Maryland Department of Transportation to align commuter bus routes and funding priorities with current and expected travel patterns and complementary regional public transit initiatives.	OOT	Ongoing
6. Continue to work with federal, state, and regional partners on preliminary studies for high-quality connections.	OOT	Ongoing
7. <u>Implement Development Regulations that require site plans that allow access to buildings by transit, bicycle, walking, and micro-mobility services.</u>	DPZ OOT	Mid-Term
8. <u>Work with state and regional agencies to develop reliable and sustainable methods to measure bike and pedestrian activity.</u>	OOT	Mid-Term

Table 10-1: Implementation Matrix		
Policy and Implementing Actions	Lead Agency	Timeframe (Mid-Term five-year, Long-Term six+ years, Ongoing)
CIM-6 - Focus on improvements to the transportation system that improve travel reliability.		
1. Evaluate the use of Transportation Systems Management and Operations concepts to manage the County's road system.	OOT DPW	Mid-Term
2. Develop real-time traffic monitoring and coordinate transportation and emergency resources to address non-recurring congestion due to weather and crashes on the local and regional transportation system.	OOT OEM DPW	Mid-Term
3. Focus on operations at key intersections while ensuring improved safety for bicycle and pedestrian movements.	DPW OOT	Mid-Term
4. Optimize signal timing and phasing at key intersections in coordination with efforts to improve pedestrian and bicycle movements and safety, and coordinate signals in major commute corridors during peak time periods.	DPW OOT	Mid-Term
5. Increase street connections in key locations that provide more route choices to system users.	OOT DPW	Mid-Term
6. Develop access management approaches through updates to the Zoning Regulations and the Subdivision and Land Development Regulations, design approvals, and coordination with the Maryland Department of Transportation State Highway Administration.	DPZ OOT	Long-Term
CIM-7 - Refine processes and policies to deliver transportation improvements strategically, efficiently, and equitably.		
1. Review existing rules, policies, processes, and procurement procedures to identify opportunities to accelerate the planning, design, permitting, or construction of new and equitable transportation projects, including the recommendations from the Capital Improvement Program study.	OOT DPW	Mid-Term
2. Identify opportunities to minimize the time needed to acquire right-of-way for planning road, sidewalk, or bicycle projects while respecting the rights of private property owners. Alternatively, reevaluate the scope of projects earlier in the planning process if it is determined that there is strong opposition to land acquisition.	OOT DPW Private Property Owners	Ongoing
3. Implement contracting methods that shorten construction activities for a project, including, but not limited to, design-build provisions for small projects like sidewalks or intersection improvements, contracts that share risk with contractors and support flexible project phasing for larger projects, and incentives for early project completion.	DPW OOT OOP	Long-Term

Table 10-1: Implementation Matrix		
Policy and Implementing Actions	Lead Agency	Timeframe (Mid-Term five-year, Long-Term six+ years, Ongoing)
CIM-8 - Actively plan for and evaluate the impact of technology and climate change on the transportation system.		
1. Evaluate and update parking and land development requirements to reflect greater use of mobility and delivery as service models.	DPZ OOT	Mid-Term
2. Amend design standards and asset management approaches to ensure resilience.	DPW OOT DPZ	Mid-Term
3. Support the installation of electric vehicle-vehicles (EV), such as <u>electric cars, electric bikes, and</u> charging stations in private and public space, with particular attention to shared parking lots to ensure they are EV ready by including connections and infrastructure.	DPW OCS OOT Private Partners	Ongoing
4. Evaluate and address the potential impact of electric vehicle charging stations on electric power requirements.	DPW OOT OCS	Long-Term
5. Participate in regional and state coordination efforts to ensure federal and state regulations on connected and autonomous vehicles account for vulnerable road users such as pedestrians and cyclists.	OOT	Ongoing
CIM-9 - Support efforts to improve air quality with an emphasis on communities and populations most threatened by high levels of pollution.		
1. Develop land use and environmental policy strategies that reduce the impact of diesel particulate matter in communities adjacent to industrial areas.	OCS OOT	Long-Term
2. Develop a plan to transition the County's fleet (including school buses and contracted services) to low/no emission vehicles.	OOT OCS	Mid-Term
3. Continue to invest in increasing public transit frequency and walking and cycling infrastructure to support both a more equitable transportation system and shifts away from automobiles to non-automobile modes.	OOT	Ongoing
4. Consider targeted financial incentives to property owners and companies that deploy electric vehicle charging infrastructure, idle reduction technology, and other technologies that capture or mitigate diesel emissions at the source.	OOT OCS Private Property Owners	Mid-Term
5. Consider a subsidy program to support low emission vehicles, bicycles, and scooters in traditionally underserved communities.	OOT	Long-Term

Table 10-1: Implementation Matrix		
Policy and Implementing Actions	Lead Agency	Timeframe (Mid-Term five-year, Long-Term six+ years, Ongoing)
CIM-10 - Advance transportation planning and transportation investments to support an economically and environmentally sustainable transportation system that moves people safely and efficiently throughout the County and supports the land use and equity goals in HoCo By Design, including its emphasis on mixed-use activity centers.		
1. Develop a countywide transportation plan and conduct a focused transportation study for each activity center in the Route 1 Corridor.	OOT DPW	Mid-Term
2. Continue to use the Functional Road Classification Map to guide the design, capacity, and function of roads as they are built or improved.	DPW OOT DPZ	Ongoing
3. Implement HoCo By Design's recommendations for transit service through future transit service functional plans or master plans.	OOT DPZ	Long-Term
4. Continue to implement recommendations from WalkHoward and BikeHoward as methods to advance the broad concepts and recommendations in the General Plan.	OOT	Ongoing
5. Ensure the Design Manual is consistent with the General Plan as part of the regular update process for the Design Manual.	OOT	Long-Term
EP-1 - Retain and expand the use of industrial land to support employment opportunities that pay a living wage.		
1. As part of the Zoning Regulations update, consider protective measures to ensure an adequate long-term supply of industrial land, such as additional requirements or impact statements for rezoning industrial land, zoning that discourages incompatible uses in heavy industrial areas, heavy buffer requirements for non-industrial users locating near heavy industrial land, or industrial overlay zoning for prime industrial land.	DPZ	Mid-Term
2. Determine how compatible uses can co-locate in designated Industrial Mixed-Use character areas to support industrial operations and create an active sense of place.	DPZ	Long-Term
3. Prioritize for retention industrial land that is uniquely accessible to regional highways for continued industrial use.	DPZ	Mid-Term
4. During the Zoning Regulations update or via Zoning Amendments, favorably consider context-sensitive industrial uses along the Interstate 70 corridor.	DPZ	Mid-Term
EP-2 - Ensure redevelopment is consistent with the character of industrial areas.		
1. Update the Route 1 Design Manual to include Industrial Mixed-Use character areas and incorporate buffers between redevelopment areas and industrial areas.	DPZ	Long-Term

Amendment 34 to Council Bill No. 28 -2023

BY: The Chairperson at the Request
of the County Executive

Legislative Day 11
Date: 10/02/2023

Amendment No. 34

(This Amendment provides a history of the noise associated with Baltimore Washington International (BWI) Airport, the Airport-Noise Zone (ANZ), the Federal Aviation Administration's NextGen satellite guidance system, and the BWI Roundtable.

The Amendment also adds a policy statement (CIM Policy Action 10) and related Implementing Action that the County shall explore the opportunities to reduce the impacts of noise and air pollution generated by air travel and shall ensure that future residential development considers these evolving conditions.)

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

- 3 • Chapter 4, County in Motion – insert new pages 32A and 32B and amend page 34
4 • Chapter 11, Implementation – page 28 (noting that EP-1 and EP-2 had been on page 28
5 and have been moved to page 29 to accommodate new CIM-Policy Action 10)

6
7 Correct all page numbers, numbering, and formatting within this Act to accommodate this
8 amendment.

I certify this is a true copy of

Am 34 CB28-2023

~~passed~~ on 10/11/2023

Michelle A. David
Council Administrator

Not
moved

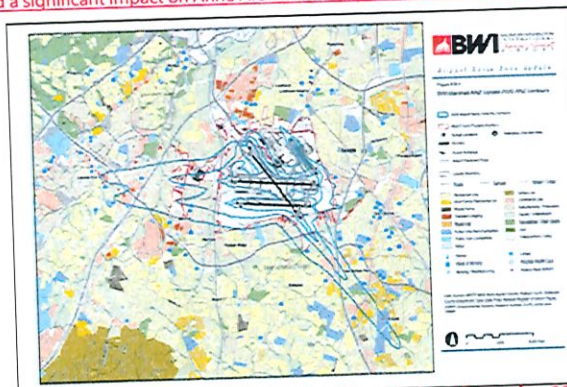
Baltimore/Washington International Airport Flight Paths

Noise associated with Baltimore/Washington International (BWI) Airport air traffic was recognized as far back as the 1982 General Plan, which described an objective "to ensure that general aviation activity does not produce excessive noise in residential areas." Three years after the adoption of PlanHoward 2030, the Federal Aviation Administration (FAA) implemented NextGen, resulting in more noise impacts to residents in Howard County than ever before.

To date, the only official recognition of airport noise impact zones by the Maryland Department of Transportation (MDOT) Maryland Aviation Administration (MAA) is the Airport Noise Zone (ANZ). According to the MAA website, the ANZ was created "to control the incompatible land development around BWI Marshall Airport and develop a Noise Abatement Plan (NAP) to minimize the impact of aircraft noise on people living near the Airport."

This ANZ zone is an "overlay" on local land use regulations establishing limits in addition to those in local zoning and subdivision controls. The Noise Abatement Plan establishes controls and restrictions on airport/aircraft operations that will minimize the impact of noise on communities surrounding the BWI Airport. Within the Airport Noise Zone, most industrial, commercial, and recreational activities are permitted, but residential development and many community facilities (such as churches, libraries, schools, and hospitals) are not, except for pre-existing uses. Should a developer wish to develop such uses, he/she must petition the Board of Airport Zoning Appeals (BAZA) showing that his/her proposal meets specific noise reduction standards. Similarly, the height of temporary and permanent new structures within a four-mile radius of BWI is also regulated by MAA. Potential non-height related "obstructions," such as lighting, are also subject to MAA regulations.

The first ANZ and NAP for BWI were adopted in 1976 and were most recently updated in 2020. In the 2020 update, the MDOT MAA expanded the ANZ by approximately 23% due to various operational details, including changes in flight paths and the aircraft fleet mix. Additionally, in 2015, BWI adopted the FAA's NextGen satellite guidance system that contributed to many of these operational changes. As seen on the map below, the ANZ changes have had a significant impact on Anne Arundel County and abut the Howard County border.



Source: MDOT MAA Airport Noise Zone Update, December 2020

While the expansion of the ANZ has had very limited, if any, overlap with Howard County, BWI's operational changes and aircraft noise have, nonetheless, had an impact on Howard County residents and communities.

To mitigate the noise from BWI's NextGen system, the BWI Roundtable was formed in 2017. It includes representatives from Howard and Anne Arundel Counties appointed by state and local government representatives. The Roundtable called for changes to the operational procedures and flight patterns to lessen the airplane noise disturbances. These changes are anticipated to go into effect in the Spring/Summer of 2024.

Another concern expressed by residents pertains to the air pollution that may be caused by airplane particulate matter. Airplane exhaust, like car exhaust, contains a variety of pollutants, such as sulfur dioxide and nitrogen oxides. The County should work with state and federal partners to evaluate if the particulate matter has an impact on the air quality of Howard County communities within the flight paths.

As BWI operations, flight patterns, and the understanding of the impacts of aircraft noise and particulate matter have and will continue to evolve, the County should continue to monitor these impacts on Howard County communities, especially as it pertains to future residential building location and design. This is particularly important given recent studies on the impact of airport noise conducted at the request of the Maryland General Assembly, and FAA's consideration of changes to noise measurement policies to more accurately reflect the true impact of noise on residents near airports.

While proximity to BWI serves as an economic generator for the movement of goods and provides many benefits to County residents and businesses who desire convenient access to commercial air travel, the County should continue to advocate and participate in discussions with the Federal Aviation Administration around mitigation of impacts associated with BWI flight paths. Development within Howard County that falls within the ANZ or other state or federally defined flight zones should utilize best practices in building standards for attenuating noise.

CIM-10 Policy Statement

Explore opportunities to reduce the impacts of noise and air pollution generated by air travel and ensure that future residential development considers these evolving conditions.

Implementing Actions

1. Continue participating on the BWI Roundtable to track the proposed technical changes requested by the BWI Roundtable and agreed to by the Federal Aviation Administration (FAA).
2. Continue to encourage the MAA and FAA through County participation in the BWI Roundtable to identify and develop additional and necessary changes to NextGen that reduce airplane noise disturbances.
3. Continue to advocate for State and Federal Policies to help communities monitor the airplane particulate matter in communities within state or federally defined zones associated with BWI flight paths (existing height and noise).
4. Research national trends and explore and implement requirements for innovative building designs that reduce airplane noise in areas highly impacted by BWI operations.
5. Partner with the State of Maryland to implement policies and programs that will reduce and/or minimize impacts on the most highly impacted residents and continue to participate in all future updates to the ANZ and NAP updates.

TRANSPORTATION INVESTMENT PRIORITIES

Howard County's transportation needs and preferences have changed significantly over the last three decades. Travel demands and commuting patterns have settled along major corridors that are now generally built to their ultimate size and configuration.

While automobile travel will continue to dominate travel patterns for the near future, there is growing and demonstrated community interest in improving the safety and efficiency of the transit, bicycle, and pedestrian networks. Many community members continue to express their desires to replace their work, shopping, or other automobile trips with more economic and environmentally-conscious choices. These preferences are starting to be reflected in the County's shift to building a transportation system focused on travel time reliability, safety, and travel choices for all members of the community. Since the adoption of PlanHoward 2030, substantial investments have been made in transit, bicycle, and pedestrian facilities. Eleven percent of capital transportation spending is focused on these three non-automobile categories while operational and capital investments for the transit system are also increasing dramatically. The future mixed-use activity centers envisioned in HoCo By Design complement this shift to greater walking, bicycling, and transit use. Refer to the Quality By Design chapter and Focus Areas appendix for details on how design can facilitate increased use of non-automobile modes.

To continue to support this shift in direction, the County should use the Significant Transportation Investments to Support Growth & Redevelopment Map and Table (Map 4-2 and Table 4-1) to guide county investments in, and support of, transportation projects and activities. The selection of projects is not intended to be exclusive since many county projects are focused on specific operational issues and might not be shown on the map. Further, projects are not listed in priority order (they have not been prioritized). The projects shown were selected based on travel trends and forecasts, PlanHoward 2030 transportation projects, and more recent functional planning projects—including the Regional Transit Plan for Central Maryland, Walk Howard, the Strategic Road Safety Plan, and the Complete Streets Policy.

The map and table will not only guide county priorities but also support the County's partnerships and advocacy for large regional transportation projects and initiatives. These regional efforts could be funded and implemented by the Maryland Department of Transportation in the Consolidated Transportation Program or advanced in the Baltimore Metropolitan Council's Long-Range Transportation Plan, which is critical to ensuring projects are eligible for federal funding.

Howard County's transportation investment priorities should also be informed by the reality of county transportation funding. County spending for transportation is divided between operating costs, such as transit services and routine maintenance costs, and capital costs, such as engineering intersections, resurfacing roads, rehabilitating bridges, installing traffic signals, maintaining bicycle and pedestrian facilities, and replacing transit vehicles. Both operating and capital funding in the County are limited and can change significantly from year to year, which makes it difficult to sustain a steady pipeline of projects to plan, engineer, and construct over time. As a result, many projects identified for implementation in the CIP have been delayed due to funding constraints, and some older projects may not advance the policies and goals in HoCo By Design. The County should reevaluate the purpose and need of these delayed projects to ensure they are consistent with HoCo By Design.

Map 4-3 shows the current road system in Howard County by functional class. These functional classifications, coupled with design guidance in the Howard County Design Manual, are used to determine the right-of-way and road improvements required for both private development projects and county capital projects. The map divides roads into five functional classifications, primarily organized based on vehicle throughput. New roads, as they are built and accepted into the county road system, are assigned a functional classification based on their design. These five classifications are matched to multi-modal street types in the Howard County Design Manual, which details the process to design a road based on its full context to meet the goals of the Complete Streets Policy (see pages 39-40 below).

To further identify transportation investment priorities, the County should develop a countywide transportation plan that:

- Results from a comprehensive process that engages the County's diverse population, including users of all transportation modes.
- Builds upon the Significant Transportation Investments to Support Growth & Redevelopment Map (Map 4-2), functional plans, and corridor master plans.
- Incorporates complete streets typologies.
- Reevaluates the purpose and need of the existing transportation system and proposed transportation projects to ensure consistency with county goals and funding.
- Aligns with the equity in capital planning approach described in HoCo By Design's Supporting Infrastructure chapter, and the emission reduction goals in the County's Climate Action Plan.

CIM-10 11 Policy Statement

Advance transportation planning and transportation investments to support an economically and environmentally sustainable transportation system that moves people safely and efficiently throughout the County and supports the land use and equity goals in HoCo By Design, including its emphasis on mixed-use activity centers.

Implementing Actions

1. Develop a countywide transportation plan and conduct a focused transportation study for each activity center in the Route 1 Corridor.
2. Continue to use the Functional Road Classification Map to guide the design, capacity, and function of roads as they are built or improved.
3. Implement HoCo By Design's recommendations for transit service through future transit service functional plans or master plans.
4. Continue to implement recommendations from WalkHoward and BikeHoward as methods to advance the broad concepts and recommendations in the General Plan.
5. Ensure the Design Manual is consistent with the General Plan as part of the regular update process for the Design Manual.

Table 10-1: Implementation Matrix		
Policy and Implementing Actions	Lead Agency	Timeframe (Mid-Term five-year, Long-Term six+ years, Ongoing)
CIM-8 - Actively plan for and evaluate the impact of technology and climate change on the transportation system.		
1. Evaluate and update parking and land development requirements to reflect greater use of mobility and delivery as service models.	DPZ OOT	Mid-Term
2. Amend design standards and asset management approaches to ensure resilience.	DPW OOT DPZ	Mid-Term
3. Support the installation of electric vehicle (EV) charging stations in private and public space, with particular attention to shared parking lots to ensure they are EV ready by including connections and infrastructure.	DPW OCS OOT Private Partners	Ongoing
4. Evaluate and address the potential impact of electric vehicle charging stations on electric power requirements.	DPW OOT OCS	Long-Term
5. Participate in regional and state coordination efforts to ensure federal and state regulations on connected and autonomous vehicles account for vulnerable road users such as pedestrians and cyclists.	OOT	Ongoing
CIM-9 - Support efforts to improve air quality with an emphasis on communities and populations most threatened by high levels of pollution.		
1. Develop land use and environmental policy strategies that reduce the impact of diesel particulate matter in communities adjacent to industrial areas.	OCS OOT	Long-Term
2. Develop a plan to transition the County's fleet (including school buses and contracted services) to low/no emission vehicles.	OOT OCS	Mid-Term
3. Continue to invest in increasing public transit frequency and walking and cycling infrastructure to support both a more equitable transportation system and shifts away from automobiles to non-automobile modes.	OOT	Ongoing
4. Consider targeted financial incentives to property owners and companies that deploy electric vehicle charging infrastructure, idle reduction technology, and other technologies that capture or mitigate diesel emissions at the source.	OOT OCS Private Property Owners	Mid-Term
5. Consider a subsidy program to support low emission vehicles, bicycles, and scooters in traditionally underserved communities.	OOT	Long-Term

Table 10-1: Implementation Matrix		
Policy and Implementing Actions	Lead Agency	Timeframe (Mid-Term five-year, Long-Term six+ years, Ongoing)
CIM-10 - Explore opportunities to reduce the impacts of noise and air pollution generated by air travel and ensure that future residential development considers these evolving conditions.		
1. Continue participating on the BWI Roundtable to track the proposed technical changes requested by the BWI Roundtable and agreed to by the Federal Aviation Administration (FAA).	OOT Elected Officials	Ongoing
2. Continue to encourage the MAA and FAA through County participation in the BWI Roundtable to identify and develop additional and necessary changes to NextGen that reduce airplane noise disturbances.	OOT Elected Officials	Ongoing
3. Continue to advocate for State and Federal Policies to help communities monitor the airplane particulate matter in communities within state or federally defined zones associated with BWI flight paths (existing height and noise).	OOT Elected Officials	Mid-Term
4. Research national trends and explore and implement requirements for innovative building designs that reduce airplane noise in areas highly impacted by BWI operations.	DPZ OOT DILP	Mid-Term
5. Partner with the State of Maryland to implement policies and programs that will reduce and/or minimize impacts on the most highly impacted residents and continue to participate in all future updates to the ANZ and NAP updates.	DPZ OOT	Mid-Term
CIM-10 11- Advance transportation planning and transportation investments to support an economically and environmentally sustainable transportation system that moves people safely and efficiently throughout the County and supports the land use and equity goals in HoCo By Design, including its emphasis on mixed-use activity centers.		
1. Develop a countywide transportation plan and conduct a focused transportation study for each activity center in the Route 1 Corridor.	OOT DPW	Mid-Term
2. Continue to use the Functional Road Classification Map to guide the design, capacity, and function of roads as they are built or improved.	DPW OOT DPZ	Ongoing
3. Implement HoCo By Design's recommendations for transit service through future transit service functional plans or master plans.	OOT DPZ	Long-Term
4. Continue to implement recommendations from WalkHoward and BikeHoward as methods to advance the broad concepts and recommendations in the General Plan.	OOT	Ongoing
5. Ensure the Design Manual is consistent with the General Plan as part of the regular update process for the Design Manual.	OOT	Long-Term

Table 10-1: Implementation Matrix		
Policy and Implementing Actions	Lead Agency	Timeframe (Mid-Term five-year, Long-Term six+ years, Ongoing)
EP-1 - Retain and expand the use of industrial land to support employment opportunities that pay a living wage.		
1. As part of the Zoning Regulations update, consider protective measures to ensure an adequate long-term supply of industrial land, such as additional requirements or impact statements for rezoning industrial land, zoning that discourages incompatible uses in heavy industrial areas, heavy buffer requirements for non-industrial users locating near heavy industrial land, or industrial overlay zoning for prime industrial land.	DPZ	Mid-Term
2. Determine how compatible uses can co-locate in designated Industrial Mixed-Use character areas to support industrial operations and create an active sense of place.	DPZ	Long-Term
3. Prioritize for retention industrial land that is uniquely accessible to regional highways for continued industrial use.	DPZ	Mid-Term
4. During the Zoning Regulations update or via Zoning Amendments, favorably consider context-sensitive industrial uses along the Interstate 70 corridor.	DPZ	Mid-Term
EP-2 - Ensure redevelopment is consistent with the character of industrial areas.		
1. Update the Route 1 Design Manual to include Industrial Mixed-Use character areas and incorporate buffers between redevelopment areas and industrial areas.	DPZ	Long-Term
EP-3 - Support and diversify the local job market to maximize opportunities to grow regional employment.		
1. Develop tools and strategies to support long-term job diversity initiatives, emerging industries, and job opportunities accessible to a variety of skill and educational levels.	HCEDA	Mid-Term
2. Promote green industries by creating incentives to attract new businesses demonstrating sustainable practices or developing sustainable technologies, materials, and products.	HCEDA	Mid-Term
3. Support new investment and job creation in emerging markets, especially those that reveal new opportunities for renewable energy and green technologies, including but not limited to solar arrays and canopies.	HCEDA	Long-Term

Table 10-1: Implementation Matrix		
Policy and Implementing Actions	Lead Agency	Timeframe (Mid-Term five-year, Long-Term six+ years, Ongoing)
EP-4 - Create job opportunities through new mixed-use activity centers that serve as destinations and include a mix of uses that compliment and support one another and improve the jobs-housing balance.		
1. Revise the Zoning Regulations, Subdivision and Land Development Regulations, and other land use regulations and guidelines to ensure that mixed-use activity centers incorporate an array of housing types (possibly including goals for a specific percentage mix of housing types), walkable neighborhoods, open space, and compatible transitions between neighboring uses.	DPZ	Mid-Term
2. Allow sufficient densities in activity centers through the Zoning Regulations to make a wide range of uses economically viable. Encourage densities sufficient to support convenience retail and other local-serving amenities at the neighborhood level.	DPZ	Mid-Term
3. Plan for future transportation connections, including bicycle, pedestrian, and transit, among and between activity centers and other commercial centers.	DPZ OOT	Ongoing
4. Ensure that growth management tools consider the need for housing growth that keeps pace with employment growth in addition to infrastructure demands.	DPZ	Ongoing
5. Develop a master plan for Gateway that describes the area's desired future mix of uses, open space network, development phasing and intensity, building height range, and infrastructure approach. Build upon the general considerations included in the HoCo By Design Focus Areas technical appendix.	DPZ	Mid-Term
6. Create opportunities to house the County's essential workers, including teachers, healthcare workers, and public safety personnel.	DHCD DPZ Non-profit sector Private Partners	Ongoing

Amendment 35 to Council Bill No. 28 -2023

BY: The Chairperson at the Request
of the County Executive

Legislative Day 11
Date: 10/02/2023

Amendment No. 35

(This Amendment makes a technical correction to Tables 5-2 and 5-3 to include Howard County Government and Howard County Public School System employees, to indicate that Freshly has closed as of early 2023 and to list the source citation for Table 5-3.)

- 1 In the *HoCo By Design* General Plan, attached to this Act as Exhibit A, amend the following
2 pages as indicated in this Amendment:
- 3 • Chapter 5, Economic Prosperity – page 12
- 4
5 Correct all page numbers, numbering, and formatting within this Act to accommodate this
6 amendment.

I certify this is a true copy of
Am 35 CB28-2023
passed on 10/11/2023
Michelle Harris
Council Administrator

Current Jobs and Unemployment

According to the Maryland Department of Labor, there were over 174,000 jobs in Howard County in 2020. As indicated in Table 5-1, Howard County had the 6th greatest number of jobs in Central Maryland and the 2nd greatest 10-year job growth rate at 23.5%, just behind the 24.5% growth rate experienced in Anne Arundel County. Montgomery County had the greatest number of jobs in Central Maryland, followed by Baltimore City and the other large counties surrounding Howard County.

Table 5-1: Jobs in Central Maryland

	2010		2020		2010 to 2020	
	Jobs	Percent	Jobs	Percent	Jobs	% Increase
Montgomery County	433,226	22%	469,462	21%	36,236	8.4%
Baltimore City	320,403	16%	389,738	17%	69,335	21.6%
Baltimore County	355,189	18%	374,165	17%	18,976	5.3%
Prince George's County	292,271	15%	318,755	14%	26,484	9.1%
Anne Arundel County	220,228	11%	274,102	12%	53,874	24.5%
Howard County	141,169	7%	174,390	8%	33,221	23.5%
Frederick County	89,106	4%	104,013	5%	14,907	16.7%
Harford County	78,828	4%	93,784	4%	14,956	19.0%
Carroll County	52,772	3%	57,571	3%	4,799	9.1%
TOTAL	1,983,192	100%	2,255,980	100%	272,788	13.8%

Source: Maryland Department of Labor (1st quarter)

Table 5-2 shows the major employers in Howard County, based on information provided by the Howard County Economic Development Authority (HCEDA). Howard County continues to be an attractive place for large businesses. However, as important as large companies may be, HCEDA's Strategic Plan suggests that fostering small to mid-size companies should be prioritized to achieve maximum future job growth. As new businesses expand, new job opportunities will arise, particularly in the professional and business services and technology sectors.

Given the highly-educated workforce in Howard County, the unemployment rate is typically among the lowest in Maryland. As of August 2021, the unemployment rate in Howard County was 4.3%, compared to 5.8% in Maryland and 5.2% in the US. It is anticipated that the unemployment rate will remain low in Howard County over the next 20 years as the County's job base and population continue to grow. Howard County's location in the middle of the Baltimore and Washington regions will continue to be an asset, attracting new businesses and offering opportunities for residents to find work that matches their education and skills.

Market Demand Conditions

In addition to projecting the need for 30,000 new housing units, the Market Research and Demand Forecast projected the need for 16.5 million square feet of commercial space and 1,000 hotel rooms. The commercial space needs are broken down by industry in Table 5-3 and housing units are broken down by type.¹

Table 5-2: Howard County's Largest Private Employers (2022 2021)

Employer	Estimated Employees	Product/Service
Howard County Public School System	8,561	Education
Johns Hopkins Applied Physics Laboratory	7,200	R&D systems engineering
Howard County Government	3,200	Government
Howard County General Hospital	1,800	Medical services
Verizon	1,700	Telecommunications
Howard Community College	1,400	Higher education
The Columbia Association	1,200	Nonprofit civic organization
Lorien Health Systems	1,190	Nursing care
Coastal Sunbelt Produce	1,050	Food products distribution
Nestle Dreyer's Ice Cream	835	Frozen desserts
Freshly*	820	Prepared meals manufacturing
Wells Fargo	810	Financial services
Maxim Healthcare Services	675	HQ/Medical staffing, wellness
Oracle	650	Software development
W.R. Grace & Co.	600	HQ/Chemical R&D
Sysco Food Services	515	Food products distribution
Enterprise Community Partners	505	HQ/Community development

Note: Excludes post offices and state and local governments

Source: HCEDA Research *In early 2023, Freshly closed its warehouse located in Howard County.

Table 5-3: Summary of Demand 2020-2040

	Cumulative Demand By 5-Year Increment			
	2025	2030	2035	2040
Single-Family Detached (units)	3,428	5,808	7,996	9,807
Single-Family Attached (units)	2,743	4,685	6,502	8,033
Rental Apartment (units) For-	3,626	6,320	8,947	11,249
Sale Condominium (units)	437	859	1,361	1,884
Office (sf)	1,828,711	3,289,007	4,741,323	6,315,129
Flex (sf)	317,406	564,815	792,410	1,030,921
Industrial (sf)	2,358,227	4,164,086	5,570,199	7,150,158
Retail (sf)	642,400	1,125,800	1,603,300	2,037,600
Hotel (keys)	246	509	752	1,019

Source: RCLCO's Market Research and Demand Forecast (2020)

¹ As previously noted, RCLCO's Market Research and Demand Forecast projected a 59,000 increase in jobs by 2040. To arrive at this figure, RCLCO first examined Baltimore Metropolitan Council (BMC) projections for the region, then used Moody's Analytics projections to distribute regional growth by industry (adjusting for COVID-19 impacts), and finally determined the County's future share of regional industry growth using historical trends. RCLCO then projected household growth based on this projected employment growth, arriving at a projected need for 31,000 new housing units in the County. In addition to projecting the need for 31,000 new housing units, the Market Research and Demand Forecast projected the need for 16.5 million square feet of commercial space and 1,000 hotel rooms. RCLCO projected demand for office, flex, and industrial space by estimating the type of space and square footage needed to accommodate each new employee by industry; projections for hotel rooms were based on the current ratio between jobs in the County and hotel rooms. RCLCO projected demand for retail space based on estimated spending from new households and employees (adjusting for online spending).

Amendment 36 to Council Bill No. 28 -2023

BY: The Chairperson at the Request
of the County Executive

Legislative Day 11
Date: 10/02/2023

Amendment No. 36

*(This Amendment corrects references to the Market Overview & Background Research study
which was prepared by RCLCO.)*

- 1 In the *HoCo By Design* General Plan, attached to this Act as Exhibit A, amend the following
2 pages as indicated in this Amendment:
- 3 • Chapter 6, Dynamic Neighborhoods – page 13
- 4
- 5 Correct all page numbers, numbering, and formatting within this Act to accommodate this
6 amendment.

I certify this is a true copy of

Am 36 CB28-2023

passed on

10/11/2023

Michelle Davron
Council Administrator

Data and Findings from the Housing Opportunities Master Plan

The Housing Opportunities Master Plan (HOMP) involved extensive research of the local housing market and existing policy landscape, and makes the case for expanding home choices and affordability in the County. The “Market Overview & Background Research” [a Technical Appendix prepared by RCLCO for from the HOMP](#), should be used as a resource document to HoCo By Design as it provides an overview the County’s housing inventory, affordability, and demand. However, some of the key findings relevant to the policies and actions presented in HoCo By Design can be found below:

- In 2019, just one-quarter (25.6%) of for-sale housing units in Howard County were affordable to households making less than 120% of Area Median Income (AMI), with most of this housing stock being much older.
- There is not enough housing supply for renters who make less than 60% of AMI (or less than \$73,000 annually).
- Most new housing being built by the market is affordable to households making more than 80% of AMI (rental) and more than 120% of AMI (for-sale).
- Just 9% of housing in Howard County is affordable to households making less than 60% of AMI, and virtually no for-sale homes that have been built in the last two decades are affordable to this group.
- The Rural West lacks housing options for low- and moderate-income households. Based on prices of homes sold between 2015–2018, to include new construction and resales, just 1% of its homes are affordable to households making less than 60% of AMI, largely due to the lack of modestly priced for-sale housing.
- Cost burdens are disproportionately felt by diverse populations, both for rental and for-sale housing.
- While single-family detached homes under 3,000 square feet represent nearly half (48%) of the overall for-sale inventory, they account for just 17% of new product today. In April 2020, the average size of a for-sale, newly constructed, single-family detached home was 4,025 square feet and 2,471 square feet for a townhome, generally larger than neighboring jurisdictions.
- The average share of income spent on housing is especially high (32.2%) for 65 years and older renter households, one-quarter of which pay 50% or more of their incomes.
- The amount of new housing that has been built in Howard County has decreased in recent years. As a result, housing supply has not kept up with housing demand, which has contributed to rising home prices.
- Households that own their own homes and make more than 120% of AMI account for a majority (51%) of all households in Howard County, compared to just 37% in surrounding counties (which include: Anne Arundel, Baltimore, Carroll, Montgomery, and Prince George’s).
- Compared to surrounding counties, Howard County is home to a lower percentage of homeowners who make less than 120% of AMI, as well as most types of renters. The types and price points of housing that exist in the County today are at least partially attributable to these differences.

Overall, the housing affordability challenges are most severe for low- and moderate-income households. These households, concentrated in certain areas of the County, have lower homeownership rates and less access to affordable units.

Map 6-2 on Pages 15-16 shows median household income, by census block group, throughout the County. The block groups with the lowest income households are found along Route 40, in Ellicott City, in parts of Columbia, and along the Route 1 Corridor.



Amendment 37 to Council Bill No. 28 -2023

BY: The Chairperson at the Request
of the County Executive

Legislative Day 11
Date: 10/02/2023

Amendment No. 37

(This Amendment makes a technical correction to the percentage of rental housing reflected in the note following Graph 6-3.)

- 1 In the *HoCo By Design* General Plan, attached to this Act as Exhibit A, amend the following
- 2 pages as indicated in this Amendment:
- 3 • Chapter 6, Dynamic Neighborhoods – page 19
- 4
- 5 Correct all page numbers, numbering, and formatting within this Act to accommodate this
- 6 amendment.

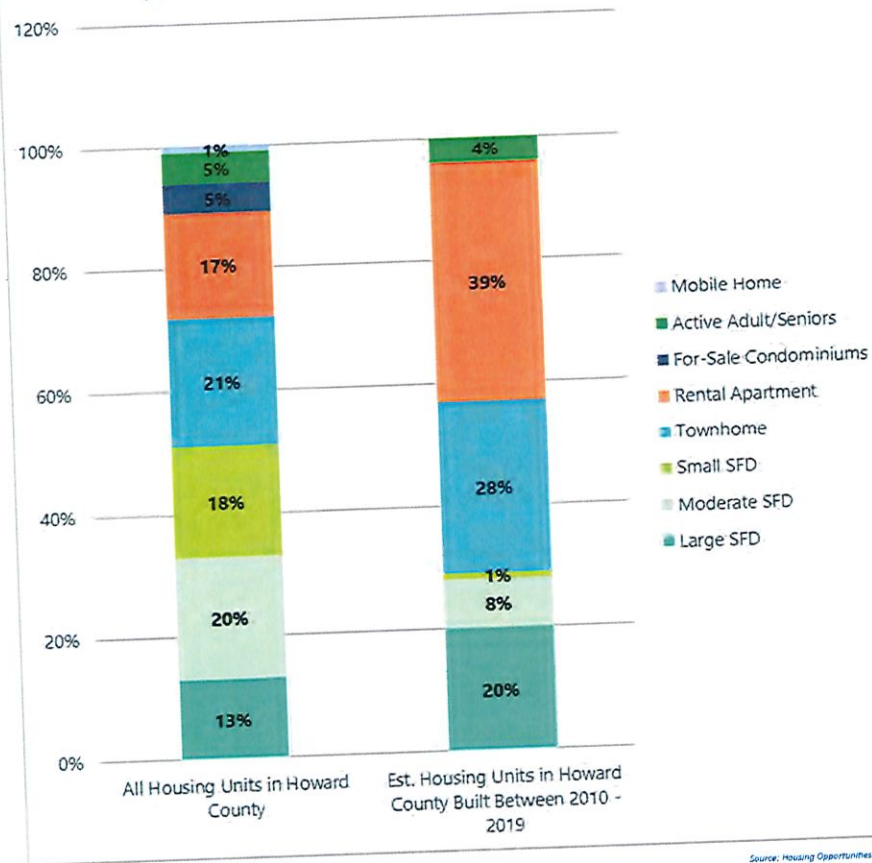
I certify this is a true copy of

Am 37 CB28-2023

passed on 10/11/2023

Michael H. Reed
Council Administrator

Graph 6-3: Distribution of Housing Inventory, 2019



Graph 6-3 shows that most housing units (87%) built between 2010 and 2019 were large single-family detached (20%), townhome/single-family attached (28%), and rental apartments (39%). According to the Housing Opportunities Master Plan (HOMP), a small single-family detached (SFD) home is less than 2,000 square feet, a moderate single-family detached home is between 2,000 and 3,000 square feet, and a large single-family detached home is over 3,000 square feet in size.



Amendment 38 to Council Bill No. 28 -2023

BY: The Chairperson at the Request
of the County Executive

Legislative Day 11
Date: 10/02/2023

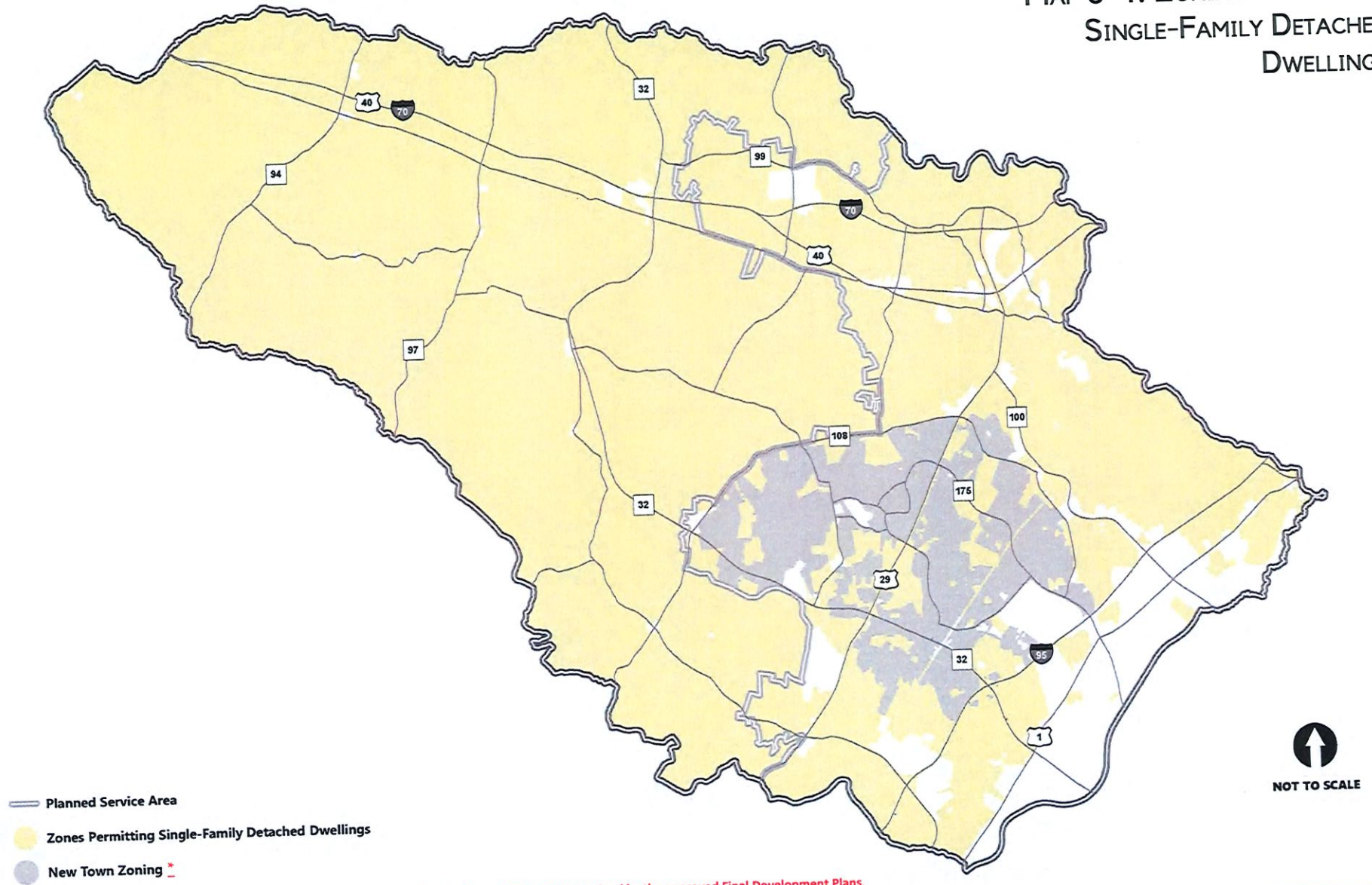
Amendment No. 38

(This Amendment adds a note to Maps 6-4, 6-5 and 6-6 that directs the reader to refer to Map 6-7 to see housing types permitted within New Town.)

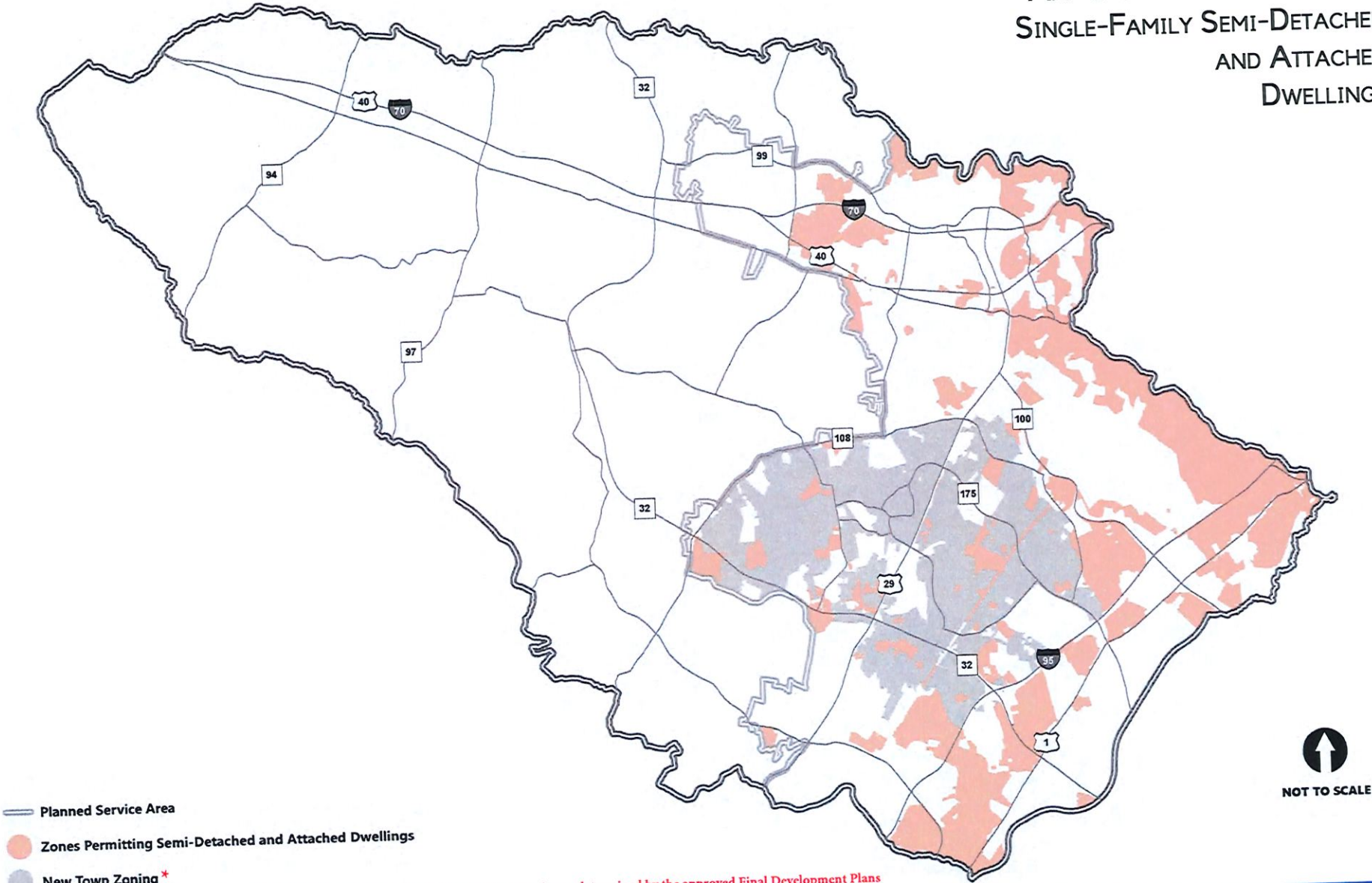
- 1 In the *HoCo By Design* General Plan, attached to this Act as Exhibit A, amend the following
- 2 pages as indicated in this Amendment:
 - 3 • Chapter 6, Dynamic Neighborhoods – pages 27, 28, 29, 30, 31 and 32
 - 4
 - 5 Correct all page numbers, numbering, and formatting within this Act to accommodate this
 - 6 amendment.

I certify this is a true copy of
Am 38 CB 28-2023
passed on 10/11/2023
[Signature]
Council Administrator

MAP 6-4: ZONING PERMITTING SINGLE-FAMILY DETACHED DWELLINGS



**MAP 6-5: ZONING PERMITTING
SINGLE-FAMILY SEMI-DETACHED
AND ATTACHED
DWELLINGS**



— Planned Service Area

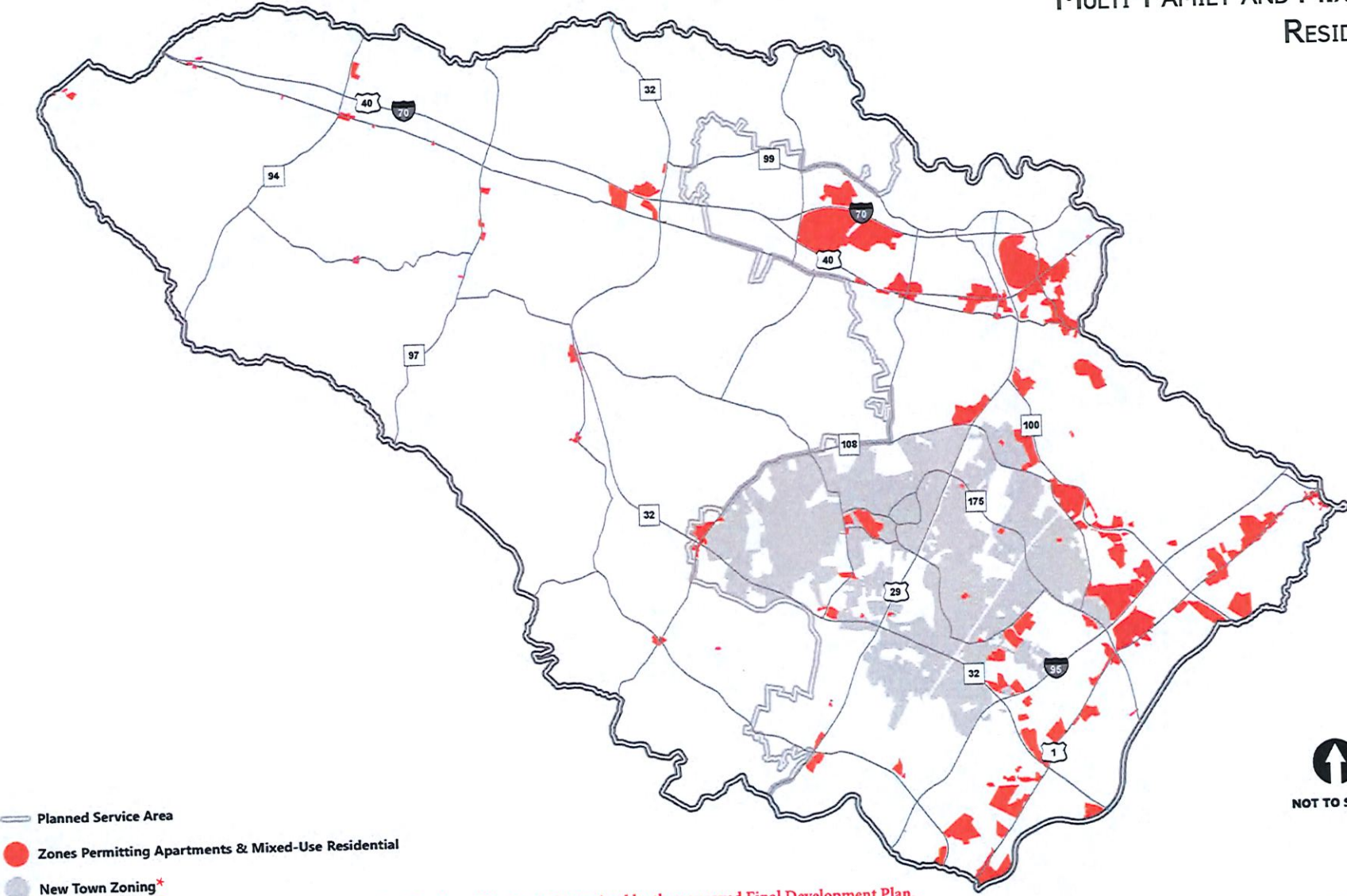
● Zones Permitting Semi-Detached and Attached Dwellings

● New Town Zoning*

* Please refer to Map 6-7 to see the housing types permitted within New Town Zoning as determined by the approved Final Development Plans



MAP 6-6: ZONING PERMITTING MULTI-FAMILY AND MIXED USE RESIDENTIAL



- Planned Service Area
- Zones Permitting Apartments & Mixed-Use Residential
- New Town Zoning*



NOT TO SCALE

* Please refer to Map 6-7 to see the housing types permitted within New Town Zoning as determined by the approved Final Development Plan.

Amendment 39 to Council Bill No. 28 -2023

BY: The Chairperson at the Request
of the County Executive

Legislative Day 11
Date: 10/02/2023

Amendment No. 39

(This Amendment adds a statement that accessory dwelling units are accessory to the primary residential use and should not be eligible for subdivision and further describes location-specific criteria for ADUs in an implementing action.)

- 1 In the *HoCo By Design* General Plan, attached to this Act as Exhibit A, amend the following
2 pages as indicated in this Amendment:
- 3 • Chapter 6, Dynamic Neighborhoods – pages 35 and 40
 - 4 • Chapter 11, Implementation – page 37
- 5
6 Correct all page numbers, numbering, and formatting within this Act to accommodate this
7 amendment.

I certify this is a true copy of

Am 39 CB 28-2023

passed on 10/11/2023

Michelle Dorr
Council Administrator

While the County's housing mix presented earlier in the chapter represents the percentage of specific housing types that exist in the County today, zoning districts determine where certain housing types are allowed by-right or as a conditional use. Zoning districts west of the Planned Service Area (PSA) are restricted in development density due to lack of access to public water and sewer, growth tiers limiting the number of units, and significant amounts of land permanently preserved for agricultural uses. Therefore, the amount of land permitting single-family detached homes is much higher than the amount of land permitting other types of housing in the County.

Since missing middle housing types often include two or more units, there are a limited number of locations where they can be built under the Zoning Regulations, as they are either not defined in the regulations or not permitted. New zoning should also consider bulk requirements (a set of controls that determine the size and placement of a building on a lot) that are realistic for these housing types and do not preclude their potential on existing lots. Regulatory barriers, limited precedent, and uncertain returns on investments are noted obstacles to creating this housing type in today's market. While demand exists for smaller, more affordable housing stock, many missing middle types are not a common housing product within the building industry and the ability to finance them remains to be proven in the market. Therefore, jurisdictions may need to facilitate and incentivize demonstration projects to encourage these new housing types or offer a range of multi-unit or clustered housing models or designs that are compatible with single-family homes. This could provide greater predictability for both the community and the developers of these housing types.

Accessory Dwelling Units

The American Planning Association defines an accessory dwelling unit (ADU) as "a smaller, independent residential dwelling unit located on the same lot as a stand-alone (i.e., detached) single-family home." ADUs are self-contained residences that include their own kitchen, bathroom, and sleeping area. ADUs can go by many other names, such as granny flats, tenant homes, accessory apartments, in-law suites, and more. They can also come in a variety of shapes and forms, including basement, attic, garage, attached, and detached. The ADU drawings and descriptions on page 37 help to distinguish between these different types. By their inherent nature, accessory dwelling units are accessory to the primary residential use and should not be eligible for subdivision.



Not only do ADUs increase the supply of diverse, lower cost housing options, they provide opportunities for homeowners to supplement their income. This could help many older adults to age in place. Today, Howard County Zoning Regulations allow some forms of ADUs—accessory apartments and temporary accessory family dwellings—but there are various restrictions on where they are permitted. Between 2015 and 2020, only 99 attached accessory apartments and one temporary accessory family dwelling were permitted in the County.

Throughout the HoCo By Design planning process, some residents have expressed concerns about the impact that ADUs would have on parking, the environment, and neighborhood character. However, regulatory tools can be adopted to minimize these potential impacts.

According to the AARP, data from Portland, Oregon suggests that the average ADU in Portland has 0.93 cars, and about half of Portland's ADU-generated cars are parked on the street. Portland's experience suggests that ADUs have a minimal impact on street parking; however, parking requirements should be flexible and location- and site-dependent so that units are neither over- nor under-parked.

To ensure that ADUs have minimal impact on the environment and neighborhood character, zoning regulations could provide height and size caps, design controls, minimum lot size or environmental condition restrictions, and limits on the number of bedrooms. These types of standards could provide neighbors with greater predictability of the size and look of this housing type. Additional information on the environmental impact can be found in the "Infill Development in Existing Residential Neighborhoods" section.

ADUs IN HOWARD COUNTY

ATTACHED ACCESSORY APARTMENTS

Accessory apartments are permitted as an accessory use in most residential zoning districts if located within a single-family detached dwelling, such as a renovated basement, attic, or garage. In addition to meeting various site and building criteria, they must be located in an owner-occupied dwelling, and the owner must occupy either the accessory or the principal dwelling.

DETACHED ACCESSORY APARTMENTS

Detached accessory apartments are not permitted under the Zoning Regulations, except as a temporary accessory family dwelling. These dwellings are permitted conditionally (as opposed to by-right) and allow for a second dwelling unit on a lot if it is used for an elderly or disabled family member of the resident of the primary residence. There are various site and building criteria that must be met, such as being located on a lot that is two acres or larger, and allowed through a conditional-use process in certain zoning districts. These dwellings must be removed once no longer in use by a family member.

DN-1 Policy Statement



Increase opportunities for missing middle housing through the creation and use of zoning tools and incentives.

Implementing Actions

1. Evaluate conditions where duplex and multiplex homes can be compatible with existing neighborhoods and permitted by-right in a greater number of residential and mixed-use zoning districts.
2. Identify and eliminate barriers in the Zoning Regulations and Subdivision and Land Development Regulations to housing stock diversification. Ensure that bulk regulations are realistic for these housing types and do not preclude their potential on existing lots.
3. Expand the types of housing allowed in the Zoning Regulations and Subdivision and Land Development Regulations to include missing middle housing types, such as stacked townhomes, cottage clusters, and multiplexes, and consider appropriate parking requirements for these housing types.
4. Evaluate and establish one or more of the following zoning tools and incentives as potential opportunities to create missing middle housing:
 - a. Zoning overlays or floating zones that could be applied to activity centers, transportation corridors, or other areas that are appropriate for this housing type.
 - b. Smaller lot sizes (lot width and lot area).
 - c. Density-based tools such as transfer of development rights or density bonuses.
 - d. Tax incentives for developers and/or land owners.
 - e. Flexible development standards such as maximum building size or lot coverage.
5. Establish regulations that disperse missing middle homes throughout the County so that neighborhoods contain a proportionate mix of different housing types and can balance other infrastructure needs.
6. Explore opportunities to work with public and private partners to build missing middle housing demonstration projects or provide models and designs for these housing types.

DN-2 Policy Statement



Allow attached and detached accessory dwelling units (ADUs) on a variety of single-family attached and single-family detached lots that meet specific site development criteria in residential zoning districts.

Implementing Actions

1. Establish a clear, predictable process and location-specific criteria for ADUs including but not limited to consideration of lot coverage, lot size, setbacks, and other bulk regulations, stormwater management, and parking.
2. Revise the Zoning Regulations and Subdivision and Land Development Regulations to allow attached and detached ADUs that meet pre-determined location and site criteria. Provide parking requirements as needed.
3. Establish a clear definition of ADUs in the updated Zoning Regulations.
4. Direct the Adequate Public Facilities Ordinance (APFO) task force to develop recommendations as to the applicability of APFO to accessory dwelling unit creation or construction.

Table 10-1: Implementation Matrix		
Policy and Implementing Actions	Lead Agency	Timeframe (Mid-Term five-year, Long-Term six+ years, Ongoing)
DN-2 - Allow attached and detached accessory dwelling units (ADUs) on a variety of single-family attached and single-family detached lots that meet specific site development criteria in residential zoning districts.		
1. Establish a clear, predictable process and location-specific criteria for ADUs <u>including but not limited to consideration of lot coverage, lot size, setbacks, and other bulk regulations, stormwater management, and parking.</u>	DPZ	Mid-Term
2. Revise the Zoning Regulations and Subdivision and Land Development Regulations to allow attached and detached ADUs that meet pre-determined location and site criteria. Provide parking requirements as needed.	DPZ DHCD	Mid-Term
3. Establish a clear definition of ADUs in the updated Zoning Regulations.	DPZ	Mid-Term
4. Direct the Adequate Public Facilities Ordinance (APFO) task force to develop recommendations as to the applicability of APFO to accessory dwelling unit creation or construction.	DPZ DHCD	Mid-Term
DN-3 - Future activity centers—as identified on the Future Land Use Map (FLUM)—should include a unique mix of densities, uses, and building forms that provide diverse, accessible, and affordable housing options.		
1. Establish a new mixed-density and mixed-use zoning district that encourages diverse housing types and creates opportunities for mixed-income neighborhoods.	DPZ	Mid-Term
2. Allow a vertical (a range of uses within one building) and horizontal (a range of uses within one complex or development site) mix of uses, including housing, employment, and open space, that encourage walkability and transit connections.	DPZ OOT	Mid-Term
3. Incentivize the production of housing units affordable to low- and moderate-income households, beyond what is currently required by the Moderate Income Housing Unit (MIHU) program.	DHCD DPZ Non-profit Partners	Ongoing
4. Incentivize the production of housing units that meet the needs of different levels of ability (like persons with disabilities) and other special needs households. Ensure that these units are both accessible and affordable.	DPZ DHCD Non-profit Partners	Ongoing

Table 10-1: Implementation Matrix		
Policy and Implementing Actions	Lead Agency	Timeframe (Mid-Term five-year, Long-Term six+ years, Ongoing)
DN-4 - Allow the development of small-scale missing middle housing and accessory dwelling units (ADUs) that respect the character and integrity of their surroundings and meet specific site conditions in single-family neighborhoods.		
1. Establish design requirements, pattern book or character-based regulations for missing middle housing types and detached accessory dwelling units to ensure that new construction is consistent with the character of the surrounding existing housing.	DPZ	Long-term
2. Establish provisions in the regulations that include dimensional and design standards to ensure neighborhood compatibility, off-street parking requirements, minimum lot sizes, and other standards.	DPZ	Mid-Term
3. Explore zoning and other incentives for minor subdivisions that consist of missing middle housing types and explore form-based or character-based zoning for these types of residential infill developments.	DPZ	Mid-Term
4. Evaluate how accessory dwelling units and other types of new development could enhance or impact stormwater management practices.	DPZ DPW	Mid-Term

Amendment 40 to Council Bill No. 28 -2023

BY: The Chairperson at the Request
of the County Executive

Legislative Day 11
Date: 10/02/2023

Amendment No. 40

(This Amendment adds language about the use of public-private partnerships to facilitate mixed-use activity centers with a mix of for-sale and rental housing in redevelopment projects and adds an implementing action that such models shall be explored.)

- 1 In the *HoCo By Design* General Plan, attached to this Act as Exhibit A, amend the following
2 pages as indicated in this Amendment:
- 3 • Chapter 6, Dynamic Neighborhoods – page 44
 - 4 • Chapter 11, Implementation – page 37
- 5
- 6 Correct all page numbers, numbering, and formatting within this Act to accommodate this
7 amendment.

I certify this is a true copy of

Am 40 CB 28-2023

passed on

10/11/2023

Michelle Harsco
Council Administrator

infill development. By seeking opportunities to expand the County's inclusionary zoning policies and encouraging the development of diverse housing types where growth opportunities exist, mixed-income communities will become more prevalent, housing prices will be less constrained, and county tax rates can remain stable. New financially attainable housing opportunities for all, including low- and moderate-income households, will be less concentrated and more available in more communities throughout the County.

As noted in the previous section, the Zoning Regulations do not permit many missing middle housing types or detached ADUs, and proposed policies aim to allow them with appropriate criteria. This section focuses on where opportunities exist for all types of new housing in the County. The section also emphasizes how regulations may need to change within different geographies, or opportunity areas, to accommodate diverse housing types.

Diverse Housing Opportunities in New Activity Centers

Based on the limited amount of land still available for development, a significant amount of future housing will be concentrated in new mixed-use activity centers identified on the Future Land Use Map (FLUM). The new mixed-use activity centers are envisioned to be compact walkable areas with employment opportunities, commercial uses and open space, community services and amenities, and multi-modal transportation connections. Activity centers, refined from PlanHoward 2030's Growth and Revitalization place type, create a predictable and sustainable pattern of growth. This pattern supports existing neighborhoods with retail, services, and job growth; provides greater opportunity for attainable housing; and supports opportunities to reduce environmental impacts of activity centers through redevelopment, including improved stormwater management infrastructure. Medium to high housing densities will likely be necessary to supporting this vision.




It is anticipated that activity centers will appeal to a wide variety of residents and will support and maintain the County's socioeconomic diversity by offering a multitude of housing options and opportunities to increase the supply of income-restricted affordable housing. Retirees, empty nesters, persons with disabilities, families, and young professionals would likely be attracted to living in more active mixed-use environments. As activity centers are envisioned to be the areas with the greatest potential for growth and are planned to be located along transportation corridors, having an efficient, safe, and well-maintained multi-modal transportation system that connects these places is critical. See the County in Motion chapter for more details about the future of transportation.

Activity centers are envisioned to be varying sizes and scales, which will help inform their infrastructure needs. They will also provide beneficial amenities to adjacent existing neighborhoods. However, they should be sensitive to any unintended impacts they may cause, such as traffic and noise. The Supporting Infrastructure chapter discusses the adequate and timely provision of infrastructure. The Public Schools Facilities chapter discusses opportunities for new models for public schools that could be appropriate in certain locations. The Quality by Design chapter recommends that adverse impacts, such as noise, light, and air pollution, be mitigated and new developments should be contextually-appropriate. It also provides guidance on the public realm and walkability within and around these new mixed-use centers.

Depending on the size, scale and proposed mix of uses in a redevelopment project, there may be increased complexities and costs associated with planning, financing, design and construction of these projects. Furthermore, as HoCo by Design envisions Activity Centers to provide a range of housing types, including for sale and rental options, overcoming hurdles in financial lending markets and navigating regulatory requirements associated with certain types of condominium development may impede some mixed-use redevelopments from realizing the full potential of diverse housing forms. There may be opportunities for the public sector to partner with the private sector to overcome these barriers and realize the desired vision.

DN-3 Policy Statement

 Future activity centers—as identified on the Future Land Use Map (FLUM)—should include a unique mix of densities, uses, and building forms that provide diverse, accessible, and affordable housing options.

Implementing Actions

1. Establish a new mixed-density and mixed-use zoning district that encourages diverse housing types and creates opportunities for mixed-income neighborhoods.
2. Allow a vertical (a range of uses within one building) and horizontal (a range of uses within one complex or development site) mix of uses, including housing, employment, and open space, that encourage walkability and transit connections.
3. Incentivize the production of housing units affordable to low- and moderate-income households, beyond what is currently required by the Moderate Income Housing Unit (MIHU) program.
4. Incentivize the production of housing units that meet the needs of different levels of ability (like persons with disabilities) and other special needs households. Ensure that these units are both accessible and affordable.
5. Explore models of public-private partnerships that facilitate redevelopment of a mixed-use activity center with a mix of for-sale and rental housing.

Table 10-1: Implementation Matrix		
Policy and Implementing Actions	Lead Agency	Timeframe (Mid-Term five-year, Long-Term six+ years, Ongoing)
DN-2 - Allow attached and detached accessory dwelling units (ADUs) on a variety of single-family attached and single-family detached lots that meet specific site development criteria in residential zoning districts.		
1. Establish a clear, predictable process and location-specific criteria for ADUs.	DPZ	Mid-Term
2. Revise the Zoning Regulations and Subdivision and Land Development Regulations to allow attached and detached ADUs that meet pre-determined location and site criteria. Provide parking requirements as needed.	DPZ DHCD	Mid-Term
3. Establish a clear definition of ADUs in the updated Zoning Regulations.	DPZ	Mid-Term
4. Direct the Adequate Public Facilities Ordinance (APFO) task force to develop recommendations as to the applicability of APFO to accessory dwelling unit creation or construction.	DPZ DHCD	Mid-Term
DN-3 - Future activity centers—as identified on the Future Land Use Map (FLUM)—should include a unique mix of densities, uses, and building forms that provide diverse, accessible, and affordable housing options.		
1. Establish a new mixed-density and mixed-use zoning district that encourages diverse housing types and creates opportunities for mixed-income neighborhoods.	DPZ	Mid-Term
2. Allow a vertical (a range of uses within one building) and horizontal (a range of uses within one complex or development site) mix of uses, including housing, employment, and open space, that encourage walkability and transit connections.	DPZ OOT	Mid-Term
3. Incentivize the production of housing units affordable to low- and moderate-income households, beyond what is currently required by the Moderate Income Housing Unit (MIHU) program.	DHCD DPZ Non-profit Partners	Ongoing
4. Incentivize the production of housing units that meet the needs of different levels of ability (like persons with disabilities) and other special needs households. Ensure that these units are both accessible and affordable.	DPZ DHCD Non-profit Partners	Ongoing
5. <u>Explore models of public-private partnerships that facilitate redevelopment of a mixed-use activity center with a mix of for-sale and rental housing.</u>	EDA DPZ	Mid-Term

Table 10-1: Implementation Matrix		
Policy and Implementing Actions	Lead Agency	Timeframe (Mid-Term five-year, Long-Term six+ years, Ongoing)
DN-4 - Allow the development of small-scale missing middle housing and accessory dwelling units (ADUs) that respect the character and integrity of their surroundings and meet specific site conditions in single-family neighborhoods.		
1. Establish design requirements, pattern book or character-based regulations for missing middle housing types and detached accessory dwelling units to ensure that new construction is consistent with the character of the surrounding existing housing.	DPZ	Long-term
2. Establish provisions in the regulations that include dimensional and design standards to ensure neighborhood compatibility, off-street parking requirements, minimum lot sizes, and other standards.	DPZ	Mid-Term
3. Explore zoning and other incentives for minor subdivisions that consist of missing middle housing types and explore form-based or character-based zoning for these types of residential infill developments.	DPZ	Mid-Term
4. Evaluate how accessory dwelling units and other types of new development could enhance or impact stormwater management practices.	DPZ DPW	Mid-Term