BY: Deb Jung Liz Walsh

Legislative Day 11 Date: October 2, 2023

Amendment No. 102

(This Amendment makes the following changes to HoCo by Design Chapter 4 and Chapter 11:

Chapter 4: County in Motion	 Removes all quotes; Amends the fifth key organization topic relating to the future of the transportation system to include the Baltimore/Washington International Thurgood Marshall Airport (BWI); Amends the "Maintaining the Transportation System" section by adding language to the County's future challenges to include meeting climate policy goals by building a zero-emission fleet; Amends the CIM-1 Policy Statement by adding a new implementing action to encourage the proliferation of non- polluting vehicles by upgrading County fleets and requiring appropriate infrastructure; Amends the Safety and the Transportation System section by adding language that consideration should be given to improving walking routes to school; Amends the CIM-2 Policy Statement Implementing Action 2 to update the Subdivision and Land Development Regulations to favor land use and development that improves safety, particularly for pedestrians and bicyclists; Amends the CIM-3 Policy Statement Implementing Action 2 to ensure investments in the RTA system that accomplish increased service frequencies, improved reliability, and specified additional routes; Amends the CIM-3 Policy Statement Implementing Action 3 to provide, support and enhance specified community-based mobility programs; Amends the CIM-3 Policy Statement Implementing Action 3 to provide, support and enhance specified community-based mobility programs; Amends the CIM-5 Policy Statement Implementing Action 3 to consider subsidies for income-qualified residents to use existing rideshare programs; Amends the CIM-5 Policy Statement Implementing Action 3 to "review" rather than "sustain" and expand efforts to develop and implement Transportation Demand Management programs and adds language to improve the reporting process for outcomes

- Amends the CIM-5 Policy Statement Implementing Action 4 to reduce demand for hazard-based school bus service and to assess walking routes for safety and equity;
- Amends the CIM-5 Policy Statement Implementing Actions by adding Action 7 to require safe, non-automobile pathways that connect buildings within specified complexes as well as activity centers to support "park once" behavior and adding Action 8 to consider more funding for electric school buses;
- Amends the Climate Change and Air Quality subsection of the Future of the Transportation System to add commercial airplanes and business jets to the contributors of total carbon dioxide emissions and greenhouse gas emissions in the U.S., adds reducing direct emissions from airplanes, and adds creating more efficient transportation modes with fewer direct emissions;
- Adds a fifth paragraph to the Climate Change and Air Quality subsection relating to requirements of the Design Manual for a noise analysis under specified circumstances and requirements for specified noise mitigation;
- Amends the CIM-8 Implementing Action 3 to require the installation of electric vehicle charging stations in private and public space;
- Amends the CIM-9 Implementing Action 2 to develop a plan and transition the County's fleet to low/no emission vehicles;
- Amends the CIM-10 Policy Statement to add advance land use patterns and site development that support an economically and environmentally sustainable transportation system; and
- Amends the CIM-10 Implementing Actions to add Action 6 to advance the Complete Streets Policy by updating specified regulations to favor land use patterns and individual site development that supports an economically and environmentally sustainable transportation system.
- Chapter 11: Amends the CIM-1 Policy Statement by adding a new Implementation - implementing action to encourage the proliferation of nonpolluting vehicles by upgrading County fleets and requiring appropriate infrastructure;
 - Amends the CIM-2 Policy Statement Implementing Action 2 to update the Subdivision and Land Development Regulations to favor land use and development that improves safety, particularly for pedestrians and bicyclists;
 - Amends the CIM-3 Policy Statement Implementing Action 2 to ensure investments in the RTA system that accomplish increased service frequencies, improved reliability, and specified additional routes;

- Amends the CIM-3 Policy Statement Implementing Action 3 to provide, support and enhance specified community-based mobility programs;
- Amends the CIM-3 Policy Statement Implementing Action 4 to consider subsidies for income-qualified residents to use existing rideshare programs;
- Amends the CIM-5 Policy Statement Implementing Action 3 to "review" rather than "sustain" and expand efforts to develop and implement Transportation Demand Management programs and adds language to improve the reporting process for outcomes and goals;
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- Amends the CIM-10 Implementing Actions to add Action 6 to advance the Complete Streets Policy by updating specified regulations to favor land use patterns and individual site development that supports an economically and environmentally sustainable transportation system.)

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

- Chapter 4, County in Motion: 3, 9, 10, 11, 12, 13, 18, 25, 26, 27, 30, 31, 32, and 34.
- Chapter 11: Implementation: 23, 24, 25, 27, and 28.
- 5
- 6 Correct all page numbers, numbering, and formatting within this Act to accommodate this
- 7 amendment.

County in Motion: Fostering Modern Mobility ChoiCes

This chapter highlights policies, initiatives, and actions to manage and provide a safe, equitable, and fiscally sustainable transportation system for all users that is responsive to changing local, regional, and national transportation trends. The chapter builds upon a comprehensive Transportation Assessment completed for HoCo By Design and HoCo By Design's public engagement process. The assessment described travel trends, travel forecasts, and county transportation investments since the last General Plan, PlanHoward 2030. These investments included efforts to reduce congestion, improve connectivity, and reduce environmental impacts, among other achievements. Several recent efforts also influenced the chapter, such as the Bicycle Master Plan (BikeHoward), the Pedestrian Master Plan (WalkHoward), and the Complete Streets Policy, which together guide the County's commitment to safety, accessibility, and equitable transportation choices.

This chapter is organized around six key topics: 1) maintaining the transportation system, which addresses the importance of investing in the ongoing maintenance and upkeep of the system; 2) safety and the transportation system, which details the actions the County is taking to ensure the transportation system is safe for all users; 3) transportation mobility and access, which addresses the wide range of topics, factors, and actions the County considers in managing the transportation system; 4) delivering transportation projects, which outlines he challenges in delivering transportation projects and options to accelerate projects; 5) future of the transportation system, including Baltimore/Washington International Thurgood Marshall Airport, which outlines the pending and expected changes facing the transportation system in the County and region; and 6) transportation investment priorities, which details a range of transportation investments to support the goals in HoCo By Design.

Finally, the chapter should be read with the understanding that there are many current and future challenges to which the County will need to react, such as connected and autonomous vehicles, and post Covid-19 travel patterns. The impacts of these and other challenges are uncertain, so the chapter recommends a flexible and nimble policy approach.

CIM-3 Chapter 4: County In Motion

HoCo By Design 2023 Council Draft



Maintaining the transportation SysteM

Howard County's transportation system is comprised of facilities and operations that provide transportation services and maintain the existing transportation infrastructure. The system reflects public and private investments that are critical to Howard County community members and businesses. Maintaining this investment requires continuous assessment of—as well as repairs and upgrades to—bridges, roadway pavement, bike lanes, sidewalks, signals, and transit buses, to name just a few key items. Each new facility installed or new vehicle purchased adds to the inventory of assets that require regular maintenance to ensure their safety, accessibility, and operability.

The small sample below shows the scale of the County's investment in the transportation system:

- More than 1,065 miles of sidewalks
- 72 transit buses and support vehicles used to provide transit service
- 8 Regional Transportation Agency (RTA) bus transit lines running service 15 hours a day
- Over 65 miles of bike lanes and pathways
- 1,200 miles of roads, of which 30-40 miles are repaved every year
- Over 100 traffic signals
- 363 bridges
- More than 75 county-owned trucks and heavy equipment used to clear snow, mow roadsides, sweep roads, and repair sidewalks, ramps, roads, and signals

Deferring maintenance and repairs of the transportation system can lead to larger and more frequent repairs, or replacement costs in the future as facilities age or fail. For the public transit system, buses and support vehicles that have exceeded their useful lives become more expensive to maintain and break down more often, which often results in delays and canceled service. In 2021, of the 72 vehicles in the Howard County public transit fleet, 40 vehicles have exceeded their useful life. For the county's road system, despite an anticipated reduction in the number of road miles rated in good condition over the next few years, the County has been able to ensure roads, bridges, and other transportation assets are well-maintained.

Historically, the County has been able to align and adjust transportation budgets to meet most transportation maintenance and replacement needs by annual funding infusions, either from the County or Maryland Department of Transportation. However, these funding infusions can vary widely based on national, state, and local economic conditions. In Fiscal Years 2022 and 2023, the County received an unprecedented level of state and federal funding to replace vehicles, allowing the County to place 28 new vehicles into service, about 39% of the total fleet. However, replacing this many vehicles at one time also means they will exceed their useful lives at the same time. Maintaining a reliable transportation system requires a regular and defined investment program.

The County's challenge over the next two decades will be to prioritize a limited budget for system maintenance to meet a variety of needs across the community, <u>meet climate goals by building a zero-emission fleet</u>, respond to changing maintenance obligations from new engineering and environmental practices, and also communicate how these needs are prioritized. This will require regular evaluation of the maintenance needs of the transportation system and matching these needs to available funding.



To ensure the long-term viability of the transportation system, policies and actions should advance national best practices. In 2021, Howard County participated in the Capital Improvement Program Development and Promoting Healthy Communities Study (CIP Study) with the Baltimore Metropolitan Council. The study's recommendations were developed by comparing the state of the practice across the Baltimore region's jurisdictions with the best practices found nationwide. The recommendations include specific actions that can be taken, barriers to implementation, and metrics to determine success. For example, the study recommends incorporating an equity lens in the capital planning process. Howard County has begun to adopt this approach for transportation with the inclusion of an Equity Emphasis Area index in the Complete Streets Policy (detailed in the next section of this chapter). The CIP Study's recommendations have been used to guide this chapter's implementing actions. The Supporting Infrastructure chapter also references the CIP Study; please refer to the "Equity in Capital Planning" section of the Supporting Infrastructure chapter for details.

CIM-1 Policy Statement

Maintain transportation system assets to ensure the viability of the system and safety of users.

Implementing Actions

- 1. Develop and regularly update a risk-based asset inventory and management program for all transportation assets and ensure adequate maintenance funding.
- 2. Closely coordinate system maintenance activities with utilities and private development to minimize future roadway damage.
- 3. Develop fiscally unconstrained plans for each asset class to communicate the deferred maintenance needs and a pipeline of unfunded projects for consideration.
- Consider equity emphasis areas in the prioritization of maintenance needs. 4.
 - Encourage the proliferation of non-polluting vehicles by upgrading County fleets and requiring 5. appropriate infrastructure.

- HoCo By Design process participant

SaFety and the transportation SysteM

Howard County is recognized as one of the best places to live in the United States and is one of the safest jurisdictions in the state to drive, take the bus, walk, and bike. However, crashes continue to be one of the leading causes of death and injuries for pedestrians, cyclists, and motorists. Improving the county transportation system's safety is critical to ensuring Howard County remains an attractive and desirable location to live. Consideration should also be given to improving walking routes to school.

In 2020, Howard County completed its Strategic Road Safety Plan with the goal "to prevent all traffic crashrelated fatalities and serious injuries, and to reduce the number and severity of crashes" by articulating realistic, achievable, and data-driven goals and actions. Between 2014 and 2018—the five-year period of data that informed the Strategic Road Safety Plan—Howard County averaged more than 3,900 reported crashes per year for an average of 1,499 people injured per year. During this same time period, 95 community members and visitors died in crashes on roads in the County. As detailed in the plan, of the approximately 19,500 crashes during that time period, the most prevalent factor was distracted driving (involved in 8,800 crashes, or 45%). Another 3,100 crashes involved improper driving behaviors, such as speeding and aggressive driving, and 1,200 crashes involved impaired driving. Finally, 280 crashes involved cyclists or pedestrians. Notably, while two-thirds of all bicycle and pedestrian crashes occurred on local roadways, 85% of all bicycle and pedestrian fatalities occurred on state roadways, which typically have greater traffic volume and higher speeds.

In 2019, the County Council adopted a Complete Streets Policy to ensure that community members using any transportation mode can travel freely, safely, and comfortably throughout the County. The Complete Streets Policy uses an Equity Emphasis Area Index to track implementation, prioritize projects, and evaluate designs. The index uses methodology developed by the Baltimore Metropolitan Council (BMC), which assigns scores to census tracts in Howard County based on multiple factors, including the percent of households in poverty, transit dependent households, non-Hispanic minority individuals, low English-proficiency individuals, Hispanic or Latino individuals, individuals 75 years and older, and disabled individuals. Map 4-1 shows the Equity Emphasis Areas and index scores.

GG Pedestrian safety must be improved—I keep seeing pedestrians walking down the middle of Broken Land or Snowden because there's noreasonable public transit or walking paths for them to safely get where they're going. GG

Building on the Complete Streets Policy, the Howard County Design Manual Volumes III and IV (Design Manual) were updated in 2022 to incorporate best practices in street design to accommodate all modes of transportation. The next step in complete streets implementation is to update the Subdivision and Land Development Regulations to ensure that the development process supports the County's vision for complete streets. In early 2020, Howard County also adopted a new pedestrian master plan, WalkHoward, which identifies and prioritizes pedestrian infrastructure needs. A fundamental organizing principle of WalkHoward includes last-mile access, and the plan recommends a series of projects and connections to ensure walking is a safe, effective, and viable recreational and transportation choice. BikeHoward, further described under the "Mobility and Access" section of this chapter, envisions safe bicycling on roads and paths as a means of daily transportation and healthy recreation. BikeHoward calls for the creation of a safe and seamless network of bikeways that connect people to schools, shops, parks, and work, with facilities that serve all skill and comfort levels.

The Strategic Road Safety Plan recommended a safe system approach for the County that identifies the link between priority crash types and the roadway contexts in which they most frequently occur. The system then prioritizes countermeasures that provide a solution to those crash types at the identified location types. This approach is innovative because it can prioritize locations that have a high propensity for crashes to occur even if crashes have not occurred there in recent years. Overall, the system proactively targets road safety improvements in high-risk locations where the most frequent and severe crashes could occur. This effort should also coordinate with and support the Complete Streets Policy and the WalkHoward and BikeHoward capital programs.

Finally, HoCo By Design's Economic Prosperity chapter describes the transportation needs of the agricultural community and conditions that impact safety. Refer to the section "Sustaining our Agricultural Economy" within the Economic Prosperity chapter for details.

CIM-2 Policy Statement

Design and operate an equitable transportation system that prevents and mitigates the most severe types of crashes for motorists, transit riders, bicyclists, and pedestrians.

Implementing Actions

- 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.
- 2. Advance the Complete Streets Policy by updating the Subdivision and Land Development Regulations to provide accommodations and <u>improve</u> <u>favor land use and development that improves</u> safety, particularly for pedestrians and bicyclists who are the most vulnerable roadway users.
- 3. Execute the priorities of WalkHoward and BikeHoward through dedicated funding in the capital budget and efficient project delivery.
 - 4. Ensure that all transportation capital projects include review of potential safety improvements during the project scoping process.



Mobility and **a**CCess

Transportation systems are based on two transportation concepts: mobility and access. Mobility is generally defined as the ability to use the transportation system to move from place to place, such as on a highway or on a regional train system. Access is generally defined as how many places one can get to safely and easily. The planning and development of transportation systems balance these two concepts to reflect and advance community goals. Traditionally, Howard County's transportation system was more focused on mobility but is evolving to focus on ensuring and improving access for walkers, cyclists, drivers, and transit riders, a process that is guided by some of the highlighted topics below. Increased multi-modal access is important to serve the County's growing senior community, youth, people with disabilities, and carless community members.

Transportation Trends, Patterns, and Facts

Vehicle Miles Traveled

Annual daily vehicle miles traveled in Howard County is in flux as the County and the country emerge from the Covid-19 pandemic. On average, each resident drove approximately 500 more miles per year in 2018 compared to 2013, while the same measure shows that each resident drove approximately 1,300 fewer miles in 2021 compared to 2018. On a per-resident basis, the County's vehicle miles traveled was approximately 37% and 33% higher than the region for those two time periods. This increase is likely a function of longer commute distances between home and work, higher per-resident automobile ownership, and limited transit, bicycle, or pedestrian facilities that support viable non-automobile trips for local travel.

Congestion, Roads, and Highway Infrastructure

The Maryland State Highway Administration monitors road conditions in the region and reports conditions using a Travel Time Index. The Travel Time Index measures travel time during congested periods of the day and compares it to the same trip made during less congested periods. The regional transportation system in Howard County performs well, with just three exceptions: Route 32, Route 29, and Interstate 95. Projects and studies to address travel time reliability on these roads are underway or complete, and conditions continue to be monitored on other roads, including Route 103, Route 108, Route 144, Broken Land Parkway, and Little Patuxent Parkway. In addition to congestion and delay that occur during peak hours on both local and state roads, many users are impacted by non-recurring delay, which is delay caused by crashes, weather, and other events that cannot be forecasted. These non-recurring events can considerably impact travel time and how users plan their trips.

Howard County's authority for transportation planning and investment is limited based on jurisdictional responsibility associated with different roads in the community. In 2022, the County maintained over 1,000 miles of roads; however, these roads supported only 19% of the average daily vehicle miles traveled in the County. The remaining average daily vehicle miles traveled in the County were on state roads or federal interstates, which the County does not have the authority to maintain or expand to meet future year needs. These systems experience the greatest delay in aggregate, which is primarily attributed to regional traffic. However, many users of the transportation system also experience periodic congestion and delay on the local road system.



by multiple modes. Keeping children active an essential public health imperative.

n process participant

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.
- Ensure investments in the Regional Transportation Agency system balance improving service 2. frequencies and adding new routes to unserved areas with transit-supportive land use. Ensure investments in the Regional Transportation Agency system accomplish increased service frequencies, improved reliability, and additional routes to unserved areas by considering transit-supportive land uses.
- 3. Continue to Provide, support and enhance community-based mobility programs and nongovernmental organizations that serve for 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. Consider subsidies for income-gualified residents to use existing rideshare programs.

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.
- 🧶 З. 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.
 - 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.

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

- equity goals outlined in the Complete Streets Policy.
- centers and high-quality transit.
- outcomes and goals.
- and equity.
- initiatives.
- connections.
- complexes as well as activity centers to support "park once" behavior.
- 8. Consider more funding for electric school buses.

CIM-6 Policy Statement

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

Implementing Actions

- County's road system.
- system.
- movements.
- 4. Optimize signal timing and phasing at key intersections in coordination with efforts to improve 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 Department of Transportation State Highway Administration.

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2023 Council Draft

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

2. Continue to plan and implement projects that enhance transportation connections to regional job

3. Sustain <u>Review</u> 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. Improve the reporting process for

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 hazard-based school bus service, and decrease driving to school. Assess walking routes for safety

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

6. Continue to work with federal, state, and regional partners on preliminary studies for high-guality

7. <u>Require safe, non-automobile pathways that connect buildings within commercial and office</u>

1. Evaluate the use of Transportation Systems Management and Operations concepts to manage the

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

3. Focus on operations at key intersections while ensuring improved safety for bicycle and pedestrian

pedestrian and bicycle movements and safety, and coordinate signals in major commute corridors

Subdivision and Land Development Regulations, design approvals, and coordination with the Maryland

Walkability in commercial corridors is a big issue in HoCo, so I appreciate solutions to make pedestrian areas a priority. The entire Route 1 Corridor, Route 216, Route 40, and Route 108 come to mind as highly unwalkable and unsafe.

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GG - HoCo By Desian process participant

delivering **p**rojeCts

Howard County's Capital Improvement Program (CIP) details how the County is funding transportation projects, either as part of a single project or a program of projects. Funding, planning, designing, and constructing transportation projects is a challenging and lengthy process. Some of these challenges are engineering-based, while others are process and communication focused.

In 2021, Howard County participated in the CIP Development and Promoting Healthy Communities study with the Baltimore Metropolitan Council. This study identified common barriers to communicating how the CIP works, how challenges impact project delivery times and costs, and how the risks of these challenges are incorporated into the CIP process. The study developed a series of best practice recommendations related to the CIP and project delivery:

- Develop a clear internal process to define, identify, and screen capital projects.
- View asset management and State of Good Repair through a resiliency lens. State of Good Repair means a transportation asset is maintained to operate at its full level of performance. Consider the condition of each asset in the prioritization process and the impact that asset's failure could have on transportation services and finances. Maintain a detailed and up-to-date inventory of all assets that includes asset condition. Develop formal processes to monitor the state of assets on a continuous basis.
- Incorporate an equity lens throughout the capital planning process, from start to finish. Equity questions should be considered as needs are identified, measures are prioritized, and impacts are assessed.
- Use digital tools to help the public engage with traditionally lengthy budget documents that may not be easily accessible or understood. Jurisdictions have found ways to improve the flow of information related to capital planning and increase transparency by creating online interfaces that translate the budget.

HoCo By Design's Supporting Infrastructure chapter builds upon the CIP study's recommendations for capital planning.

In 2022, the County initiated a study to develop recommendations for priority sidewalk and safety projects in the Route 1 Corridor and their delivery. It found that a significant amount of local and state funding has been allocated to design and construct projects, but progress has been slow due to challenges with securing rightsof-way for the project, permitting, and contracting. Based on these findings, the County should consider the recommendations from the CIP study. To achieve benefits more quickly while respecting its Equal Business Opportunity Program goals, the County should also adopt programmatic approaches in which the process of design, right-of-way acquisition, permitting, and construction are based on performance-driven design-build contracts.

CIM-7 Policy Statement

Refine processes and policies to deliver transportation improvements strategically, efficiently, and equitably.

Implementing Actions

- projects, including the recommendations from the Capital Improvement Program study.
- land acquisition.
- incentives for early project completion.



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 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

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

Future oF the transportation SysteM

Technological and Economic Change

Rapidly evolving transportation technologies and changes to commuting and work patterns accelerated by Covid-19, will likely lead to shifting demands on the transportation system. As a result of this shift in demand, the County might modify its approach to planning its transportation system. In the short-term, it might focus more on integrating technology solutions to address the main effects of connected vehicle (CV) technology and automated vehicles (AV) on safety, mobility, and the environment. In the long-term, the County might focus more on the relationship between evolving transportation developments and shifting employment and housing patterns.

The first waves of change in the transportation industry have been focused on Mobility as a Service (MaaS), such as Lyft, Uber, and ever-evolving micro-mobility technologies deploying e-scooters and bike sharing. MaaS supports living and working in suburban downtowns, as it provides a convenient transportation alternative and can reduce transportation costs for users. The industry is still in its infancy, and the long-term viability of the current business models are not certain.

On the more immediate horizon, connected and automated electric vehicles (CAV) may be prevalent by the early 2030s, and the County should expect them to alter both demand on parking infrastructure and the road system. However, these impacts are very uncertain. Some forecasts claim CAVs will self-park more efficiently than humans can, leading to more efficient use of parking facilities. Changes in parking space needs could have several positive effects. New development in activity centers could share parking with existing projects. Infill and redevelopment could take place without the prerequisite of additional parking facilities, reducing costs. On the other hand, CAVs could also increase vehicle miles traveled (VMT) and cause more congestion as a result of multiple trips when a CAV drops its passenger in front of a destination, parks in a remote lot, and then later returns to pick up its passenger.

In the longer-term, if CAVs mature and are cycled into the vehicle fleet in significant ways, they may alter commuting patterns in the County. CAVs could offer more efficient commutes by reducing travel times, providing community members a greater choice of locations to live in, and shifting demand to areas in the County, or outside, that are further away from job centers or less connected to the highway system. However, like the potential impact on parking demand, the adoption of CAVs may increase VMT as a result of this shift.

The automotive industry is years away from fully leveraging CAV technology and impacts are not yet clear or understood. Further, most regulatory policy will be established at the state and federal levels. The County should monitor the progression of CAV technology and associated regulations, and respond to changes as they occur. The County's response to future changes may include updated road design standards, expanded electric vehicle charging policies, a robust fiber optic communications network, and revised parking requirements. The County may also need to ensure the safety of cyclists and pedestrians if it is not adequately addressed in state and federal regulatory changes.





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The increase in 'work from home' needs to be evaluated seriously inrelation to the transportation network. Feels like the demand for road and public transportation will be somewhat different over the next 20 years than the previous 20 years. We tend to make projections based upon the past usage and growth and that will probably misstate the need.



USDOT 2512606

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. Commercial airplanes and business jets contribute 10% to U.S. total carbon dioxide emissions and nearly 9% of greenhouse gas emissions in the U.S. 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 and airplanes; 2) shifting demand and creating 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.

The Design Manual requires a noise analysis if the proposed residences are located within a specified number of feet from a roadway or a rail line, or if the location is within an airport noise zone. The Design Manual also requires noise mitigation through the use of buffers, barriers or acoustical insulation, or through building orientation.

CIM-8 Policy Statement

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

Implementing Actions

- delivery as service models.
- 2. Amend design standards and asset management approaches to ensure resilience.
- 3. <u>Support Require</u> 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.
- requirements.
- 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 and 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 nonautomobile modes.
 - 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.

1. Evaluate and update parking and land development requirements to reflect greater use of mobility and

4. Evaluate and address the potential impact of electric vehicle charging stations on electric power

Participate in regional and state coordination efforts to ensure federal and state regulations on

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

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 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 throughout. 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:

- transportation modes.
- functional plans, and corridor master plans.
- Incorporates complete streets typologies.
- to ensure consistency with county goals and funding.
- chapter, and the emission reduction goals in the County's Climate Action Plan.

CIM-10_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. Similarly, advance land use patterns and individual site development that support an economically and environmentally sustainable transportation system.

Implementing Actions

- center in the Route 1 Corridor.
- 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.
- the broad concepts and recommendations in the General Plan.
- the Design Manual.
- to favor land use patterns and individual site development that supports an economically and environmentally sustainable transportation system.

Results from a comprehensive process that engages the County's diverse population, including users of all

Builds upon the Significant Transportation Investments to Support Growth & Redevelopment Map (Map 4-2),

Reevaluates the purpose and need of the existing transportation system and proposed transportation projects

Aligns with the equity in capital planning approach described in HoCo By Design's Supporting Infrastructure

1. Develop a countywide transportation plan and conduct a focused transportation study for each activity

2. Continue to use the Functional Road Classification Map to guide the design, capacity, and function of

4. Continue to implement recommendations from WalkHoward and BikeHoward as methods to advance

5. Ensure the Design Manual is consistent with the General Plan as part of the regular update process for

Advance the Complete Streets Policy by updating the Subdivision and Land Development Regulations

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 viabusers.	oility of the	0 0,
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
 Closely coordinate system maintenance activities with utilities and private development to minimize future roadway damage. 	OOT Private Partners	Ongoing
 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
5. <u>Encourage the proliferation of non-polluting vehicles by upgrading</u> <u>County fleets and requiring appropriate infrastructure.</u>	OOT DPW	Ongoing
CIM-2 - Design and operate an equitable transportation system t most severe types of crashes for motorists, transit riders, bicycl		
 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
 Advance the Complete Streets Policy by updating the Subdivision and Land Development Regulations to provide accommodations and <u>improve favor land use and development that improves</u> safety, particularly for pedestrians and bicyclists who are the most 	OOT DPZ DPW	Ongoing
 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 Action

CIM-3 - Make the transportation system equitation jobs, health care, education, and social service

- Continue to monitor system performance, gather current riders, and allocate existing resources to and enhance service for current public transit ride
- Ensure investments in the Regional Transportation balance improving service frequencies and addit unserved areas with transit-supportive land use the Regional Transportation Agency system accomp frequencies, improved reliability, and additional rout by considering transit-supportive land uses.
- Continue to <u>Provide</u>, support <u>and enhance</u> con mobility programs and non-governmental org serve for seniors and people with disabilities.
- Explore flexible transit routing, mobility as a serv micro-mobility concepts to provide efficient and service in lower-density areas of the County. <u>Co</u> for income-qualified residents to use existing rice programs.

CIM-4 - Leverage Howard County's position in transportation projects and policies with regio on governance, accountability, funding policies service needs.

- Continue to engage in regional discussions rega federal investment in regional transit systems to and support for Howard County projects, meet goals to enhance and improve access to regiona maintain the County's position as an attractive lo work.
- 2. Continue to support the collaborative efforts to Regional Transportation Agency of Central Mar
- Continue to partner with Montgomery County an Department of Transportation to extend the Flas Service to Howard County.
- Support and partner with Maryland Department and other regional organizations to expand serv reliability on the Camden Commuter Rail Line.
- 5. Continue to engage and participate in regional a and coordination activities to ensure the needs goods movements are considered and supported and supported and support.

ons	Lead Agency	Timeframe (Mid-Term five-year, Long-Term six+ years, Ongoing)
table, close mobility es.	/ gaps, an	d improve access to
er input from o maximize ridership iders.	ООТ	Ongoing
on Agency system ling new routes to- e. Ensure investments in plish increased service tes to unserved areas	ΟΟΤ	Ongoing
ommunity-based ganizations that	DCRS OOT	Ongoing
vice, and other d economic transit onsider subsidies ideshare	ООТ	Mid-Term
onal and local impa	cts, inclu	ton regions to advance ding focusing efforts unmet transportation
arding state and o ensure funding the County's al job centers, and location to live and	OOT DPW Elected Officials OOB	Ongoing
improve the ryland.	ООТ	Ongoing
and the Maryland Ish Bus Rapid Transit	ООТ	Mid-Term
t of Transportation vice and improve	ООТ	Mid-Term
and state planning of freight and red.	ООТ	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.			
 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		
 Continue to plan and implement projects that enhance transportation connections to regional job centers and high-quality transit. 	DPZ OOT	Ongoing		
3. <u>Sustain Review</u> 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. <u>Improve the reporting process for outcomes and goals.</u>	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 <u>hazard-based</u> school bus service, and decrease driving to school. <u>Assess walking routes for safety and equity.</u>	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.	ΟΟΤ	Ongoing		
 Continue to work with federal, state, and regional partners on preliminary studies for high-quality connections. 	ООТ	Ongoing		
7. Require safe, non-automobile pathways that connect buildings within commercial and office complexes as well as activity centers to support "park once" behavior.	OOT DPW	Ongoing		
8. <u>Consider more funding for electric school buses.</u>	HCPSS	Ongoing		

Table 10-1: Implementation Matrix

Policy and Implementing Action

CIM-6 - Focus on improvements to the transpo

- 1. Evaluate the use of Transportation Systems Mana Operations concepts to manage the County's ro
- Develop real-time traffic monitoring and coordin and emergency resources to address non-recurr to weather and crashes on the local and regiona system.
- 3. Focus on operations at key intersections while er safety for bicycle and pedestrian movements.
- Optimize signal timing and phasing at key inters coordination with efforts to improve pedestrian movements and safety, and coordinate signals in corridors during peak time periods.
- 5. Increase street connections in key locations that route choices to system users.
- Develop access management approaches throug Zoning Regulations and the Subdivision and Lar Regulations, design approvals, and coordination Department of Transportation State Highway Accession

CIM-7 - Refine processes and policies to delive efficiently, and equitably.

 Review existing rules, policies, processes, and procurement p opportunities to accelerate the planning, design, permitting, or equitable transportation projects, including the recommendation Improvement Program study.

2. Identify opportunities to minimize the time needed to acquire right-of-wapplanning road, sidewalk, or bicycle projects while respecting the rights of prive property owners. Alternatively, reevaluate the scope of projects earlier in the process if it is determined that there is strong opposition to land acquisition.

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.

ons	Lead Agency	Timefram e (Mid-Term five-year, Long-Term six+			
ortation system that improve travel reliability.					
nagement and road system.	ООТ	Mid-Term			
5	DPW				
inate transportation rring congestion due	ООТ	Mid-Term			
al transportation	OEM				
1	DPW				
ensuring improved	DPW	Mid-Term			
	OOT				
sections in n and bicycle in major commute	DPW OOT	Mid-Term			
t provide more	ООТ	Mid-Term			
	DPW				
igh updates to the and Development n with the Maryland Administration.	DPZ OOT	Long-Term			
er transportation in	nproveme	nts strategically,			
procedures to identify r construction of new and ons from the Capital	OOT DPW	Mid-Term			
ire right-of-way for e rights of private s earlier in the planning	OOT DPW Private Property Owners	Ongoing			

Owners

DPW

OOT

OOP

Long-term

		Timeframe
Policy and Implementing Actions	Lead Agency	(Mid-Term five-year, Long-Term six+ vears_Ongoing)
CIM-8 - Actively plan for and evaluate the impact of technolog ransportation system.	y and climate	change on the
. Evaluate and update parking and land development	DPZ	Mid-Term
requirements to reflect greater use of mobility and delivery as service models.	ООТ	
2. Amend design standards and asset management approaches to	DPW	Mid-Term
ensure resilience.	OOT	
	DPZ	
8. Support <u>Require</u> the installation of electric vehicle (EV) charging	DPW	Ongoing
stations in private and public space, with particular attention to shared parking lots to ensure they are EV ready by including	OCS OOT	
connections and infrastructure.	Private Partners	
I. Evaluate and address the potential impact of electric vehicle	DPW	Long-Term
charging stations on electric power requirements.	OOT	
	OCS	
 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. 	ΟΟΤ	Ongoing
CIM-9 – Support efforts to improve air quality with an emphase nost threatened by high levels of pollution.	sis on commun	ities and populations
. Develop land use and environmental policy strategies that reduce	OCS	Long-Term
the impact of diesel particulate matter in communities adjacent to industrial areas.	ООТ	
2. Develop a plan-to-and transition the County's fleet (including	ООТ	Mid-Term
school buses and contracted services) to low/no emission vehicles.	OCS/HCPSS	
B. 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.	ΟΟΤ	Ongoing
E. 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.	OCS Private Property Owners	Mid-Term
5. Consider a subsidy program to support low emission vehicles,	OOT	Long-Term

Chapter 11: Implementation IMP-

Table 10-1: Implementation Matrix		
Policy and Implementing Actions	Lead	Timeframe (Mid-Term five-year,
	Agency	Long-Term six+ years, Ongoing)
CIM-10 – Advance transportation planning and transportation investment and environmentally sustainable transportation system that moves per throughout the County and supports the land use and equity goals in F emphasis on mixed-use activity centers. <u>Similarly, advance land use pa</u> development that support an economically and environmentally sustain	eople safely loCo By De atterns and	y and efficiently esign, including its individual site
 Develop a countywide transportation plan and conduct a focused transportation study for each activity center in the Route 1 Corridor. 	OOT DPW	Mid-Term
 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
 Implement HoCo By Design's recommendations for transit service through future transit service functional plans or master plans. 	OOT DPZ	Long-Term
 Continue to implement recommendations from WalkHoward and BikeHoward as methods to advance the broad concepts and recommendations in the General Plan. 	ООТ	Ongoing
 Ensure the Design Manual is consistent with the General Plan as part of the regular update process for the Design Manual. 	ООТ	Long-Term
5. Advance the Complete Streets Policy by updating the Subdivision and Land Development Regulations to favor land use patterns and individual site development that supports an economically and environmentally sustainable transportation system.	ООТ	Long-Term
P-1 – Retain and expand the use of industrial land to support en bay a living wage.	mploymei	nt opportunities that
. 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
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
 Prioritize for retention industrial land that is uniquely accessible to regional highways for continued industrial use. 	DPZ	Mid-Term
 During the Zoning Regulations update or via Zoning Amendments, favorably consider context-sensitive industrial uses along the Interstate 70 corridor. 	DPZ	Mid-Term
P-2 – Ensure redevelopment is consistent with the character of i	r	
. 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