

Baltimore County, Maryland

MASTER PLAN 2020



Baltimore County, Maryland

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ADOPTED BY BALTIMORE COUNTY COUNCIL
November 15, 2010

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James T. Smith, Jr.

Baltimore County Council
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Kevin Kamenetz, District 2
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From the Baltimore County Executive and the Baltimore County Council

Master Plan 2020 is the guiding document that directs future development in Baltimore County over the next ten years and beyond. This plan embodies this County's broad goals of protecting the environment, preserving agriculture, and ensuring safe and attractive places to live and work. It combines the expertise and skill of Baltimore County's public servants with input from the people of our communities to help determine both where and how land development will occur throughout the next decade.

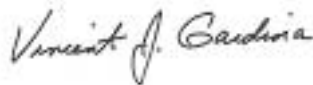
Master Plan 2020 is based on the concept of *sustainability*. We cannot meet our present needs and simultaneously preserve resources for future generations without implementing sustainable practices throughout Baltimore County. By reducing greenhouse gases in our air and pollutants in our streams and wetlands, we will improve not only the health of our entire County, but also the quality of life in all of our communities. We must maintain Baltimore County's tradition of smart growth by promoting policies that encourage compact, walkable, well-designed redevelopment of underused properties along commercial corridors and close to public transit. And by continuing to promote economic development in our historic neighborhoods and maintaining our highly skilled and well trained workforce, we can keep attracting and strengthening businesses that provide a wide variety of jobs for all our residents.

Many residents provided valuable assistance in the development of *Master Plan 2020*. The numerous comments and suggestions received at the public input meetings, from advisory committees, through the mail and emails, and through telephone calls and personal conversations, were greatly appreciated and critical to this plan's completion.

Master Plan 2020 is an effort to create and maintain safe and sustainable communities to achieve a sensible balance of economy, equity, and a healthy environment for people to reside, pursue careers, raise families, and enjoy the amenities of Baltimore County. This is an exciting opportunity for Baltimore County to continue working as partners with all its residents, businesses, and adjacent jurisdictions to develop a new direction for a brighter and healthier future.



S.G. Samuel Moxley, District 1



Vincent J. Gardina, District 5




Kevin Kamenetz, District 2



Joseph Bartenfelder, District 6



T. Bryan McIntire, District 3



John Olszewski, Sr., District 7
Chairman, County Council



James T. Smith, Jr.
County Executive



Kenneth N. Oliver, District 4



VISION

Create and maintain safe and sustainable communities, to achieve a sensible balance of economy, equity, and environment for people to reside, work, pursue careers, raise families, and enjoy the amenities in Baltimore County, Maryland.



Goals of Master Plan 2020

To promote policies and actions resulting in a safe, sustainable environment for future generations, the County Council in partnership with the citizens of Baltimore County, Maryland hereby adopt this Master Plan 2020.

Goal One: Continue the Success of Growth Management

- Direct the future growth within the Urban-Rural Demarcation Line (URDL)
- Protect and enhance Community Conservation Areas
- Promote redevelopment with an emphasis on ailing commercial or industrial properties
- Develop compact, mixed-use, transit-oriented, and walkable neighborhoods
- Advance economic well-being by promoting a high quality labor force
- Provide a mixture of housing types for an emerging diversity of residents
- Support quality public schools to enhance communities
- Prioritize infrastructure improvements via the Capital Improvement Program to endorse sustainable development
- Protect the character and economic vitality of the rural communities

Goal Two: Improve the Built Environment

- Provide adequate open space and recreational opportunities and increase connections to nature by linking open spaces and parks
- Invest in public grounds by tree planting, buffer conservation and habitat restoration
- Expand and deliver multi-modal transportation services
- Reduce pollutant loadings of runoff with enhanced stormwater management
- Meet desire for green communities by providing regulatory incentives
- Ensure integration between regulations and sustainability programs such as LEED

Goal Three: Strengthen Resource Conservation and Protection

- Protect health of the natural environment and maintain a valuable biodiversity
 - Restore ecosystems and encourage fair, efficient use of natural resources
 - Preserve cultural assets to establish a tangible sense of community
 - Nurture farming activities and importance of the agricultural industry
 - Conserve rural characteristics and scenic vistas
-

Visions of Master Plan 2020

Futhermore, in conformance with Article 66B of the Annotated Code of Maryland, the following “Visions” to be implemented by Master Plan 2020 are hereby adopted.

- (1) Quality of life and sustainability: a high quality of life is achieved through universal stewardship of the land, water, and air resulting in sustainable communities and protection of the environment;
- (2) Public participation: citizens are active partners in the planning and implementation of community initiatives and are sensitive to their responsibilities in achieving community goals;
- (3) Growth areas: growth is concentrated in existing population and business centers, growth areas adjacent to these centers, or strategically selected new centers;
- (4) Community design: compact, mixed-use, walkable design consistent with existing community character and located near available or planned transit options is encouraged to ensure efficient use of land and transportation resources and preservation and enhancement of natural systems, open spaces, recreational areas, and historical, cultural, and archeological resources;
- (5) Infrastructure: growth areas have the water resources and infrastructure to accommodate population and business expansion in an orderly, efficient, and environmentally sustainable manner;
- (6) Transportation: a well-maintained, multimodal transportation system facilitates the safe, convenient, affordable, and efficient movement of people, goods, and services within and between population and business centers;
- (7) Housing: a range of housing densities, types, and sizes provides residential options for citizens of all ages and incomes;
- (8) Economic development: economic development and natural resource-based businesses that promote employment opportunities for all income levels within the capacity of the State’s natural resources, public services, and public facilities are encouraged;
- (9) Environmental protection: land and water resources, including the Chesapeake and coastal bays, are carefully managed to restore and maintain healthy air and water, natural systems, and living resources;
- (10) Resource conservation: waterways, forests, agricultural areas, open space, natural systems, and scenic areas are conserved;
- (11) Stewardship: government, business entities, and residents are responsible for the creation of sustainable communities by collaborating to balance efficient growth with resource protection; and
- (12) Implementation: strategies, policies, programs, and funding for growth and development, resource conservation, infrastructure, and transportation are integrated across the local, regional, State, and interstate levels to achieve these visions.

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INTRODUCTION

The present and future needs of our citizens with respect to the economy, community and the environment will be protected and enhanced by actions proposed in this plan, with the intention of achieving a sustainable community.



The general purpose of *Master Plan 2020* is to guide the coordinated, adjusted, and harmonious development of Baltimore County. Policies and actions proposed herein will promote public health, safety, morals, order, convenience, prosperity and the general welfare. Although a few proposed actions are required by state law, generally the policies and actions stated in *Master Plan 2020* are not mandatory and do not control or limit the County governing body. They serve, as do all of the statements of the Master Plan, as a guide for the County's governing body. This plan will build on the successful concepts and strategies of previous plans, and will strengthen these long-term goals using a framework of sustainability. The present and future needs of our citizens with respect to the economy, community and the environment will be protected and enhanced by actions proposed in this plan, with the intention of achieving a sustainable community.

The County Executive and the County Council acknowledge the importance of the master plan as an advisory tool for ensuring rational and orderly development. The policy decisions of the Council, expressed through its law-making powers, are the means to fulfilling the evolving needs of the County and the citizens. *Master Plan 2020* is intended to guide the County Executive, the Council, and the government agencies in accomplishing the visions and goals of the plan. However, in certain limited circumstances, the plan may be more than just a guide. In response to a recent court decision, the Maryland General Assembly revised Article 66B of the Annotated Code of Maryland. The code essentially describes how applicable regulations and ordinances promulgated by local jurisdictions shall be consistent with specific items in the plan. (§ 1.02 Consistency with comprehensive plans, Article 66B. Annotated Code of Maryland)

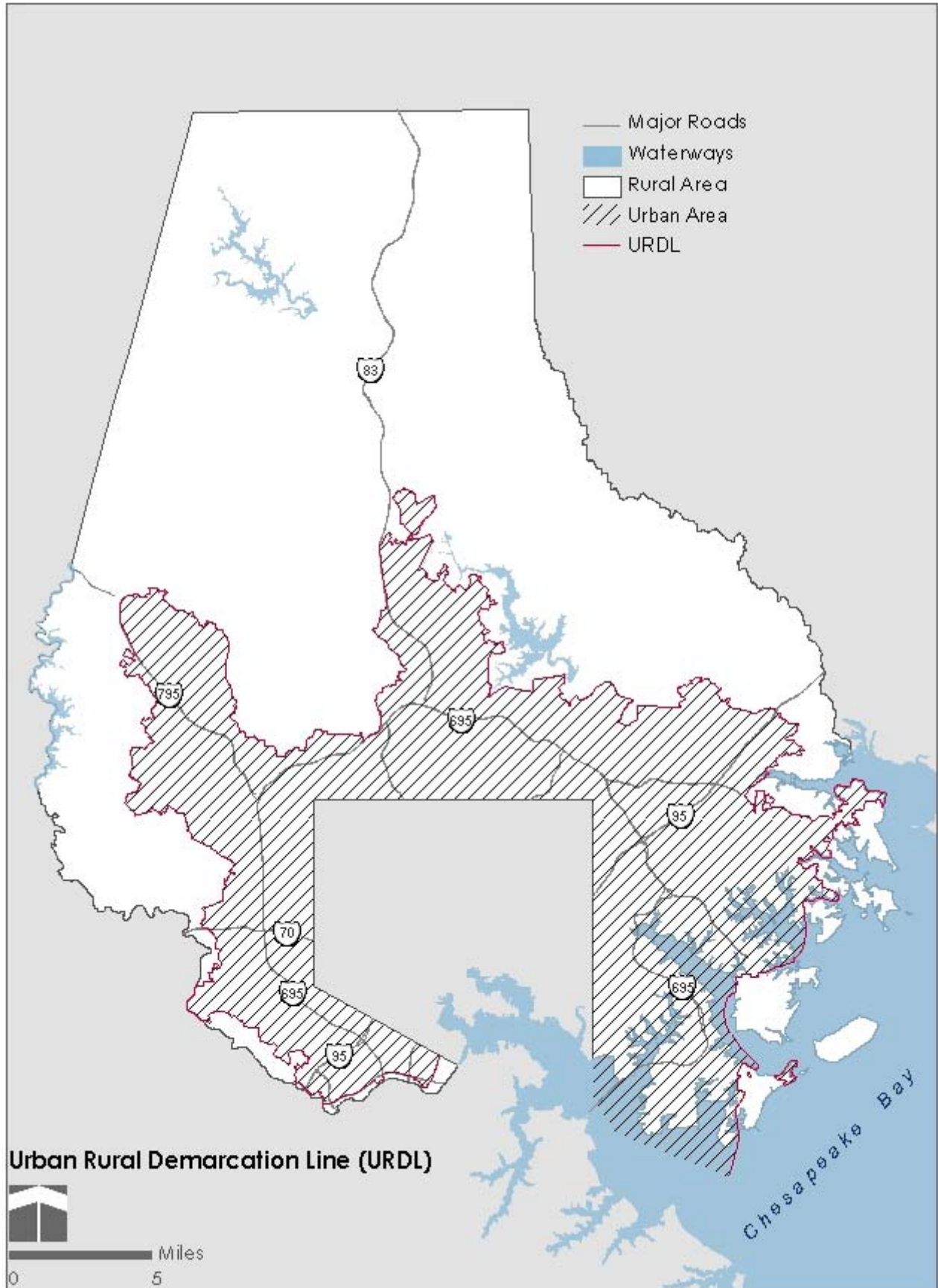
Several other mandates, including Federal, State, and local regulations affect *Master Plan 2020*. First, the Baltimore County Charter requires that a master plan be prepared and adopted every 10 years (§ 522.1 et. seq.). Additionally, details on required and optional contents of the plan are described in the Baltimore County Code (§ 32-2-202 et. seq.). Article 66B of the Annotated Code of Maryland, which is quite specific about elements required in local master plans, lists twelve new visions to be implemented to ensure a sustainable future for all jurisdictions in Maryland. This State Code was further revised to require a Water Resources Element (WRE) be included in the plan. The WRE is an examination of existing and future impacts of land development on all water resources in the County. Based on the results of this study, the proposed policies and actions in this plan are selected that will best help ensure the County will meet pollutant loading reductions in stormwater runoff and wastewater, and drinking water supplies will be safe and adequate. The WRE is included in *Master Plan 2020*. Finally, in compliance with Article 66B, a priority preservation element was recently added to *Master Plan 2010*, to ensure protection of the agricultural industry and the rural areas. The latter element is continued in this plan.

Success of Current and Past Master Plans

The first formal master plan, the *1980 Guideplan for Baltimore County, Maryland*, was adopted in 1972. Its philosophy was to accommodate growth and development in an orderly, environmentally sensitive manner, with adequate open space. Subsequent plans, the *Baltimore County Comprehensive Plan, 1975* and the *Baltimore County Master Plan 1979-1990* reorganized land use and development planning into a comprehensive growth management program. The 1975 plan resulted in the creation and adoption of urban and rural zoning. Two growth areas, Owings Mills and Perry Hall-White Marsh, were designated in the 1979 plan. The *Baltimore County Master Plan 1989-2000* created specific land management areas and policies that included growth areas, urban centers, community conservation areas, employment areas, and various rural land management areas.

Baltimore County is a national showcase in resource management and balanced growth, by successfully implementing *Master Plan 2010*, and the precedent master plans. The residential construction and redevelopment within the Urban-Rural Demarcation Line (URDL)(Map 1), first described in 1967, illustrate that the County excels in conserving its urban and rural communities by revitalizing existing communities and directing new development into the County's two designated growth areas. Water and sewer planning to allow those public utilities only in urban areas ensures development is concentrated inside the URDL, thus reducing sprawl. The noteworthy concentration of population and employment within the community conservation areas, and development in Owings Mills and Perry Hall-White Marsh, reflects the extraordinary effort on rational, aesthetic, and environmentally sustainable growth. *The Plan for the Valleys*, prepared and published in 1964 by the Green Spring and Worthington Valley Planning Council Incorporated, won the 2010 American Planning Association's National Planning Landmark Award. The Plan is the first long-range development plan based on the application of principles of ecological determinism to direct growth away from sensitive ecological features.

Map I: Urban Rural Demarcation Line



Since 2000, the County adopted and implemented amendments to the Comprehensive Manual of Development Policies (CMDP), new Resource Conservation (RC) zone designations, Renaissance Initiatives, the Adequate Public Facility Ordinance (APFO), and Planned Unit Development (PUD) regulations. These efforts continue to enhance quality design, high density, and efficient development in accordance with the Maryland Smart Growth Legislation. The County also strongly promotes large-scale redevelopment and new urbanist, or mixed-use development projects within its urban communities.

Furthermore, success is demonstrated in the economic development strategies to retain zoning districts for commercial and industrial expansion, by directing business development to the designated growth areas, commercial revitalization districts, enterprise zones, and employment centers. These policies are balanced with community conservation through programs that accentuate community empowerment, public/private partnerships, and coordination of public/private actions. Maintaining and strengthening the vibrancy of residential and business communities throughout the urban county is being achieved, and will be continued by *Master Plan 2020*.

Many advances in restoring, preserving and protecting our natural resources are continuing with policies and actions carried forward from precedent master plans. More than 55,000 acres of significant agricultural properties are preserved in perpetual easements available through various programs being administered by the Department of Environmental Protection and Resource Management (DEPRM). Stream restorations, retrofitting stormwater management facilities, tree plantings, establishment of stream buffers and forest conservation easements are successful and will continue to protect and enhance our natural resources.

Future Development

Over the next decade and beyond, the county must focus on where and how development occurs. This need is directed by State court decisions asserting that each jurisdiction must accommodate its fair share of population and employment increases. Although the rate of population increase is predicted to be slow, it



is estimated there will be 30,000 additional people living in Baltimore County in the next decade, with approximately 32,000 to 33,000 new jobs by 2020. Using policies and actions proposed by *Master Plan 2020*, this amount of growth can be accommodated with sustainable design at appropriate sites.

There are locations where growth and development should not occur. These sites may be of special concern or significance, such as agricultural properties, tracts within Chesapeake Bay Critical Areas, places near drinking water supply reservoirs, and other parcels with environmental resources. Some very localized parts of the County may have seriously inadequate infrastructure, such as insufficient public sewer capacity or over-crowded schools that make these sites unsuitable for additional density, unless these deficiencies are corrected. Many existing stable residential neighborhoods should not be disturbed for additional development. Most of these communities will be protected, with some in need being enhanced with physical improvements such as, schools, parks, open spaces, and, in some cases, enriched by amenities provided by nearby redevelopments.

The majority of future growth will be in the form of redevelopment because most of the land within the urbanized portion of the County is already developed. Larger, one-story buildings with huge unused parking lots present great opportunities for redevelopment as compact, mixed-use walkable communities. The areas most suitable for growth are typically located along major roads in commercial corridors, in or adjacent to existing town centers, or on older industrial and warehouse properties. The most ideal sites to accommodate future growth will have adequate public infrastructure already in place. Other criteria include the possibility for a good mix of residential, office, retail and other uses, potential for walkable and sustainable design, proximity to existing or proposed public transit, and with civic services, amenities, and employment opportunities on the sites or very close. The term Community Enhancement Areas (CEAs) is used to identify these new, sustainable communities. A detailed description of the proposed CEAs, their function, and the overall effect on the economy, community and environment is presented in the *Sustainable Communities* chapter in this plan.

Master Plan 2020 introduces the concept of transect-based planning to guide development. The concept was used to formulate the proposed land use maps for Baltimore County. Identifying a range of habitats from the most natural to the most urban, transects may be used as a framework for creation of zoning categories. The habitats are divided into six transect zones that are defined by the level and intensity of their physical and social character. One very important principle of this planning concept is that certain forms and elements are appropriate in specific environments. For example, a large apartment building belongs in an urban area, while a ranch house is more suitable in a rural setting. Additionally, the transect concept recognizes more flexibility

“To be truly successful in any community, planning must have the understanding and support of the people it serves. Staff members of the Office of Planning speak frequently before community groups, and the Office itself, with its collection of maps and other data in the County Building, is a clearing house for information that is open to everyone.”

Excerpt from: 1958 Report of Programs and Progress, Baltimore County Office of Planning, December 1958

of uses and building types that support mixed-use development. A land use map and zoning categories based on transects will allow citizens to be better aware of the form that future development will take. Transect-based planning is more fully described in the *Sustainable Communities* chapter in this plan.

Citizen Participation



A significant key to the success of any proposal is the involvement of all stakeholders. Baltimore County is strongly committed to providing every opportunity for participation by any interested citizen, businessperson, property owner and government entity in the development/redevelopment process. It is very important to instill a sense of stewardship: with encouragement and support, the citizens will have an integral role in the creation of sustainable developments through collaborative efforts. At the very genesis of any proposals, the County will facilitate meetings with all stakeholders, soliciting comments and suggestions from all who will contribute.

Process

In November 2007, the Office of Planning convened an interagency committee to begin developing *Master Plan 2020*. Representatives from the following agencies served on this committee:

- (1) Department of Environmental Protection and Resource Management (DEPRM)

- (2) Department of Public Works (DPW)
- (3) Recreation and Parks
- (4) Community Conservation
- (5) Economic Development
- (6) Permits and Development Management
- (7) Planning

A sub-committee consisting of representatives from DEPRM, DPW and Planning prepared the County's response to House Bill 1141 (2006): the development of the aforementioned Water Resources Element (WRE) to be included in the plan. The WRE provides significant influence on policies and actions herein.

In January and February 2010, more than fifty citizens from all areas of Baltimore County participated in two advisory committee meetings. This diverse group provided many comments, suggestions and observations on the future of their communities. Subsequent to the advisory committee meetings, four public input meetings were held in the southwestern, western, north-central, and eastern areas in Baltimore County. Comments offered were very informative and quite helpful in developing *Master Plan 2020*. Baltimore County is grateful to all persons who attended and participated in these meetings.

Implementation and Monitoring

The final test of any plan is its successful implementation. The multi-agency team that created this plan will be reconvened periodically to guide implementation, monitor progress, and propose strategies and programs to ensure the success of the plan. *Master Plan 2020* is developed to be a living document, that is, it will be reviewed periodically and updated when necessary. Past successful strategies in growth management will continue and be strengthened as the County moves toward achieving the goals, and implementing the State of Maryland's visions set forth in this document. All subsequent community plans formulated over the next decade will be based on the policies and actions proposed herein. Regulations

and ordinances will be consistent with specific items in *Master Plan 2020*, in those cases where State law requires consistency. The plan will be used often to help secure a sustainable future for the citizens of Baltimore County, Maryland.

SUSTAINABILITY

Sustainable development has been defined as that which "meets the needs of the present in a responsible manner without compromising the ability of current and future generations to meet their own needs" (United Nations General Assembly (1987) *Report of the World Commission on Environment and Development: Our Common Future*). Most experts agree there are three intertwined elements to the sustainability concept: *Community (or Social Equity), Economy and Environment*. To achieve a truly sustainable society, all three principles are included, with any competing interests among them being reconciled. Furthermore, our evolving world requires periodic monitoring, adaptation, and likewise modifications of these elements to maintain sustainability.

Community

Equitable access to all resources and decision-making processes is necessary for all residents to enjoy a higher quality of life that comes with the many benefits available in our society. Public transportation that is convenient and efficient allows citizens to get to work and services, reduces congestion and pollution, and decreases costs. Training and education that is readily attainable fosters opportunities for youth and the unemployed, while also contributing to the standard of living. Communities with good walkability and a healthy mix of uses, built with natural, local, durable materials, will help ensure a sustainable society. The provision of appropriate and adequate open spaces for sitting, meeting or gathering is critical. The community is also sustained by the full, active participation of all people in the decisions made concerning the future of their neighborhood. A spirit of cooperation and involvement by all stakeholders in these challenges is extremely valuable to the planning and development process.

Economy

The infusion of capital investments from and within the community aids in sustaining the local and regional economy. Financial resources generated and reinvested in the neighborhood assure high quality services for residents. Attracting and retaining large and small businesses and supporting economic development issues are very important in providing jobs for residents. These economic issues are considered throughout the Master Plan, because a sustainable community depends on a strong economy.

Environment

Reducing and mitigating negative impacts on natural resources and the environment is crucial to the long-term success of any community. Clean air and water is essential for all living beings to survive and flourish. Healthy forests and wetlands help to clean the air and water; and must be protected. To accommodate population growth, we must employ careful planning and thoughtful design as we develop/redevelop land.



This will enable preservation of our natural resources and the environment as we work towards the goal of sustainability.

Sustainability in Baltimore County: Past Successes and Future Challenges

In 1967, Baltimore County took the first significant step toward creating a sustainable policy framework for growth and development when it established an urban growth boundary, the Urban Rural Demarcation Line (URDL). The URDL divides the County into urban and rural land management areas. The division allows infrastructure investments and most land development to be focused in the urban areas, while natural and agricultural resources in the rural areas are preserved. Subsequently, Resource Conservation (RC) zones were adopted to restrict the number, configuration, size and location of new building lots in order to preserve agriculture and protect natural resources, while permitting limited growth. The protection of agriculture has been a key component of the rural growth management of the County for over 40 years. Significant public funds are invested in the permanent protection of cropland, pasture and woodland to maintain and foster a viable agricultural industry. This forward-looking effort by the County has become more important as national attention focuses on issues such as energy conservation, sustainability, global warming and national security.

As a result of these land management framework and policies, ninety percent of the county's population resides in one third of the County's land area. Consequently, public services are provided with efficiency, and two thirds of the land area is reserved for farming and natural resource conservation. By confining much of its growth to a limited geographic area, costs that might have been incurred by extending infrastructure and development are avoided. Designating and reinvesting in suburban Community Conservation areas helps to sustain private property values, maintain stable communities in which residents and business prosper, protect government's investments in the established public infrastructure, and minimize disinvestment and blight. Resources that can provide for the basic needs of all citizens,

including local food production, a high quality water supply, and improved air quality are protected, contributing to the sustainability of the community.

However, as Baltimore County grew over the past several decades, relatively low-density and auto-dependent suburban development occurred. Unlike the main street shopping areas of older neighborhoods, new development consisted of housing separated from strip shopping centers, offices and industrial parks. Instead of walkable street grids connecting residential areas to playgrounds, schools, and main streets, pods of new, single-use developments were connected by way of arterial roads that carried large volumes of fast moving traffic. This development pattern resulted in higher production costs, increased vehicle miles traveled (VMTs), increased pollution from vehicles, more time spent in cars, and reduced safety and health to the citizens.

As the size and amount of undeveloped land parcels within the URDL diminishes, the redevelopment of underused property at greater density and with a mix of land uses provides significant environmental and economic benefits. When property is redeveloped at higher densities, more people and activities are accommodated on less land. For a given number of homes, stores, or offices, the more compact the development, the greater the amount of undeveloped land that can be conserved. And the undeveloped land, if left in a natural state, or planted with trees, helps filter the air we breathe and the stormwater runoff, protecting urban streams, rivers and the Chesapeake Bay.



There remain challenges towards achieving sustainability. Three areas by which the land management framework can be improved are:

- (1) Provide a greater variety of efficient, safe, affordable and comfortable transportation choices.
- (2) Improve the physical form of new development, and enhance existing neighborhoods.
- (3) Redevelop sites to create compact, walkable, high-density mixed-use communities within the URDL to encourage economic growth and help pay for infrastructure and services.

To realize a sustainable community, *Master Plan 2020* introduces a new land management framework that contributes to the health and prosperity of its residents, and to the conservation of natural resources for future generations.

REGIONAL FRAMEWORK

The Baltimore region consists of the City of Baltimore and Anne Arundel, Baltimore, Carroll, Harford, and Howard counties in central Maryland (Map 2). These six local jurisdictions are an integral part of an interdependent network socially, economically, and environmentally in the Washington-Baltimore metropolis. Each of these six local jurisdictions identifies challenges and opportunities to manage growth and enhance economic development in communities throughout the region.

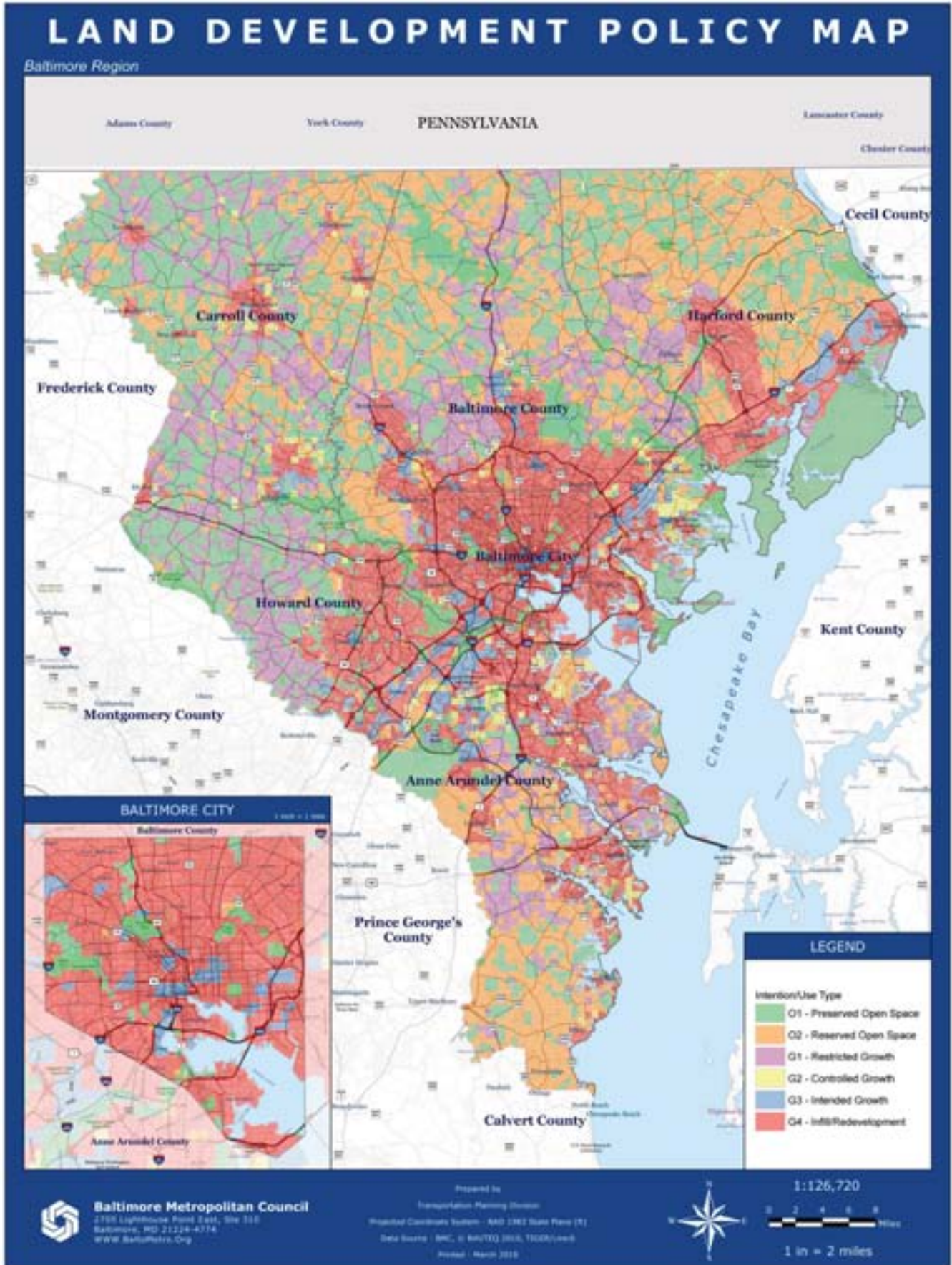
As the patterns of growth in the region continue to evolve, cities and counties redefine the previous forms of development with the goal of creating economically livable and environmentally sound communities. The State of Maryland's smart growth initiatives continue to guide regional collaboration and planning to strengthen communities and conserve natural resources, and also to achieve the twelve visions outlined in the Annotated Code of Maryland, Article 66B, revised in 2009.



Future development in Baltimore County will be focused within underutilized commercial corridors by supporting and encouraging the creative use of mass transit, taking precedence over the automotive-oriented development. It is essential for Baltimore County to establish, in cooperation with surrounding jurisdictions, a regional development database, and a model of compact urban communities. This is necessary to successfully articulate and implement

region-wide and statewide comprehensive plans, including Imagine 2060 and PlanMaryland. The Regional Development Policy map (Map 3) is for illustrative purposes only, and serves as a guide for the provision of regional infrastructure.

Map 3: Land Development Policy



DEMOGRAPHICS

Demographic information is critical in formulating policies, articulating community plans, and determining programs and services. The information enables county agencies to identify demographic change patterns and trends, not only indicating the success of the County's growth management, but also providing insights on challenges and opportunities for sustainable community enhancement in the next decade. Data provided in this section are derived from the U.S. Census Bureau's decennial enumeration and sampled data, its annual estimates, and yearly American Community Surveys (ACS). Other data sources include the U.S. Bureaus of Labor Statistics and Economic Analysis and the County's building and razing permits.

Growth and Diversity in Population

The URDL was established in 1967 and, later in the 1970s and 1980s, designated land management areas including the Owings Mills Growth Area and former Perry Hall-White Marsh Growth Area. The enacting and enforcement of these growth management policies in previous master plans has ensured the County's achievement in directing growth within the URDL, while protecting agricultural areas and preserving drinking water, natural resources and environment.

Baltimore County is the 3rd largest in population among Baltimore City and 23 counties in Maryland. In the past two decades, the County's population growth occurred predominantly inside the URDL. Approximately 90 percent of the County's residents live in the urban areas. The change in the County's population presents significant insights on how growth took place. Phenomenal growth in population occurred in the 1950s and 1960s, due to the

nationwide boom after World War II. Since that time the population growth rate has decreased (Chart 1). The slower growth rates in the past 4 decades illustrate that the County is becoming a maturing jurisdiction, which requires different policies in order to ensure a prosperous, sustainable future. The projected county population by 2020 is expected to be 846,000.

In addition, there is an emerging trend in population and housing characteristics in Baltimore County, reflecting a profound and prevailing national trend. The median age of the population continued to grow from 28.9 in 1970 to 38.8 in 2008. This represents a growing number in the elderly 65 years old or over, which increased its percent share in the County's total population from 7.4 percent in 1970 to 14.4 percent in 2008. The percent share of the County's senior residents is projected to be 17 percent in 2020.

The number and percent share of married-couple families has decreased; whereas the number and percentage of other household types – non-family, single person, or single-parent households – has been on the rise (Chart 2). Consequently, the number of persons in a household (household size) continued to decline. As a result, the County's average household



Chart 1: Total Population and Population Change, 1950 - 2020

Area	1950	1960	1970	1980	1990	2000	2010	2020
Baltimore County	270,273	492,428	621,077	655,615	692,134	754,292	816,546	846,977
<i>Change</i>	-	222,155	128,649	34,538	36,519	62,158	66,890	21,407
<i>Change Rate</i>	-	82%	26%	6%	6%	9%	9%	3%

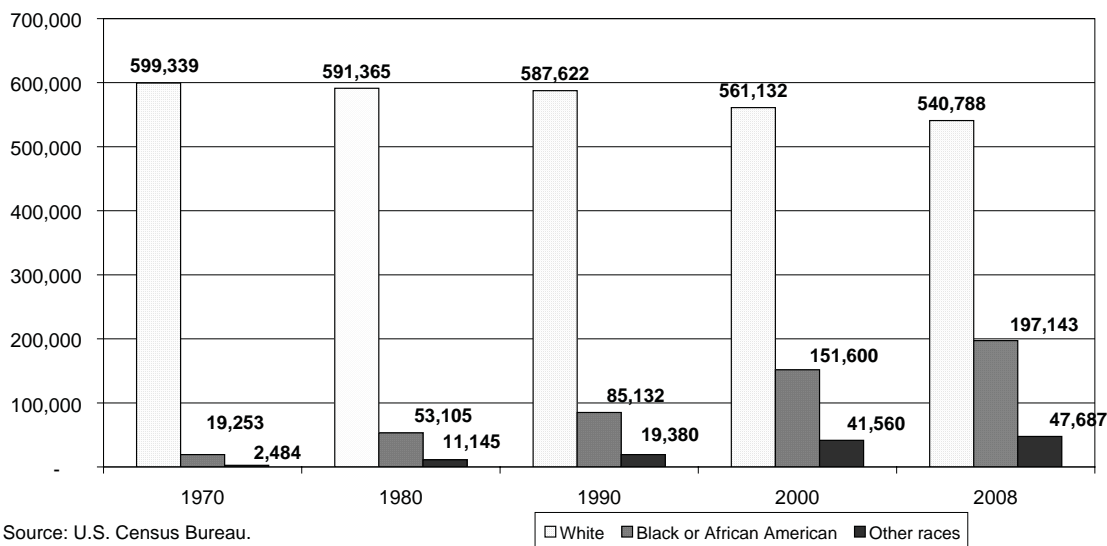
Sources: U.S. Census Bureau, 1950-2000 Censuses. Baltimore Metropolitan Council, Round 7C Forecasts.

Chart 2: Household Types, 1970 - 2008

Data Item	1970	1980	1990	2000	2008
Total Households	184,890	237,371	268,638	299,877	310,734
Married-Couple Families	146,248	150,731	151,223	148,099	144,520
<i>% total households</i>	<i>79.10%</i>	<i>63.50%</i>	<i>56.29%</i>	<i>49.39%</i>	<i>46.51%</i>
Single-Parent Families	16,085	29,671	38,612	50,506	53,863
<i>% total households</i>	<i>8.70%</i>	<i>12.50%</i>	<i>14.37%</i>	<i>16.84%</i>	<i>17.33%</i>
Non Family Households	22,557	56,969	78,445	101,272	112,351
<i>% total households</i>	<i>12.20%</i>	<i>24.00%</i>	<i>29.20%</i>	<i>33.77%</i>	<i>36.16%</i>

Source: U.S. Census Bureau.

Chart 3: Change in Racial Composition, 1970 - 2008



Source: U.S. Census Bureau.

Chart 4: Age of Housing Structures

Decade Structure Built	Number of Units	Percentage of Total Housing Units	Decade Structure Built	Cumulative Percentage of Total Housing Units
Built 1939 or earlier	28,163	8.61%	Before 1939	8.61%
Built 1940 to 1949	27,867	8.51%	Before 1949	17.12%
Built 1950 to 1959	65,578	20.04%	Before 1959	37.16%
Built 1960 to 1969	41,793	12.77%	Before 1969	49.93%
Built 1970 to 1979	46,882	14.33%	Before 1979	64.25%
Built 1980 to 1989	46,032	14.07%	Before 1989	78.32%
Built 1990 to 1999	45,874	14.02%	Before 1999	92.34%
Built 2000 to 2009	25,082	7.66%	Before 2009	100.00%
Total	327,271	---	---	---

Source: U.S. Census Bureau.

size changed from 3.28 persons per household in 1970 to 2.46 persons per household in 2008. The household size has remained at 2.46 persons since 2000.

The County is also culturally diverse, with an increasing number and percent share of non-white or people of the Hispanic or Latino origin (Chart 3). As one of the state’s immigration destinations, Baltimore County also experienced a noticeable growth in the

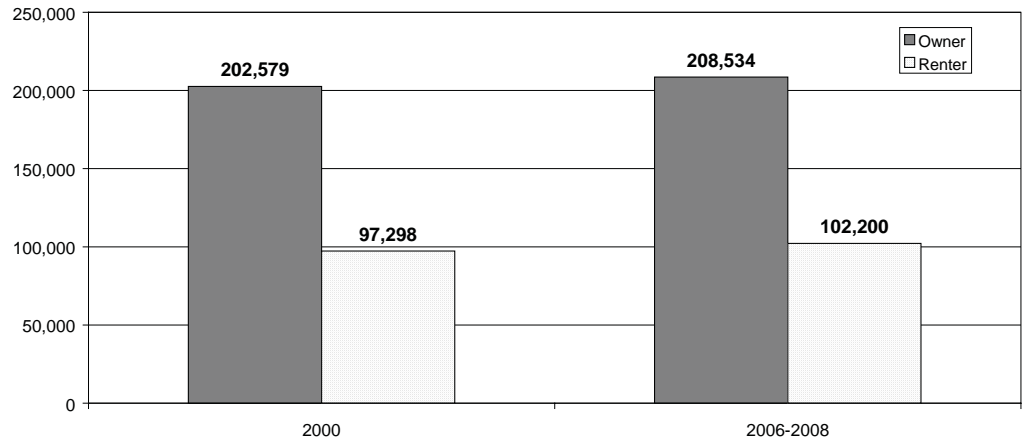
foreign-born in the 1990s and 2000s. The number of people who immigrated from other countries or places to the County rose from 32,000 (4.7 percent) in 1990 to 73,000 (9.3 percent) in 2008. As a result, people of the Hispanic or Latino origin (can be of any race) grew from 8,100 (1.2 percent of the County’s total population) in 1990 to 23,000 (3 percent of the total) in 2008. Asian and Native Hawaiian or Other Pacific Islander changed from 15,000 (2.3 percent) to 33,000

Chart 5: Housing Structure Types, 2000 - 2008

Housing Type	2000	Percent Total	2008	Percent Total
Single Family Detached	150,022	47.83%	155,728	47.58%
Single Family Semi-Detached	5,105	1.63%	4,232	1.29%
Single Family Attached (or Town Houses)	84,114	26.81%	86,703	26.49%
Multi-Family	74,447	23.73%	80,608	24.63%
Total	313,688	---	327,271	---

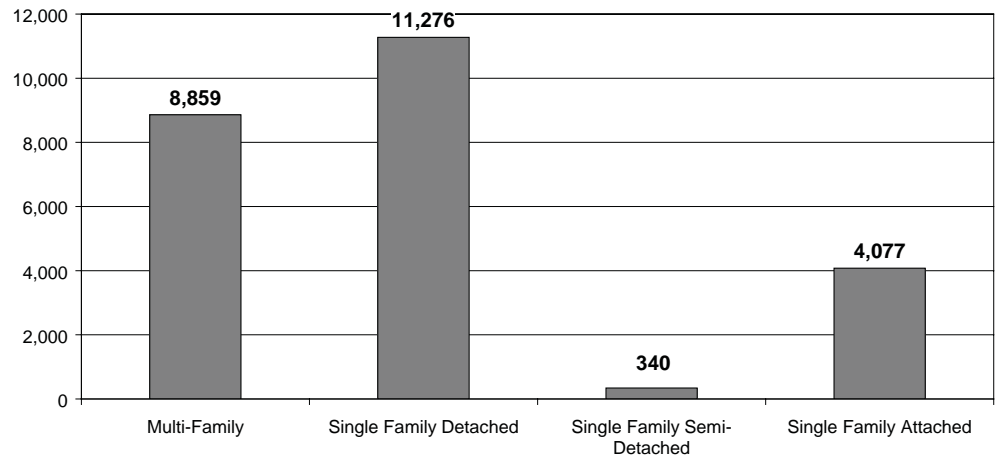
Source: U.S. Census Bureau.

Chart 6: Housing Tenure, 2000 - 2008



Source: U.S. Census Bureau.

Chart 7: New Residential Units by Housing Type, 2000 - 2009



Source: Baltimore County Government.

(4.3 percent) during the same time period. Prudently note that in Census 2000, the Census Bureau modified the race and ethnicity categories by adding two or more races. Also, the race and ethnicity data are tabulated from self-identification.

A Diverse, Affordable Housing Stock

Baltimore County leads the Baltimore region in housing inventory. The majority of the housing in the County (64 percent) was built prior to 1980, according to census data (Chart 4). Countywide, single family structures (detached, semi-detached, and attached) in the total housing inventory have been the predominant building type (Chart 5).

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Data on housing tenure is an indicator of homeownership (Chart 6). The housing tenure consists of owner-occupied units and renter-occupied units. According to the Census Bureau, the homeownership rate in Baltimore County was 67 percent in 2000 and in the 2006-2008 period. In 2009, the County's building permit system showed the homeownership rate was 68 percent, demonstrating a relatively stable trend. New residential unit

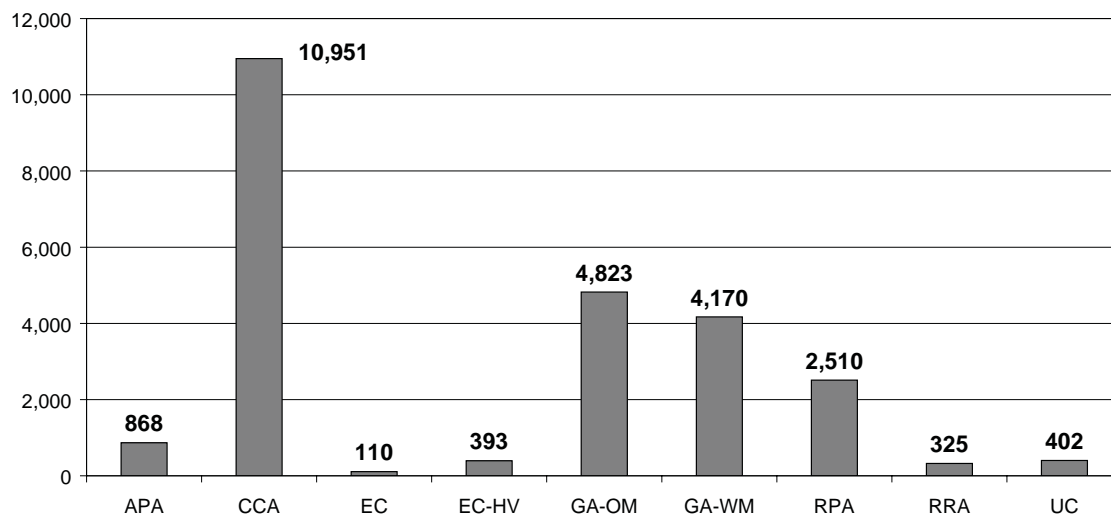
constructions since 2000, as registered in the Baltimore County building permit system, exhibited a similar pattern in housing structure types (Chart 7). However, the proportion of multi-family units in new constructions increased significantly to 36.1 percent, confirming the County's effort to diversify its housing stock.

Chart 8: Total Residential Units, 2000 - 2009

Area	Total Units		2000-2009	
	2000	2009	Total Growth	Percent Growth
Urban	283,040	301,138	18,098	6.39%
<i>Percent county total</i>	<i>90.22%</i>	<i>89.98%</i>	<i>86.37%</i>	-
Rural	30,694	33,549	2,855	9.30%
<i>Percent county total</i>	<i>9.78%</i>	<i>10.02%</i>	<i>13.63%</i>	-
County Total	313,734	334,687	20,953	6.68%

Source: Baltimore County Government.

Chart 9: New Residential Units by Land Management Area, 2000 - 2009



Source: Baltimore County Government.

Chart 10: New Residential Units by Land Management Area, 2000 - 2009

Land Management Area	Single Family Detached	Single Family Semi-Detached	Single Family Attached	Multi-Family	Total
Agricultural Preservation Area	831	0	0	0	831
Community Conservation Area	4,552	180	1,948	3,879	10,559
Employment Center	22	0	84	4	110
Employment Center-Hunt Valley	4	0	68	376	448
Growth Area-Owings Mills	922	49	1,247	2,476	4,694
Growth Area-White Marsh	2,116	96	681	1,098	3,991
Resource Preservation Area	2,260	14	6	0	2,280
Rural Residential Area	323	1	0	0	324
Urban Center	2	0	0	387	389
County Total	11,032	340	4,034	8,220	23,626

Source: Baltimore County Government.

Chart 11: Razed Residential Units by Land Management Area, 2000-2009

Land Management Area	Single Family Detached	Single Family Semi-Detached	Single Family Attached	Multi-Family	Total
Agricultural Preservation Area	124	0	0	0	124
Community Conservation Area	1,028	19	5	2,192	3,244
Employment Center	32	0	0	0	32
Employment Center-Hunt Valley	17	0	0	0	17
Growth Area-Owings Mills	63	0	1	0	64
Growth Area-White Marsh	115	4	0	0	119
Resource Preservation Area	380	4	0	0	384
Rural Residential Area	76	0	0	0	76
Urban Center	13	4	0	60	77
County Total	1,848	31	6	2,252	4,137

Source: Baltimore County Government.

Chart 12: Changes in Median Sold Price and Household Income, 2000 - 2008

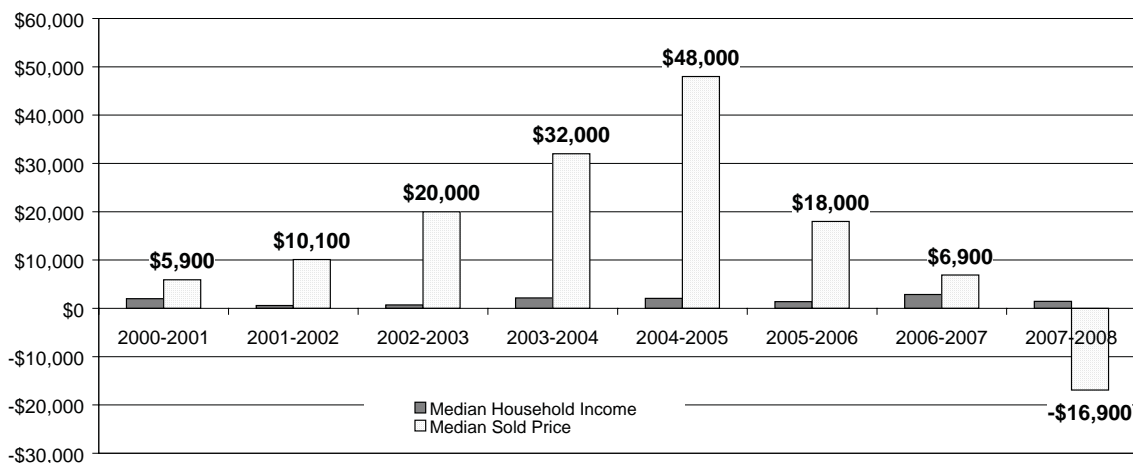
Jurisdiction	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008
Absolute changes in median sold price:								
Anne Arundel County	6,150	26,500	31,510	48,890	55,100	19,000	-22,000	18,000
Baltimore City	-3,000	4,900	8,100	15,000	30,000	20,400	12,600	-269
Baltimore County	5,900	10,100	20,000	32,000	48,000	18,000	6,900	-16,900
Carroll County	9,000	21,500	30,500	44,900	55,100	0	-30,550	35,550
Harford County	2,750	3,000	27,650	30,250	44,100	14,000	2,000	-5,000
Howard County	13,310	34,900	27,600	62,500	60,000	10,000	5,000	-15,000
Absolute changes in median household income:								
Anne Arundel County	2,850	750	700	3,150	2,500	5,550	3,000	1,600
Baltimore City	1,000	750	500	1,350	1,200	1,250	2,200	1,150
Baltimore County	2,000	600	700	2,150	2,050	1,400	2,850	1,450
Carroll County	2,150	1,250	650	3,350	3,200	1,100	3,250	1,800
Harford County	1,950	1,550	1,950	2,900	2,500	3,250	3,050	1,800
Howard County	1,550	300	1,000	3,100	2,850	5,800	3,550	1,850

Sources: Maryland Department of Planning for median household income; Metropolitan Regional Information Systems for median sold price; Freddie Mac for interest rate survey.

Recent statistics on residential development verify the county's success in enhancing community conservation and resource preservation. As shown in Chart 8, the majority of total residential units were constructed inside the URDL (or urban areas). The largest growth has occurred in Community Conservation Areas, followed by the Owings Mills and Perry Hall-White Marsh areas (Chart 9, see a land management area or LMA map for full names of LMA). The increase in residential construction in the Owings Mills area is more substantial than that in the White Marsh area. Among urban land management areas, there also is a mixture of housing types (Chart 10). In the Community Conservation Areas, single-family dwellings – detached, semi-detached, and attached (town houses) – are predominant. This is also true for the Perry Hall-White Marsh area. In Owings Mills, multi-family registers the largest number of new housing construction.



**Chart 13: Changes in Income and Housing Price
Baltimore County, 2000 - 2008**



Sources: Maryland Department of Planning and Metropolitan Regional Information

Chart 14: Housing Costs as Percent Household Income

Data Item	2000		2008	
	Owner	Renter	Owner	Renter
Less than 20.0 percent	55.00%	35.80%	35.20%	24.60%
20 to 24 percent	14.60%	14.30%	16.70%	14.70%
25 to 29 percent	9.70%	11.50%	13.60%	11.90%
30 to 34 percent	5.60%	7.70%	8.80%	9.20%
35 percent or more	14.50%	26.60%	25.70%	39.50%

Source: U.S. Census Bureau.

Reinvestment strategies will be required in older communities throughout Baltimore County for communities to retain their desirability. The redevelopment of older multi-family housing and/or commercial properties is the major component of the County’s comprehensive redevelopment strategy. The majority of residential dwelling units (3,244 out of 4,137) razed were in Community Conservation Areas. Among those 3,244 units, nearly 70 percent (or 2,192 units) were multi-family dwellings (Chart 11).

Charts 12 and 13 indicate that throughout all six (6) jurisdictions in the Baltimore region, consisting of Baltimore City and Anne Arundel, Baltimore, Carroll, Harford, and Howard counties, the change in median sales price has been substantially higher than the change in the median household income. Furthermore, the housing affordability index in Baltimore County dipped from 157.13 in 2000 to



119 in 2008, indicating that a smaller portion of the County's households are able to purchase a home.

Additionally, in 2000, 14.6 percent of the County's homeowners spent more than 35 percent of their household incomes on housing, a threshold utilized by the U.S. Department of Housing and Community Development (HUD) measuring the housing affordability. Chart 14 demonstrates that the

proportion of owners and renters who spent 35 percent or more of their household income on housing costs has increased between 2000 and 2008. This challenge in affordability for renters has been more significant than that for homeowners. However, the percent share of homeowners who experienced the affordability problems has increased more rapidly (in terms of rate of change) than that of renters. The percent share of homeowners surged from 14.5 in 2000 to 25.7 in 2008

Chart 15: Educational Attainment, 1990 - 2008

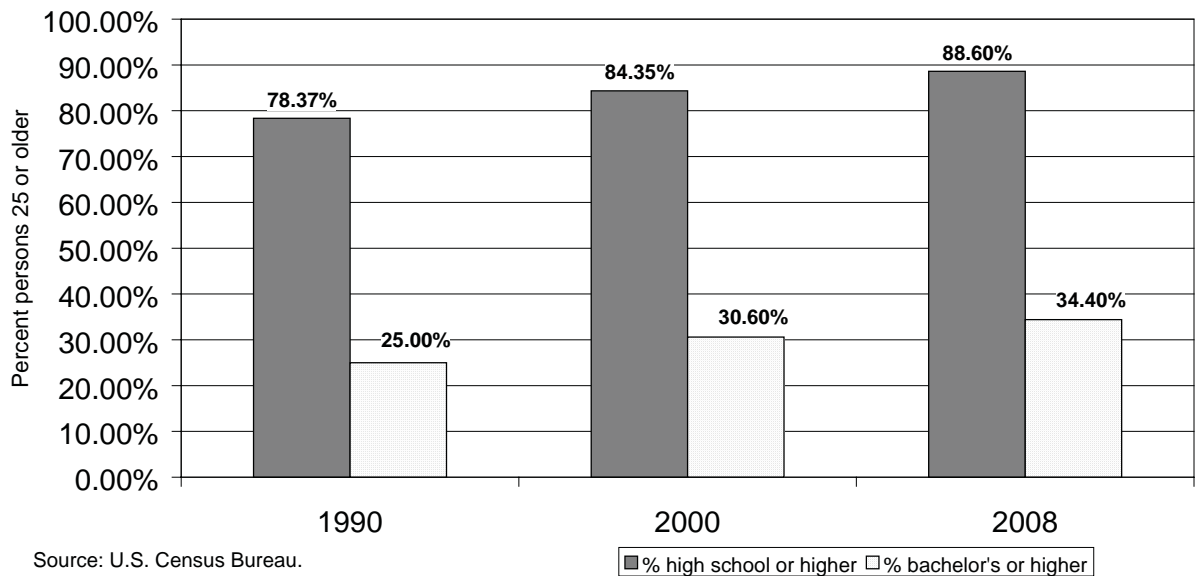
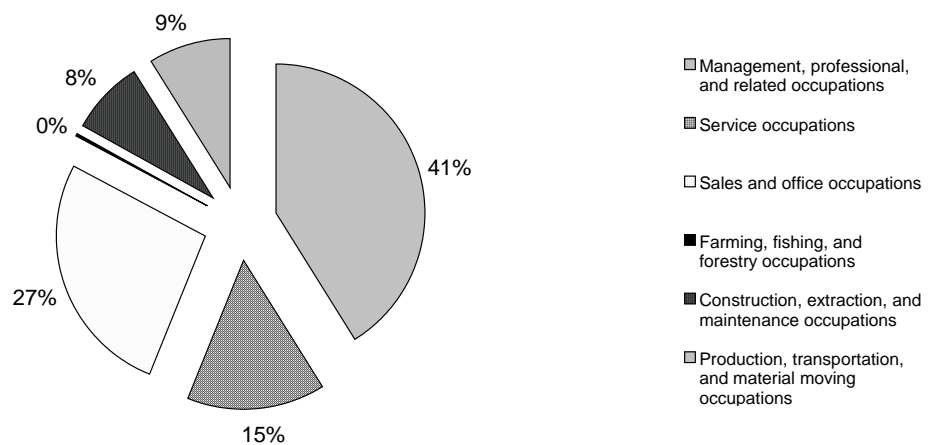


Chart 16: Occupation of Employed Residents, 2008



Source: U.S. Census Bureau.

#: Percent share of each occupation to total employed residents

(a change rate of 77 percent); whereas, the percent share of renters rose from 26.6 to 39.5 (a change rate of 48 percent).

Educated Workforce and Diversified Economy

Baltimore County residents have a high attainment level in education. This is reflected in the percent share of persons achieving high school diplomas or

higher, and bachelor’s or advanced degree in the total population 25 years old or older (Chart 15). From 1990 to 2008, the average educational attainment in the nation and Maryland are 84.5 percent and 87.6 percent respectively for a high school graduate or higher. The County’s average number of residents with a high school diploma or higher increased from 78.4 percent to 88.6 percent during the same time period. The percentages for a bachelor’s degree or

Chart 17. Total Full-Time and Part-Time Employment by Industry

Industry (Job Type)	2001	2008	2001-2008 Change
Total employment	468,712	520,891	52,179
FARM EMPLOYMENT	1,437	1,022	(415)
NONFARM EMPLOYMENT	467,275	519,869	52,594
Private employment:	407,567	461,155	53,588
Forestry, fishing, related activities, and other	527	437	(90)
Mining	352	519	167
Utilities	(D)	(D)	---
Construction	29,767	37,177	7,410
Manufacturing	33,102	24,448	(8,654)
Wholesale trade	15,103	14,065	(1,038)
Retail trade	62,317	58,387	(3,930)
Transportation and warehousing	(D)	(D)	---
Information	8,748	9,072	324
Finance and insurance	27,896	35,917	8,021
Real estate and rental and leasing	19,358	31,499	12,141
Professional and technical services	35,024	45,097	10,073
Management of companies and enterprises	1,532	3,539	2,007
Administrative and waste services	35,226	36,112	886
Educational services	9,340	12,262	2,922
Health care and social assistance	56,175	70,793	14,618
Arts, entertainment, and recreation	10,664	11,747	1,083
Accommodation and food services	26,517	29,629	3,112
Other services, except public administration	24,017	26,689	2,672
Government and Government enterprises:	59,708	58,714	(994)
Federal, civilian	15,334	15,314	(20)
Military	2,639	2,332	(307)
State and local	41,735	41,068	(667)
State government	12,365	11,183	(1,182)
Local government	29,370	29,885	515

Source: U.S. Bureau of Economic Analysis.

(D) Not shown to avoid disclosure of confidential information, but the estimates for this item are included in the totals.

The estimates for 2001 were based on the 2002 North American Industrial Classification System (NAICS). The estimates for 2008 were based on the 2007 NAICS.

Chart 18: Percent Vehicles per Household, 2000 - 2008

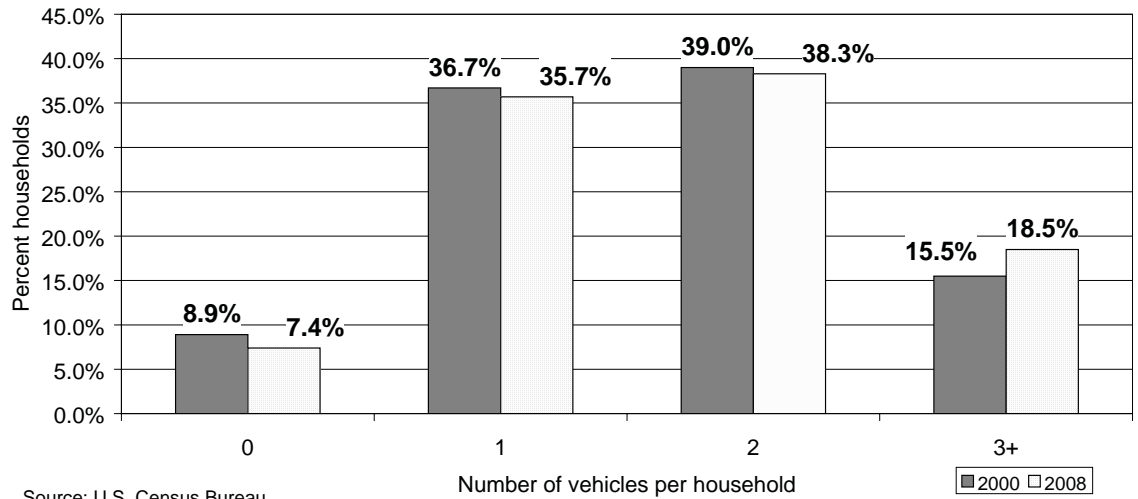


Chart 19: Place of Work at County Level, 2000 - 2008

Data category	1990		2000		2006-2008	
	Total	Percent Total	Total	Percent Total	Total	Percent Total
Total:	360,170	---	373,496	---	397,596	---
Worked in state of residence:	353,130	---	364,564	---	387,685	---
<i>Worked in county of residence</i>	181,837	50.49%	196,917	52.72%	199,496	50.18%
<i>Worked outside county of residence</i>	171,293	47.56%	167,647	44.89%	188,189	47.33%
Worked outside state of residence	7,040	1.95%	8,932	2.39%	9,911	2.49%

Source: U.S. Census Bureau.

higher are 27.4 and 35.2 in the nation and Maryland correspondingly. In Baltimore County, the average for a bachelor’s degree or higher grew from 25 percent to 34.4 percent between 1990 and 2008. The outstanding educational attainment contributed to a well-educated workforce and helped improve the economic well being of the region.

In Baltimore County, national and state trends show that the majority of employed workers perform jobs in the management and professional occupations, followed by the sales and office occupation (Chart 16). The services occupation is the 3rd highest occupation. The number and proportion of residents employed in farming and related vocations is minimal. There are approximately 70,000 residents working in the construction, production, and transportation occupations.



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Baltimore County has an employment base (jobs by place of work) of approximately 521,000 (U.S. Bureau of Economic Analysis; also see Chart 17) and ranks 2nd in Maryland, behind Montgomery County. There are approximately 59,000 government jobs at the federal, state, and local level. The County is one of the hubs in Maryland for federal government agencies including the Social Security Administration, the Centers for Medicare and Medicaid Services, and the Federal Bureau of Investigation. The Social Security Administration and the Centers for Medicare and Medicaid Services are an economic engine for the Woodlawn area and also the entire Baltimore region.

Baltimore County is home to the national or regional headquarters of leading corporations, such as CareFirst BlueCross BlueShield, McCormick and Company, Stanley Black and Decker, and Proctor and Gamble. The key employers are located along major transportation corridors, largely concentrating in the Towson urban core, Owings Mills and Perry Hall-White Marsh growth areas, and various employment centers such as Hunt Valley, Woodlawn, and Middle River.

Reflecting ongoing national trends shifting employment from manufacturing to service, the employment in Baltimore County is highly professional and service-oriented. Major employment sectors are health care and social services, retail trade, and government (Chart 17). Also, according to the state Department of Labor and Licensing Regulations (2008), among Maryland's ten industry clusters, Baltimore County ranks 1st in finance and insurance, manufacturing, and the retail trade, and is 2nd place in bioscience, business services, hospitality and the tourist industries.



Transportation Means and Expenditures

In Baltimore County, the majority of households own at least one or two vehicles, although the percent share of at least one or two vehicles in a household declined slightly from 2000 to 2008 (Chart 18). Households possessing three or more vehicles grew from 15.5 percent to 18.5 percent between 2000 and 2008.

Approximately 51 percent of all residents who are employed work within the County. Another 42

Chart 20: Means of Transportation, 1990 - 2008

Means of Transportation	1990		2000		2008	
	Total	Percent Total	Total	Percent Total	Total	Percent Total
Drove Alone	278,509	77.33%	297,552	79.67%	314,792	79.17%
Carpool	47,472	13.18%	40,497	10.84%	39,918	10.04%
Public Transit	15,718	4.36%	15,687	4.20%	15,729	3.96%
Walked or Worked at Home	16,787	4.66%	17,959	4.81%	21,459	5.40%
Other means	1,684	0.47%	1,801	0.48%	5,698	1.43%
Total employed residents	360,170	---	373,496	---	397,596	---

Source: U.S. Census Bureau.

Chart 21: Transportation Expenditure per Family, 1990 - 2008

Baltimore Metropolitan Statistical Area and Nation

Area Type	Data Item	1990	2000	2008
Baltimore MSA	Transportation Expenditure	\$5,100	\$7,185	\$7,793
	Total Expenditure	\$30,768	\$41,725	\$52,543
	% Transportation of total	16.58%	17.22%	14.83%
Nation	Transportation Expenditure	\$5,176	\$7,216	\$8,701
	Total Expenditure	\$28,444	\$38,163	\$50,805
	% Transportation of total	18.20%	18.91%	17.13%

Source: U.S. Bureau of Labor Statistics.

percent commute to work in the five other jurisdictions in the Baltimore region (Chart 19). Also, according to the Census Bureau, the mean commuting time to work remained the same, about 28 minutes from home to the workplace during the same time period.

Chart 20 shows that the actual number of residents who took public transit, walked to work, or worked at home increased. However, nearly 80 percent of them still drove to work alone, which is substantially higher than the percentage of workers who rode in carpools, took public transit, walked to work, or worked at home. The percent share of workers who chose to carpool or rode public transit declined since 1990.

In the Baltimore Metropolitan Statistics Area (MSA) (including Baltimore City and five counties in the region, and Queen Anne's County), consumer expenditures on transportation, including vehicle purchases, gasoline and motor oil, finance charges, maintenance and repairs, insurance, rentals, licenses, and public transportation have increased since 1990. The expenditure data are only available at the national or MSA level. The absolute costs have significantly increased in the nation and the Baltimore MSA (Chart 21).

The regional household travel survey by the Baltimore Metropolitan Council in June 2010 demonstrates that 80 percent of daily trips – combined means of transportation – are attributable to the non-work related. The mileage of non-work related trips also increased substantially. Walking trips account for 6 percent of overall trips. Nearly 50 percent of daily walk trips are less than 0.3 miles in distance and 90 percent are less than 1 mile. The majority of the walk trip's duration is between 1 and 5 minutes, followed by the 6 to 10 minute range.

Policy Implications

Baltimore County's population continues to grow, although at a slower pace through past decades. The maturing county requires that the County develop innovative strategies to promote compatible infill, revitalization, and sustainable design and construction of residential and non-residential structures. The emerging diversity strongly suggests that the County faces new challenges, and will need to offer alternative solutions for the provision of services to its residents.

The increase in senior residents - due to longevity, aging in place, and growing old of baby boomers – require a larger variety of services for daycare, transitional housing, senior centers, mobile transit, and health care. The dynamic in the household composition change indicates a need for diverse housing choices for different types and sizes of homes that will continue to meet the demand of married-couple families with children and single-parent households and non-family households. The senior residents may require a different type of housing for daily living and mobility around their residences. The growth in minorities and foreign-born will bring



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different cultural heritages to Baltimore County and will also have significant implications on programs and services, particularly schools, health, social services, workforce development, housing choices, and fair practices.

Baltimore County is successful in safeguarding its urban communities as viable places to live, work, and raise families. This is being achieved by revitalizing ailing communities while directing new development in the designated growth areas. The County works towards preserving existing, well-established residential communities where more than 90 percent of the housing stock was built prior to 2000. The County promotes an adequate supply of residential dwellings with a variety of types to meet the needs of people at different ages and stages of their lives. Multi-family construction has become increasingly important to fit emerging demographic trends and housing market conditions in recent years.



The relatively affordable housing stock will continue to attract people who desire to work and reside in Baltimore County.

Mirroring the national trend, there exists a significant increase in the transportation expenditure in the Baltimore metropolitan area. Workers choosing to drive alone to work accounted for 80 percent among all means of transportation. Additionally, half of employed residents perform their jobs outside of Baltimore County. The mixed-use, walkable, and transit-oriented development may help allow some residents to work close to their residences.

Retaining and attracting well-educated residents in the workforce will continue to be part of the County's workforce development. The County's business development plan also encourages mixed-use, walkable, and transit-oriented development, which will help provide opportunities for the County workforce to work and reside within the same area. Baltimore County is one of the key leaders in the Maryland state economy. The County is a hub of major employers (nationwide or statewide), with a diversified economic structure. A well-educated workforce in the professional and services occupations contributes to a high level of employment. The County will continue to achieve its goals by collaborating with jurisdictions in the Baltimore-Washington, D.C. region and the rest of Maryland in managing challenges for a continued growth in employment.



VIBRANT COMMUNITIES

In order to create sustainable communities, citizens and decision-makers must recognize the latest trends in housing choices and changes in family makeup.



SUSTAINABLE COMMUNITIES

In compliance with House Bill 1141, the Department of Environmental Protection and Resource Management (DEPRM) completed a detailed analysis of the impacts of current and future development on all water resources in Baltimore County. The report, called the Water Resources Element (WRE), is incorporated as part of this Master Plan. The results of the investigation reveal that, to protect, enhance, and restore the quality of our natural waters, a significant policy shift regarding future land development is required. It is determined that redevelopment of properties located inside the URDL, including replacement of impervious surface (buildings, parking lots, etc.) with green spaces (pervious surfaces) will allow for the greatest reduction of pollutants in stormwater runoff.

Included in this land use strategy are the latest requirements for stormwater management (Environmental Site Design), and an increase in allowable density. The policy to focus and target redevelopment inside the URDL, allow greater density, reduce VMTs and the generation of greenhouse gas emissions, and decrease the amount of impervious surface, is necessary to accommodate population and employment growth, while enabling restoration and protection of the environment. Also, the State’s Priority Funding Area (PFA), which is essentially the area within the URDL in Baltimore County, supports this land use strategy (Map 4). PFAs were created to direct at least 68 % of future development into areas supported by existing or planned public services and infrastructure, and to protect our irreplaceable natural resources. Baltimore County has managed to direct more than 88% of development into the PFA, and this percentage will increase through implementation of policies in *Master Plan 2020*. Priority Funding Areas meet four key goals:

- (1) Preserve existing communities,
- (2) Make the most efficient use of taxpayer dollars for infrastructure by allowing resources to build on past investments,
- (3) Reduce development pressures on critical farmland and natural resource areas by encouraging projects in already developed areas,
- (4) And strengthen housing and economic resources by sustaining/encouraging walkable communities, thus reducing VMTs and greenhouse gas emissions.

Redevelopment is one of our most important challenges. Concentrations of work-force housing accompanied the manufacturing booms of World Wars I and II. After WWII, massive residential development brought a greater concentration of people to the suburbs. These trends created some pockets of housing that did not age gracefully: many are obsolete by current market standards. In some cases, housing projects and commercial centers fell into disrepair through neglect and disinvestment. Modernization and changes in consumer preferences played a pivotal role, reducing demand for small houses with

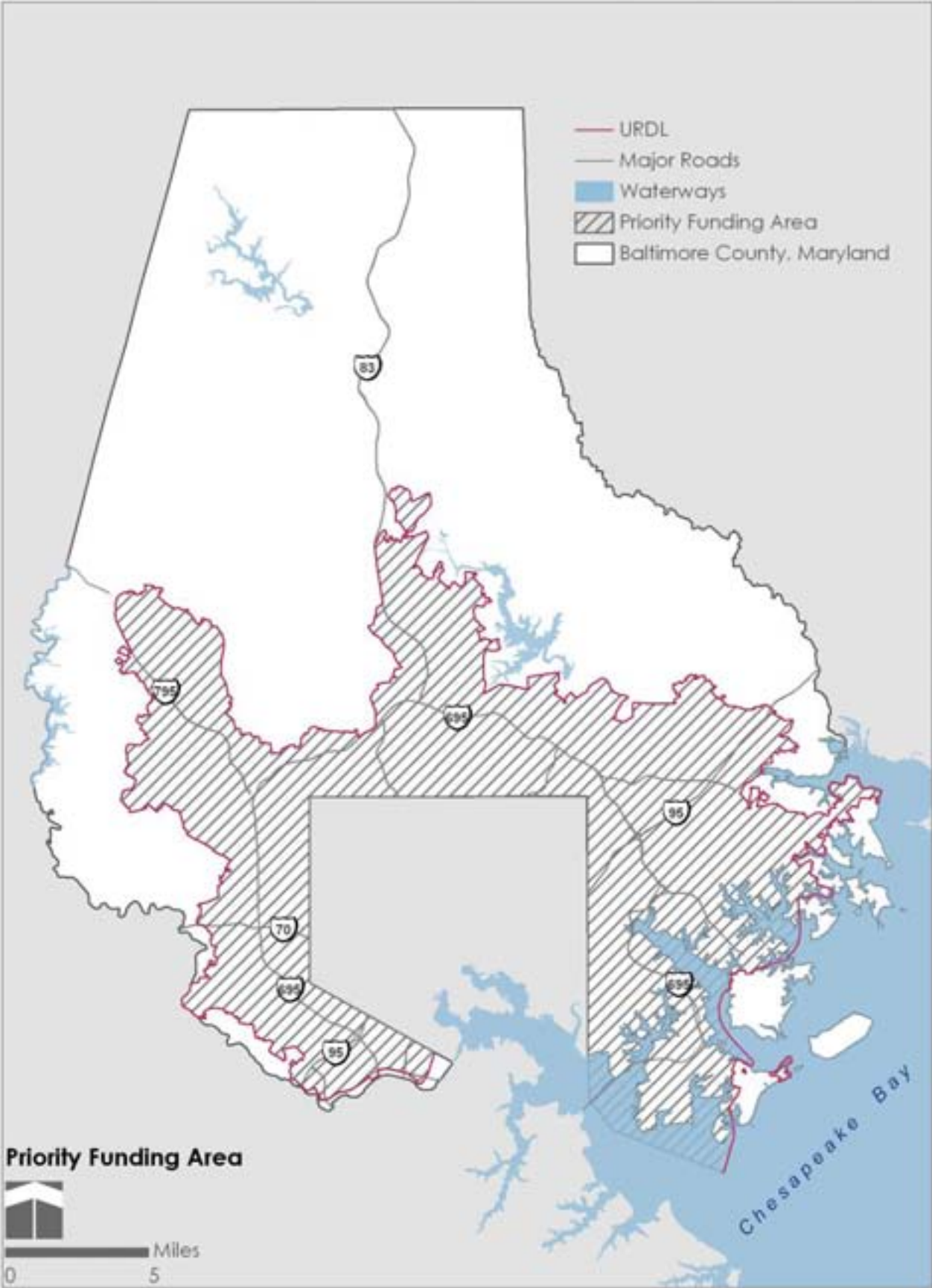
dated amenities and floor plans. In listing its policy priorities for Community Conservation Areas (CCAs), the 2010 Master Plan elevated the importance of redevelopment. That plan called for consolidation and redevelopment of abandoned and underused properties for uses that enhance CCAs.

UDATs and charrettes are comprehensive, community-driven, holistic approaches to planning and revitalization. They are designed to revitalize existing communities, or envision new communities with a sense of place, a well-conceived architectural fabric, and a sense of identity.

The County furthered its effort by initiating Urban Design Assistance Team (UDAT) planning processes for Dundalk, Randallstown, Essex and Towson. The UDAT incorporated extensive outreach and grass-roots involvement of each community with leadership from consultant teams having national expertise. The County continued to fine-tune its redevelopment strategy by enacting the Renaissance Redevelopment Pilot Program, and by administering community based collaborative planning sessions called “charrettes”. Meanwhile, the County implemented several related community improvement projects, including these key redevelopment projects: Fields at Renaissance Park and Renaissance Square in Essex-Middle River, and the Yorkway project in Dundalk. In the future, CCAs will continue to be attractive places where existing and potential homeowners want to live, work and raise families.



Map 4: Priority Funding Area



Recent Trends

In order to create sustainable communities, citizens and decision-makers must recognize the latest trends in housing choices and changes in family makeup. More homebuyers and renters desire to live in areas with shorter commutes to work, convenient access to shopping, dining, and other amenities. Traditional families, married couples with children, are becoming much less common. Young professionals, childless couples, empty nesters and single parents are replacing these traditional families. These consumers tend to prefer condominiums, townhouses and apartments in compact, mixed-use, walkable communities instead of single-family homes in the suburbs.

“Persons born after 1981 and baby boomers prefer to live in compact dense urban places.”

Governing Magazine March 2009

“For 50 years, families with children drove America’s housing industry. But now, married couples with children make up less than 25 percent of American households. And by 2025, less than 20 percent of households will be married couples with children.”

“America’s Families and Living Arrangements: 2003” U.S. Census Bureau (November 2004)

“When prospective homebuyers were asked if they would rather live in a large-lot neighborhood where they would depend entirely on cars to get around, or in more compact neighborhoods with schools, shops, and restaurants nearby, sixty percent chose the compact neighborhood.”

Smart Growth America and National Association of Realtors. 2004 American Community Survey: National Survey on Communities, Washington, DC., October 2004

Land Management Areas

Master Plan 2020 designates “Land Management Areas” that organize the County into general policy areas. The purpose of these areas is to express the *general intention* of the County regarding development and provision of services. More specific details pertaining to these areas can be found in their respective sections of the plan. Additionally, many of these areas have specific community level plans adopted as part of *Master Plan 2020*. The Land Management Areas include the following:

Rural Areas

Agriculture Priority Preservation Areas – These areas are designated for preserving active agriculture activities, and as such are not suitable for dense residential, commercial, or institutional development. The County also designated areas for the Rural Legacy Program including the Coastal, Piney Run, Gunpowder, Long Green, and Manor areas.

Resource Preservation Areas – These areas are designed to protect environmental, historic, and cultural resources, while allowing only limited residential, commercial or institutional development. These areas include Patapsco/Granite, Prettyboy Reservoir, Gunpowder, Liberty Reservoir, Chesapeake Bay, Loch Raven Reservoir, and Soldiers Delight.

Rural Commercial Centers – The County has two rural commercial centers: Hereford and Jacksonville. Community plans have been prepared for each of these centers to help guide development.

Rural Residential Areas – Some areas of limited low-density development are established. These areas include Chestnut Ridge, Parkton, Patapsco/Granite, Hereford, Kingsville, and Jacksonville.

Urban Areas

Community Conservation Areas – These areas generally consist of lower to moderate density suburban residential neighborhoods. The neighborhoods are served with public water and sewer service. The preservation and stability of these communities is of paramount importance. The majority of these areas have community plans adopted as part of the Master Plan. They also contain a significant amount of commercial development, located primarily along the commercial corridors. Areas suitable for compact, mixed-use, walkable, transit oriented development are called Community Enhancement Areas (CEAs). Commercial Revitalization Districts (CRDs), and strip commercial corridors are also located within some of these areas.

Towson Urban Center – This urban center has been the subject of multiple studies. More specific detail

can be found within the *Towson Urban Area* section of the plan.

Owings Mills Growth Area – The last of the originally designated growth areas. See the *Owings Mills Growth Area* section for more information.

Middle River Redevelopment Area – The newest designated growth area. Details are provided in the *Middle River Redevelopment Area* section in the plan.

Employment Center – These areas generally consist of a variety of commercial uses predominantly employment-oriented, some with retail and housing. They may contain heavy industrial uses as well. These areas include CEAs, CRDs, and strip commercial areas. The preservation of family-supporting wage employment is the primary goal.

Proposed Land Use

The Proposed Land Use Map provides general recommendations for land use, based upon the policies provided in *Master Plan 2020*. The map is conceptual and general, and is intended to reflect land use patterns and support the land use objectives of *Master Plan 2020*, rather than identify land use of individual properties or parcels. The use of transects, and “T-zones”, is designed to support compact mixed-use communities, while maintaining the stability of existing community conservation areas (Map 5). The proposed land use map will provide general direction for county land use decisions, and may be amended as needed.

Transect-Based Planning for the Built Environment

A “transect” of nature, first conceived by Alexander Von Humboldt at the close of the 18th century, is a geographical cross-section of a region intended to reveal a sequence of environments. Originally, it was used to analyze natural ecologies, showing varying characteristics through different zones such as shores, wetlands, plains and uplands. It helps study the many elements that contribute to habitats where certain plants and animals thrive in symbiotic relationships to the minerals and microclimate.

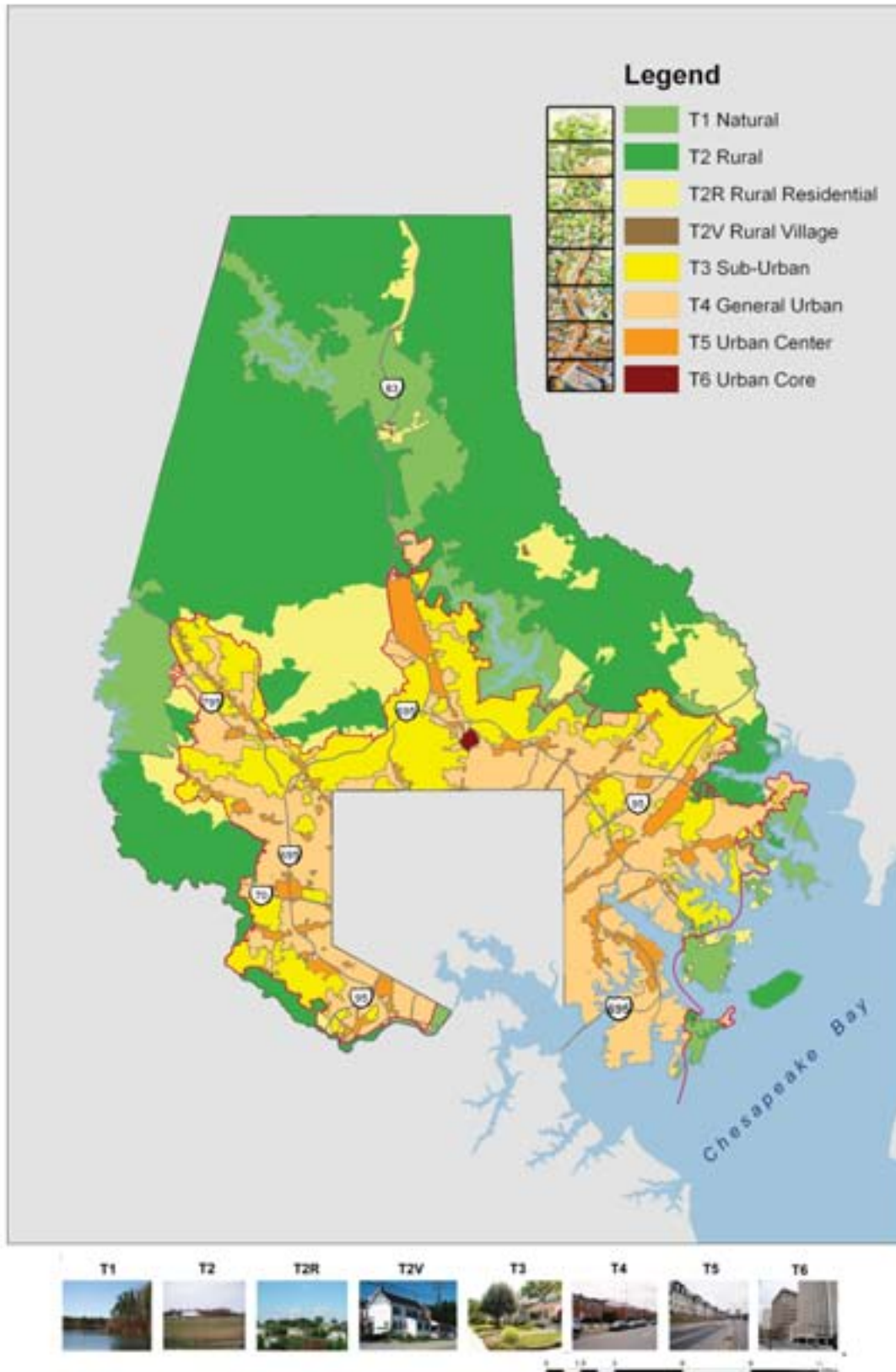
This same system can be used to demonstrate different human habitats. Some individuals prefer living on farms while others prefer living in cities. Before the automobile, American development patterns were walkable, and transects within towns and city neighborhoods reflected a variety of development patterns and uses. These degrees of urbanism are represented in a rural-to-urban transect has been developed which provides six “Transect Zones” (T-zones) for application on the proposed land use map.

The transect, as a framework, identifies a range of habitats from the most natural to the most urban (Map 5). Its continuum, when subdivided, lends itself to the creation of zoning categories. These categories include standards that encourage diversity. The standards overlap, reflecting the successional pattern of development and natural ecosystems. The transect thereby integrates environmental and zoning methodologies, enabling the design of compact, mixed-use, walkable communities that support the viability of natural ones.

- **T-1 (Natural Zone)** contains lands approximating a natural condition, including lands unsuitable for settlement due to topography, hydrology, or vegetation.
- **T-2 (Rural Zone)** consists of sparsely settled lands in an open or cultivated state. These include woodlands, agricultural lands, and grasslands. Typical buildings may include farmhouses and agricultural buildings.
- **T-2 R (Rural Residential Zone)** consists of large lot single-family detached housing. Plantings are informal. All setbacks are generally 50+ feet. Lots are deep to accommodate a larger backyard. Density varies between 2 to 5 acres per dwelling.
- **T-2 V (Rural Village Zone)** takes into account the rural villages of Hereford and Jacksonville. This zone has a mix of smaller scale retail/office and some residential uses. T-2 V preserves the rural village character featuring an attractive and traditional pattern of houses,

Map 5: Proposed Land Use

Proposed Land Use Baltimore County Smart Coded



commercial establishments, open spaces and their relationship to roadways.

- **T-3 (Sub-Urban Zone)** includes low-density residential areas, adjacent to higher zones that contain mixed use. Home occupations and outbuildings may be allowed. Landscaping is naturalistic and setbacks are relatively deep. Blocks may be large and the roads irregular to accommodate natural conditions.
- **T-4 (General Urban Zone)** is characterized by mixed-use, but is primarily residential urban fabric. It may have a wide range of building types including single-family detached and attached houses, and townhouses. Setbacks and landscaping are variable. Streets with curbs and sidewalks define medium-sized blocks.
- **T-5 (Urban Center Zone)** includes higher density mixed-use buildings that accommodate retail, offices, townhouses, and apartments. It has a tight network of streets, with wide sidewalks, steady street tree planting and buildings set close to the sidewalks.
- **T-6 (Urban Core Zone)** has the highest density and height with the greatest variety of uses, and civic buildings of regional importance. It may have larger blocks; streets have steady street tree planting and buildings set close to the wide sidewalks. Typically only large towns and cities have an Urban Core Zone.
- **T-M (Manufacturing Zone)** includes certain industries and manufacturing processes that should not be combined with other uses. By their function, they require that their operations not be closely integrated with other uses (except those with similar characteristics).
- **T-I (Institutional Zone)** many institutional uses should be incorporated into the T-4 and T-5 transects, such as community centers, branch government offices, libraries, etc. However, certain institutions like medical

complexes, educational campuses, and others that benefit from having all their functions in one location may need room to grow. That may make inclusion into a Community Enhancement Area impractical. Such facilities should be close enough to be walkable, and be mutually supportive.

The transect system replaces the conventional separate land use zoning system. The T-zones provide the basis for real neighborhood structure, which relies upon compact, walkable streets, mixed-use, transportation options, and housing diversity. The T-zones vary by the ratio and level of intensity of their natural, built, and social components. Uses may overlap between one T-zone and another. The ability of transects to clarify the compatibility among uses makes them particularly useful in planning the built environment.

They may be coordinated to all scales of planning, from the region through the community scale, down to the individual lot and building. However, any new zoning would be applied at the community scale, and it is important to note that each community will have to establish (calibrate) its own unique development criteria. Furthermore, T-zones should be balanced within a neighborhood structure based on pedestrian sheds (walksheds), so that residents of lower density neighborhoods may still walk to different habitats, such as a main street, or civic space.

Transect-based planning is used throughout the County to provide a solid foundation for all other planning. As Baltimore County moves towards compact, mixed-use, higher-density walkable communities, the successful implementation of transect-based planning will play a key role in further developing the T-4 and T-5 zones.

The Transect Zones and the following graphics for the Transect Zone descriptions and civic spaces were originated and developed by Duany Plater-Zyberk & Co.

Transect Zone Descriptions

	<p>T-1 NATURAL T-1 Natural Zone consists of lands approximating or reverting to a wilderness condition, including lands unsuitable for settlement due to topography, hydrology or vegetation.</p>	<p>General Character: Natural landscape with some agricultural use Building Placement: Not applicable Frontage Types: Not applicable Typical Building Height: Not applicable Type of Civic Space: Parks, Greenways</p>
	<p>T-2 RURAL T-2 Rural Zone consists of sparsely settled lands in open or cultivated states. These include woodland, agricultural land, grassland, and irrigable desert. Typical buildings are farmhouses, agricultural buildings, cabins, and villas.</p>	<p>General Character: Primarily agricultural with woodland & wetland and scattered buildings Building Placement: Variable Setbacks Frontage Types: Not applicable Typical Building Height: 1- to 2-Story Type of Civic Space: Parks, Greenways</p>
	<p>T-3 SUB-URBAN T-3 Sub-Urban Zone consists of low density residential areas, adjacent to higher zones that some mixed use. Home occupations and outbuildings are allowed. Planting is naturalistic and setbacks are relatively deep. Blocks may be large and the roads irregular to accommodate natural conditions.</p>	<p>General Character: Lawns, and landscaped yards surrounding detached single-family houses; pedestrians occasionally Building Placement: Large and variable front and side yard Setbacks Frontage Types: Porches, fences, naturalistic tree planting Typical Building Height: 1- to 2-Story with some 3-Story Type of Civic Space: Parks, Greenways</p>
	<p>T-4 GENERAL URBAN T-4 General Urban Zone consists of a mixed use but primarily residential urban fabric. It may have a wide range of building types: single, sideyard, and rowhouses. Setbacks and landscaping are variable. Streets with curbs and sidewalks define medium-sized blocks.</p>	<p>General Character: Mix of Houses, Townhouses & small Apartment buildings, with scattered Commercial activity; balance between landscape and buildings; presence of pedestrians Building Placement: Shallow to medium front and side yard Setbacks Frontage Types: Porches, fences, Dooryards Typical Building Height: 2- to 3-Story with a few taller Mixed Use buildings Type of Civic Space: Squares, Greens</p>
	<p>T-5 URBAN CENTER T-5 Urban Center Zone consists of higher density mixed use building that accommodate retail, offices, rowhouses and apartments. It has a tight network of streets, with wide sidewalks, steady street tree planting and buildings set close to the sidewalks.</p>	<p>General Character: Shops mixed with Townhouses, larger Apartment houses, Offices, workplace, and Civic buildings; predominantly attached buildings; trees within the public right-of-way; substantial pedestrian activity Building Placement: Shallow Setbacks or none; buildings oriented to street defining a street wall Frontage Types: Stoops, Shopfronts, Galleries Typical Building Height: 3- to 5-Story with some variation Type of Civic Space: Parks, Plazas and Squares, median landscaping</p>
	<p>T-6 URBAN CORE T-6 Urban Core Zone consists of the highest density and height, with the greatest variety of uses, and civic buildings of regional importance. It may have larger blocks; streets have steady street tree planting and buildings are set close to wide sidewalks. Typically only large towns and cities have an Urban Core Zone.</p>	<p>General Character: Medium to high-Density Mixed Use buildings, entertainment, Civic and cultural uses. Attached buildings forming a continuous street wall; trees within the public right-of-way; highest pedestrian and transit activity Building Placement: Shallow Setbacks or none; buildings oriented to street, defining a street wall Frontage Types: Stoops, Dooryards, Forecourts, Shopfronts, Galleries, and Arcades Typical Building Height: 4-plus Story with a few shorter buildings Type of Civic Space: Parks, Plazas and Squares; median landscaping</p>

Civic Space Descriptions

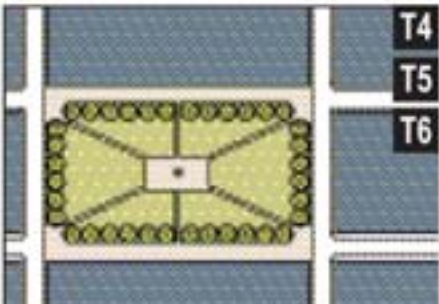
a. Park: A natural preserve available for unstructured recreation. A park may be independent of surrounding building Frontages. Its landscape shall consist of Paths and trails, meadows, waterbodies, woodland and open shelters, all naturalistically disposed. Parks may be linear, following the trajectories of natural corridors. The minimum size shall be 8 acres. Larger parks may be approved by Warrant as Special Districts in all zones.



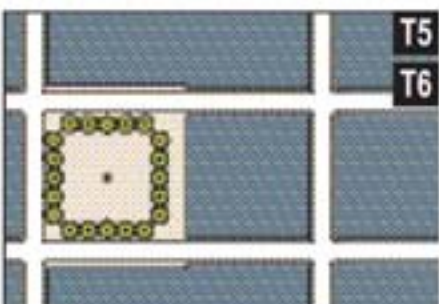
b. Green: An Open Space, available for unstructured recreation. A Green may be spatially defined by landscaping rather than building Frontages. Its landscape shall consist of lawn and trees, naturalistically disposed. The minimum size shall be 1/2 acre and the maximum shall be 8 acres.



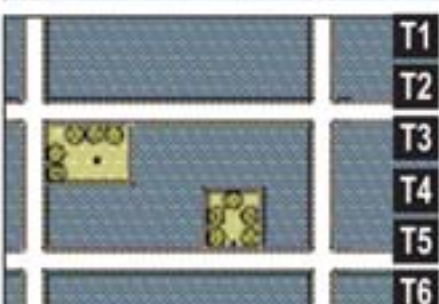
c. Square: An Open Space available for unstructured recreation and Civic purposes. A Square is spatially defined by building Frontages. Its landscape shall consist of paths, lawns and trees, formally disposed. Squares shall be located at the intersection of important Thoroughfares. The minimum size shall be 1/2 acre and the maximum shall be 5 acres.



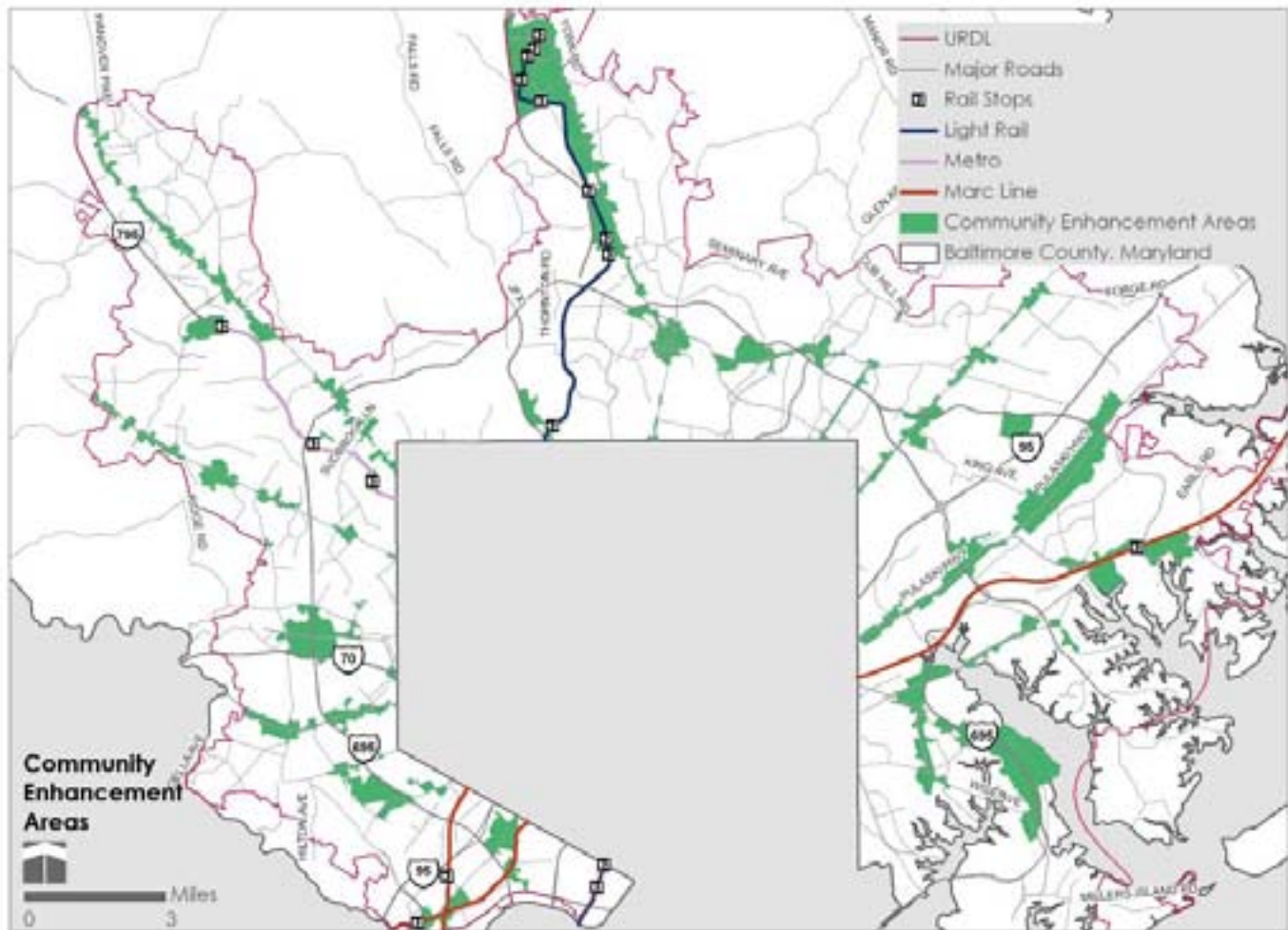
d. Plaza: An Open Space available for Civic purposes and Commercial activities. A Plaza shall be spatially defined by building Frontages. Its landscape shall consist primarily of pavement. Trees are optional. Plazas *should* be located at the intersection of important streets. The minimum size shall be 1/2 acre and the maximum shall be 2 acres.



e. Playground: An Open Space designed and equipped for the recreation of children. A playground *should* be fenced and may include an open shelter. Playgrounds shall be interspersed within Residential areas and may be placed within a Block. Playgrounds may be included within parks and greens. There shall be no minimum or maximum size.



Map 6: Community Enhancement Areas



Community Enhancement Areas

Community Enhancement Areas (CEAs) are areas suitable for sustainable redevelopments that are compact, mixed-use, and walkable (Map 6). An area with mixed-use buildings containing retail and/or office use on the lower floors and residential units above attracts new investment, provides a vibrant atmosphere, and offers diversity of housing. Environmental Site Design and conversion of existing impervious surfaces to green spaces such as parks,

greenways and public squares enhances the social and cultural life of the neighborhood and improves quality of stormwater runoff. These compact, mixed-use walkable communities have excellent, sustainable design, using the latest technologies in energy savings and environmental protection, and will focus on walkability and pedestrian access.

Site Selection

The ideal locations for CEAs are sites that exist within, or can extend traditional town centers. Other viable alternatives include underused or undervalued areas. Various sites in the County have been identified for redevelopment as sustainable communities (Map 6). Criteria used to determine potential CEAs include the following: strong local support, good multi-modal access (especially near existing or proposed transit systems), potential for walkable and sustainable design, ability to complement adjacent land uses, existing adequate public services and facilities, and limited environmental constraints.

Although the areas identified may be suitable for redevelopment, the designation does not mean that CEAs will necessarily be established on these sites, and in these areas, development will occur in accordance with the current zoning. Furthermore, other tracts outside of these CEAs are still eligible for redevelopment opportunities. The design of a particular redevelopment proposal is very site-specific: that is, what may work on one parcel, or in a certain area, might be totally inappropriate for another site, or a different area in the County.

Compact

To accommodate population and employment growth while using less land area, it is necessary that developments become more compact. There is a segment of our population that desires to live in these types of denser communities, due to the inherent benefits of being able to take available public transportation or to easily walk to work, shops, and



other destinations. Younger professionals with busy careers, and elderly persons more often do not want to spend the time and money it takes to maintain a single home, preferring condominium or apartment living, close to amenities and convenient public transportation.

One major advantage of compact CEAs is that they are increasingly self-sustaining places to live, work, study, shop, and recreate. Design provides a wide range of building types and sizes, with the maximum heights of buildings closer to the main roads, transitioning toward the styles and proportions of the surrounding residential neighborhoods.

Mixed-Use

Mixed-use in a CEA refers to an area that contains a variety of different uses. Offices, retail, and other types of commercial businesses are combined with residences, institutional and government uses, and civic spaces in the same building and/or development complex. Plazas, squares, greens and playgrounds, are also merged in the project, with important functional interrelationships integrated by attractive and coherent physical design. The site and structures are designed to include services and opportunities of interest to all ages from senior citizens to the very young. By consolidating these many varied uses in CEAs, land use can be reduced to achieve the compactness and walkability of sustainable, mixed-use neighborhoods. When complementary uses are developed in proximity to each other, it contributes to a much more interesting and attractive walkable environment. The new mixed-use development must also be accessible to adjacent neighborhoods by safe, convenient multimodal pathways. The mixed-use CEA may become the center of the larger community including adjacent neighborhoods, and present a new sense of place.

Mixed-use redevelopment brings different complexity and costs than greenfield development. Often, it is difficult to assemble small parcels into sites large enough to achieve revitalization goals. Redeveloping underutilized or vacant properties with compact mixed-use walkable sustainable communities remains the most viable, cost-effective option. CEAs will help revitalize our older neighborhoods, accommodate new



growth in a well-planned, efficient manner, and aid in protecting and restoring our natural water resources.

Walkability

Walkable design is very important to these developments. Redevelopment with more compact communities, increased road connectivity including shorter blocks and larger sidewalks, will allow residents to walk to work, school, shopping and other destinations. Buildings should align with each other along the streets with parking behind them to maximize the commercial frontage on the street. Roads must be carefully designed to allow safety for walkers, along with various transportation modes, such as bicycles, transit vehicles, and automobiles. Walkable connections to the existing nearby communities help create a healthier, more vibrant, pedestrian-friendly place to live. It must be easy and inviting for residents to walk to their destinations. If safe and convenient, all residents, from children to senior citizens, will enjoy the many health benefits of walking.

Transportation

Potential redevelopment sites located close to existing or proposed public transit systems are the highest priority (Map 7). Transit Oriented Developments (TODs) present several benefits towards achieving a sustainable society. Residents can easily use the transit to go to many destinations outside of their neighborhoods. Mass transit options should be available and convenient to these areas and must

provide a safe, convenient, and comfortable means of transportation for residents to make longer commutes. Another benefit of mass transit availability is the resultant decrease in ownership of vehicles due to less need for multiple cars per household. Fewer vehicles on the roads means that streets can be more walkable, transportation costs will be reduced, and there will be less pollution. However, all modes of transportation must be included, with strong emphasis and the highest priority on walkability, bicycling, and mass transit.

Public Infrastructure and Services

The ideal areas for redevelopment include adequate public water, sewer, roads, schools and other public facilities and services. Items to be analyzed in determining suitability of an area to accommodate population growth are the adequacy of existing and proposed infrastructure. When there is not enough water and sewer capacity, or schools and roads are overcrowded, corrections must be made, or other opportunity sites chosen. In some cases, redevelopment may bring new or improved services to the area. Redevelopment should not overburden infrastructure.

Providing appropriate open spaces and recreational activities for new residents living within these areas and visitors is critical. Appropriate open spaces may consist of areas for gathering, meeting, and relaxing. The County will develop new standards suitable for these types of developments, some of which may consist of public squares and some which may include private facilities for more active recreation.

Environmental Constraints

One of the main reasons to redevelop in CEAs is to improve the environment. Determining what the existing environmental constraints are on a property is undertaken at the beginning of the development process. Often, streams, wetlands, floodplains, steep slopes or other natural features are located on the site and must be protected.

Baltimore County is now approaching build-out, which means that the more easily developed land

is gone, and the remaining land often contains environmental constraints. This challenge must be met early in the review of a site.

Surrounding Neighborhoods

It is important that the CEAs enhance the surrounding neighborhoods, and not compete with adjacent uses. Improvements in street connectivity increase walkability. Retail, business and civic uses provide goods, services and employment opportunities closer to existing neighborhoods. The numerous amenities in the CEAs will benefit the surrounding locale.

Community Support

Due to the diversity of the County, not all CEAs should be developed in the same manner. Areas suitable for CEAs should be planned in order to meet the specific needs of the community. In those circumstances, existing staff from Baltimore County will facilitate the design of CEAs through a charrette or similar process to include all interested parties. It is essential that all interested stakeholders be included in the creation of redevelopment plans at the beginning. The process will involve all property owners, citizens, community groups, business owners, appropriate government agencies, and any other persons early in the planning and implementation phases of concepts proposed. Comments, questions and suggestions assist in the architectural design of the buildings, layout of the property, and in all aspects of the new neighborhood. Participation by all stakeholders will be encouraged and appreciated.

Policy: Development and redevelopment of under-utilized properties inside the URDL within Community Enhancement Areas will be encouraged.

Actions:

(1) With assistance from all stakeholders, including citizens, developers, property owners, and government officials, identify appropriate sites within the URDL boundary, for potential redevelopment as CEAs.

(2) Examine the selected areas for adequate infrastructure, existing and proposed open/civic spaces, public transportation options, environmental constraints and any other challenges.

(3) Prioritize sites for greatest potential for success, with possible Transit Oriented Development (TOD) projects having the highest priority. (*See Transportation for further information on TOD*)

(4) Investigate all possible incentives that would encourage/facilitate redevelopment of under-utilized commercial properties.

(5) Develop specialized overlay zones that represent community consensus. Involve all stakeholders in the planning process with tools such as an Urban Design Assistance Team (UDAT) or a public planning charrette process.

(6) Encourage quality, sustainable design, with great emphasis on walkability, connectivity, and improvement of the quality of stormwater runoff.

(7) Review all subsequent plans and building permits for compliance with the approved development proposal.

(8) Examine the development plan and permit review procedures for methods to expedite the approval process.

(9) Create a new mixed-use zone intended to accommodate residential, employment, office and retail uses in the same development and/or structure, and apply the new zone to areas designated as CEAs.

(10) Develop standards to assure the provision of appropriate and adequate open spaces that meet the needs of new residents.

Policy: Seek new financial and programmatic tools to engage private-sector stakeholders in revitalization and to bring private land into the redevelopment process.

Actions:

(1) Work with private lenders and investors to make sufficient financing available for redevelopment projects. Funding for the development entity's activities could consist of public and private funds, including loan deposit funds made available by local and regional lenders.

(2) Consider offering Tax Increment Financing (TIFs), Payment in Lieu of Taxes (PILOTs), and other tax incentives to reduce the private sector costs of redevelopment that promotes a public purpose.

Senior Citizens

The physical design and civic nature of CEAs provide ideal conditions for elderly persons to access social, recreational, medical, and county services, events and resources. CEAs also enhance their daily living in a safe, walkable and attractive environment. Volunteer activities such as environmental upkeep and beautification are at close proximity, and there is convenient access to retail stores and services (Map 8). There are opportunities to interact with others of all ages in the community, at recreation centers, parks and libraries. These places are conducive to individuals with mobility limitations, but also attract younger active seniors, and younger generations, increasing opportunities for interactions among all age groups. Baltimore County continues its commitment to providing conditions and services that keep older adults healthy, independent and participating members of the community.

Policy: Facilities and uses that engage and support the needs and interests of older citizens should be included in CEA sites.

Actions:

(1) Consult with Office of Aging and community groups on specific benefits a CEA site might bring to our senior citizens.

(2) Involve elder support groups in the design and function of specific projects in CEAs.

Community Stewardship

Organized citizen involvement is particularly important in bringing the needs and interests of communities to the attention of public officials, in shaping County plans to reflect community needs and concerns, and in ensuring that projects are implemented in an effective and timely manner. Baltimore County will continue to support, encourage, and collaborate with associations, both residential and business, throughout the county in order to stimulate citizen participation and promote sustainable communities.

Community-based planning efforts, such as the UDATs and charrettes can strengthen community leadership and cohesion. For example, one outcome of the Dundalk UDAT was the establishment of the Dundalk Renaissance Corporation (DRC), an effective Community Development Corporation (CDC). The DRC has a successful track record of promoting citizen participation, organizing volunteer projects, rehabilitating existing housing stock, and representing the interests of community residents.

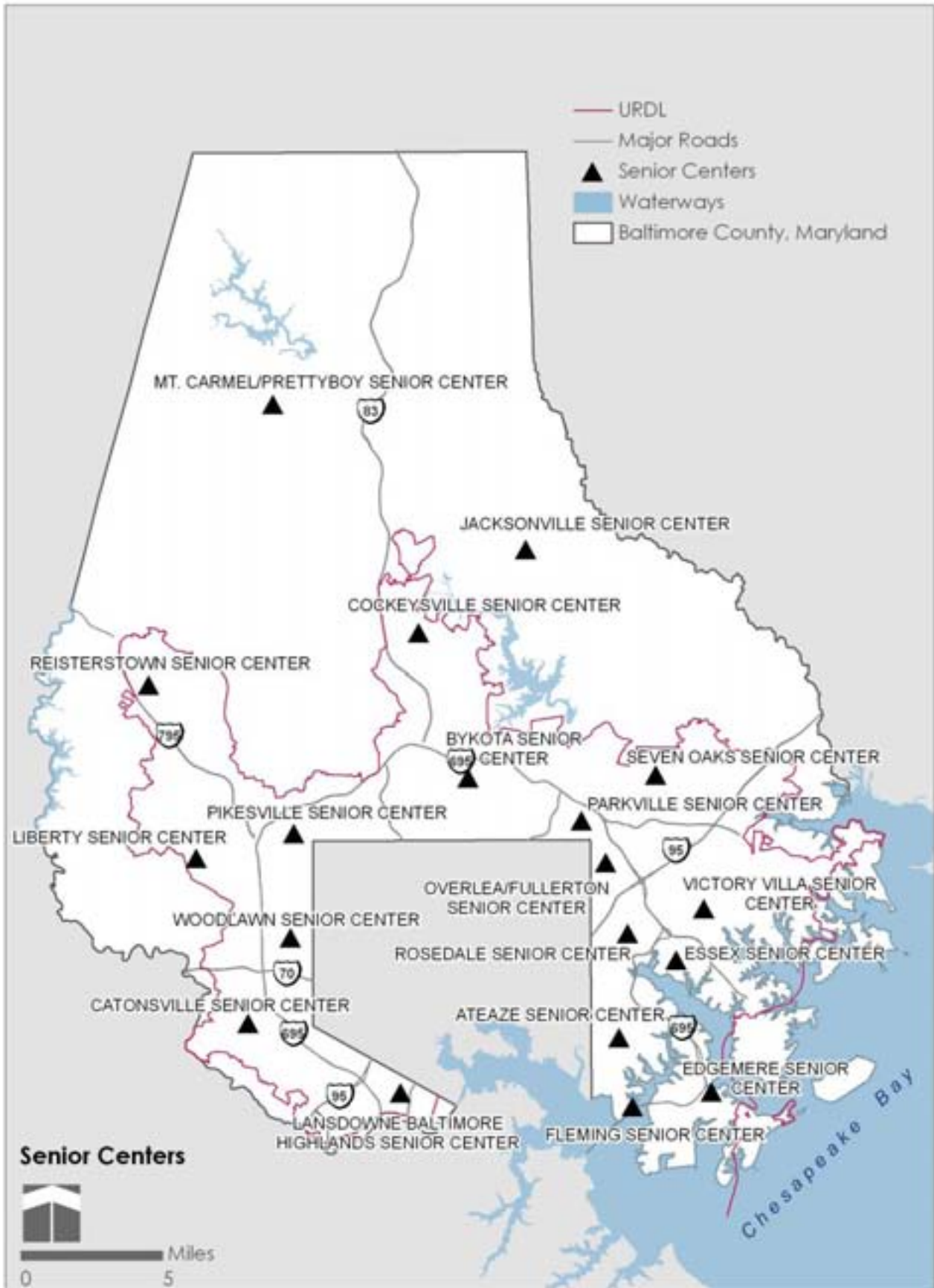
Policy: Encourage and support the formation and activities of community associations, business associations, and community development corporations in the Community Conservation Areas, and in CEAs.

Actions:

(1) Continue to promote and encourage county residents to create business and residential associations that empower citizens and foster self-reliance.

(2) Encourage and support the creation of Community Development Corporations (CDCs), where appropriate, to address housing and community development needs, and foster citizen involvement and stewardship. CDCs can also be effective tools in securing grants and other resources to fund community based housing programs.

Map 8: Senior Centers



(3) Continue grass roots community-based organizing and information sharing through e-mail, the county website, e-blast updates, internet-based social networking, and meetings with civic, faith, business, educational leaders and other stakeholders.

(4) Continue to administer community-based planning to ensure conformance with the Master Plan, and that the resulting plans and projects address community concerns, and are successfully implemented.

Community Conservation Areas

Baltimore County's Community Conservation Areas (CCAs) encompass the County's more densely populated, established communities (Map 9). Nearly 75% of the county's residents live in these areas, where there is a wide range of housing choices. Many of these communities feature small-town scale commercial centers, a proud history and culture, and an urban dynamic. They also encompass some of the County's larger employment centers.

The CCAs were first delineated in the 1989-2000 Master Plan. By adopting these areas as a new land use designation, the County set precedent, and began a much-needed push to "conserve, revitalize and enhance our older residential communities." The move to protect and invest in the older communities, and revitalize their commercial hubs followed the previous period when most public investment went to the new designated Growth Areas.

Preserving CCAs is a fundamental component of the County's critical effort to effectively maintain, strengthen and manage its built environment. This priority grows in importance as our society continues to elevate principles of sustainability thereby reducing land consumption, and utilizing sustainable construction techniques to preserve resources.

Baltimore County is proud of the plans created and projects implemented to conserve its older communities. Collaborative planning efforts have been undertaken in communities throughout the county. These include four large-scale enterprises that

employed the Urban Design Assistance Team (UDAT) planning model in Dundalk, Randallstown, Essex-Middle River, and Towson, and area community plans developed and adopted in the last ten years. Planning charrettes also helped craft a specific redevelopment plan for the former Kingsley Park apartments in Essex-Middle River, to create the Walkable Towson Plan, and to re-energize Turner Station. In addition, the Office of Community Conservation (OCC) developed a range of effective programs providing support to homeowners, homebuyers, and renters. Furthermore, the County made a major capital investment in streetscape enhancement projects in 12 of the 14 traditional commercial centers, designated as Commercial Revitalization Districts (CRDs), from Lansdowne on the west side to Essex-Middle River on the east side.

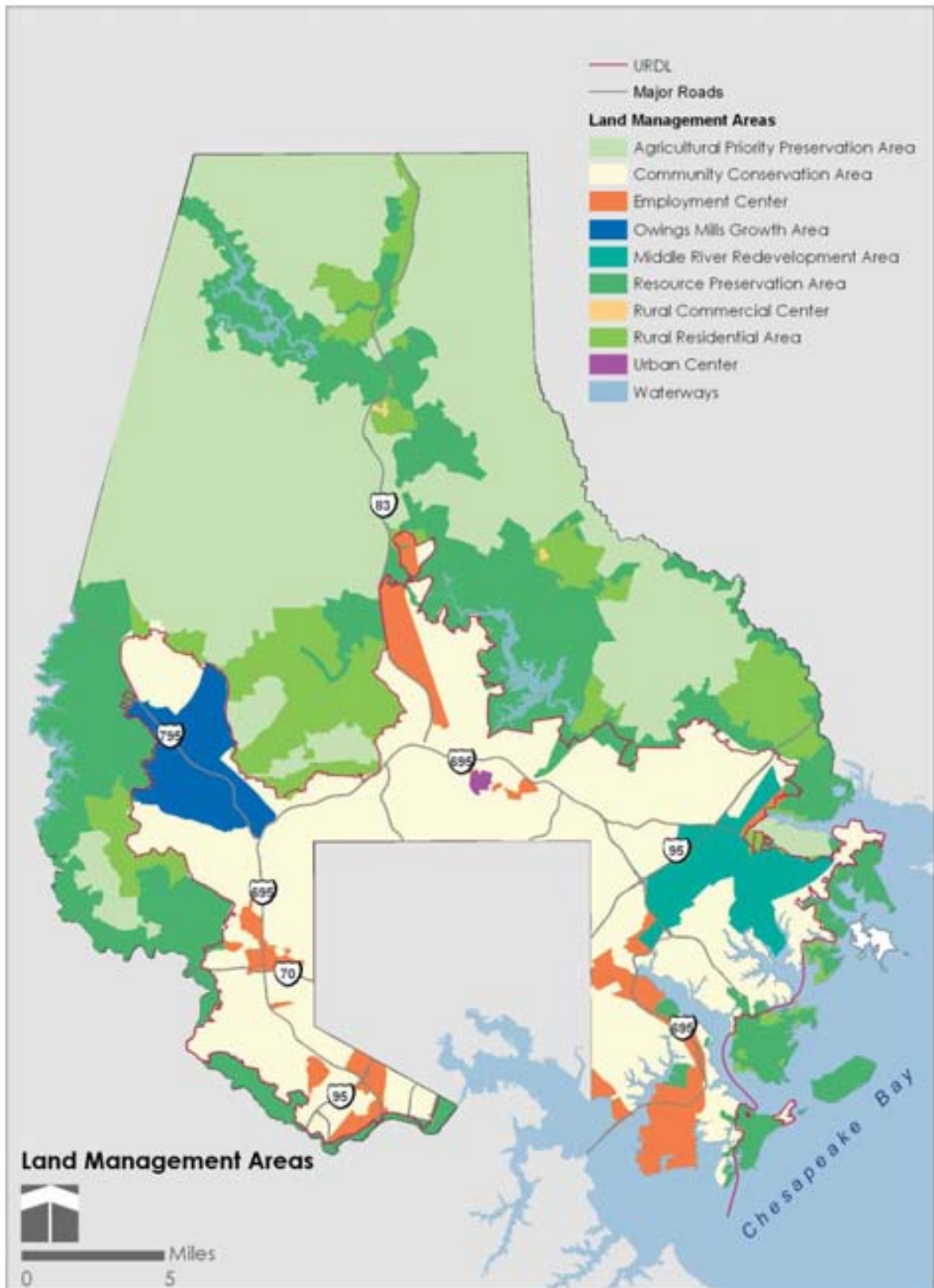
These planning efforts, and vigorous follow-through involving capital projects and public-private redevelopment produced visible improvements. In some cases, large-scale transformation was achieved. An inspiring review of community conservation activities in recent years can be found in the award-winning report, *Baltimore County Works*, published in 2008.

While the County is proud of its success, there are challenges to be met. Going forward, a sustainable community conservation strategy will include effective action in the following subject areas: Sustainable Housing, Homeownership, Workforce Housing, Rental Housing, and Green Housing.

Sustainable Housing

Baltimore County's CCAs have many advantages for residents, including convenience to shopping, recreation, and cultural amenities, housing affordability, good neighborhood schools, public transportation and community stability. However, it is also true that many of the houses in these areas lack amenities desired by today's homebuyers. Many communities consist of houses that are small, with too few bedrooms and bathrooms, and too little closet space. These houses can be expensive to maintain, with inadequate heating and cooling systems, poor or nonexistent insulation, leaky windows and

Map 9: Land Management Areas



doors, inefficient appliances, and outdated electrical and plumbing systems. However, with targeted reinvestment and creative financing instruments, these houses can be adapted for small families with young children, for workforce housing, as starter homes for first-time homebuyers, and for young professionals just starting their careers.

Many older communities, with low to moderate household incomes, struggle in tough economic times to maintain their properties. Some homeowners allow their homes to fall into disrepair, affecting surrounding property values. The County can, with assistance from community leaders, work to get egregious violations corrected, and to attain code compliance throughout the community. Enforcement must be pursued with a practical approach that allows residents to make corrective actions within a reasonable amount of time. Code enforcement needs to be more assertive and targeted to ensure that a consistent standard of enforcement is applied to all Baltimore County communities.

In order to achieve sustainable communities in the CCAs, a strategy that builds on the community's strengths, and uses public resources in a practical and sustainable way is proposed. This strategy fosters stewardship of our built environment and encourages investment in our existing residential housing stock. The Office of Community Conservation's mission, to "preserve" and "enhance" the County's older communities must be expanded to "preserve, enhance, and sustain" those communities long into the future.

Policy: Baltimore County should seek to assist in sustaining the aging housing stock in older communities, which require ongoing maintenance and repair.

Actions:

(1) Use the County's Single Family Loan and Emergency Repair Program for moderate-income homeowners. This program is funded by the federal Community Development Block Grant (CDBG) Program, and is administered by the U.S. Department of Housing and Urban Development (HUD). The program provides

a low- or no-interest deferred or amortizing loan, or a grant, to low-to-moderate income homeowners earning 80% or less of the Area Household Median Income (AHMI), to bring their properties up to code, correct hazardous conditions, or make selected improvements. At present, the program does not meet the needs of many working households earning more than 80% of the AHMI.

(2) Use tax credits and other financing instruments to make existing housing stock more energy efficient, and to improve indoor air quality, durability, curb appeal, and attractiveness.

(3) Pursue targeted code enforcement of vulnerable neighborhoods to correct violations.

Homeownership

The Settlement Expense Loan Program (SELP), the Mortgage Assistance Loan Program (MALP), and the Neighborhood Stabilization Program (NSP) provide significant resources to homebuyers looking at selected neighborhoods. These programs have catalyzed investment by first and second-time buyers in communities with declining property values, and vacant, foreclosed properties.

Investor speculation often leads to instability in the housing market. Rental conversions may increase due to a high number of foreclosed properties, and investors capitalizing on properties at low prices. This results in declining property values. The County should continue to offer foreclosure prevention and mitigation counseling services, and provide support for loan modifications that enable more families to avoid foreclosure. These efforts help to reduce the number of vacant and deteriorating properties in County communities, and to avoid further declines in property values in areas with high foreclosure rates.

Policy: Use housing programs that assist low to moderate-income households in purchasing homes.

Actions:

- (1) Use funding of the above-mentioned programs to target households with incomes ranging between 80-120% of the AHMI, to encourage qualified homebuyers to invest in older neighborhoods.
- (2) Provide incentives to homebuyers that participate in educational and housing counseling programs on the responsibilities of homeownership and community stewardship.

Workforce Housing

Workforce housing is an important asset to any community, but particularly to Baltimore County, which is the second largest employment center in the state of Maryland. The County has over 21,000 businesses providing more than 375,000 jobs. Employment includes jobs in education and health care, trades, transportation, utilities, professional and



the state of Maryland. The County has over 21,000 businesses providing more than 375,000 jobs. Employment includes jobs in education and health care, trades, transportation, utilities, professional and business services, manufacturing, construction, and government services.

If possible, most workers prefer to live in close proximity to employment in order to maximize their quality of life, and minimize commuting time and expense. They require either affordable homeownership opportunities, or rental housing that are attractive, safe, inexpensive to maintain, and close to services, public transportation, employment, and recreation. Community Conservation Areas have much to offer in this respect.

However, the availability of new housing that meets buyers' necessities is quite limited in most CCAs. This is due to the shortage of raw land, and the difficulty of assembling land parcels large enough for a viable development. In some cases, such as Waterview and Renaissance Square in Essex-Middle River, redevelopment was necessary to create new, vibrant neighborhoods in aging communities. However, HUD played a key role in the county's acquisition of the land. In many cases, residential redevelopment may not be an option due to costs and scarcity of land. Therefore, the County's workforce housing strategy must include improving the marketability and sustainability of existing housing stock.

In Baltimore County, there are currently over 20,000 households in the Section 8 Housing Choice Voucher program seeking a subsidy to make the cost of rental housing affordable. This statistic highlights the need for more workforce and affordable housing to meet the needs of Baltimore County households. Mixed income rental housing is preferable to rental communities with predominantly low-income households. Opportunities to include rental housing in mixed-use, mixed income, and mixed housing projects should be encouraged, and the County should provide appropriate incentives and zoning to encourage such development.

Policy: County programs should support construction of moderately priced workforce housing.

Actions:

(1) Study the feasibility/practicality of inclusionary zoning ordinances to increase workforce housing in market rate communities by: a) Setting aside a percentage of affordable dwelling units, and/or b) Providing density bonuses to developers who include affordable workforce housing in new residential or mixed-use projects.

(2) Revisit the Renaissance Redevelopment Program to explore incentives for mixed-income housing in communities close to services, transportation, and employment.

(3) Conduct a study to identify the opportunities for transit-oriented development (TODs), to include workforce housing, and establish TOD overlay zones that may include a portion of workforce housing near public transportation.

(4) Create density bonuses and land banking in targeted areas to allow expansion of workforce housing and provide incentives for developers to build new communities.

(5) Link neighborhoods through planning and development of bike trails, walking paths, and common commercial corridors in order to improve connectivity to employment centers from existing (and new) affordable communities.

Rental Housing

Well-maintained rental housing is an important asset to a community. It provides an option for people of modest income, for young professionals just entering their career fields, and for empty nesters who may prefer not to have maintenance worries, snow to shovel, or grass to cut. Rental housing also appeals to

people who simply do not want the responsibilities of owning their own home.

Rental housing holds its value and contributes positively to the community when it is well maintained, well lit, safe, and attractive. To achieve this, proper management of rental housing is necessary. Judicious code enforcement by Baltimore County, and prudent use of incentives and regulations, will help to ensure that rental-housing stock maintains its market value and has a positive aesthetic value.

Policy: Well-managed and maintained rental housing should be supported and ensured by enhanced tools used by the County.

Actions:

(1) Apply code enforcement consistently, on a countywide basis, in conformance with existing housing policies, codes, and regulations.

(2) Continue to review rental licensing requirements periodically to ensure that health and safety standards are maintained.

(3) Provide training sessions for owner-managers, property managers and leasing assistants so that rental communities will be better managed.

(4) Continue to use the federal HOME Investment Partnership Act Program to preserve affordability, while improving energy efficiency, quality, durability, and attractiveness.

(5) Encourage the development of new mixed-income communities that are transit oriented or are located near major employment centers. These neighborhoods may also be connected to the activity centers via bicycle and pedestrian paths.

Green Building Program

The Office of Community Conservation (OCC) identifies and directs resources to promote energy efficient and sustainable buildings. The County’s Green Building Program requires the use of green and sustainable building and remodeling practices when using OCC financing instruments. The program has two primary goals: improving energy efficiency and indoor air quality. Increased energy efficiency reduces utility costs and greenhouse gas emissions, and enhances the value and durability of the housing. Lower health care costs, and a higher quality of living can be achieved with cleaner indoor air.

The Program requires that property owners applying for loans or grants through OCC obtain an energy audit by an approved contractor prior to the development of a scope of work. Depending on the type of project, all work must be performed by a contractor certified by Energy Star certification, the Building Performance Institute, Leadership in Energy and Environmental Design (LEED), Maryland Home Performance with Energy Star, Enterprise Green Communities, Earth Advantage, or another acceptable certification. Funding for this program is provided through federal sources that restrict the beneficiaries to low to moderate-income households, individuals or communities. Baltimore County sponsors programs that provide low-interest loans or grants to improve energy efficiency, upgrade mechanical systems, improve air quality, or make capital improvements that increase marketability. Improvements may be financed through tax assessments over several years, and run with the property in the event ownership changes.

It is recognized that toxins and allergens may affect the health of a building’s occupants, and off-gases produced by volatile organic compounds (VOCs) are sometimes in paints and other surface treatments, floors, and cabinets. The use of appropriate building materials with low, or no VOCs may reduce the occurrences of respiratory distress in occupants. Lead hazards, mold, and asbestos found in older homes must be mitigated as part of any rehabilitation or retrofit approach. OCC has implemented a new protocol in the scope of work for rehabilitation

projects. The assessment of a dwelling unit occupied by a household seeking financial assistance for housing, either as a grant or loan, must include an energy audit, lead testing, and an inspection for other visible hazards that may negatively impact the health of occupants.

Policy: Walkable communities, energy efficient retrofits of existing housing, and the use of green technologies in new housing construction should be encouraged and supported by countywide programs.

Actions:

- (1) Continue the County’s programs for sidewalk installation and repair, and for bringing existing sidewalks into conformance with the Americans with Disabilities Act.
- (2) Continue the County’s street tree planting program in existing communities, and ensure that new trees are planted to replace trees removed due to conflicts with utilities. Between 2002 and 2007, a total of 7,948 trees were removed.
- (3) Existing revitalization tax credits could be made available to property owners as incentives for owner-financed improvements and upgrades that result in at least a 20% increase in energy efficiency. Tax Increment Financing (TIFs) may also be used to help finance the cost of owner-financed improvements on residential and non-residential capital projects of sufficient size.
- (4) Continue the County’s Green Building Program to target residential and commercial property owners to improve energy efficiency and promote sustainable practices. Provide low-cost loans and grants to make

In the U.S., buildings account for approximately 40% of all greenhouse gas emissions. Buildings built prior to the 1991 Energy Code emit eighty-five percent (85%) of all greenhouse gas emissions produced by buildings. Most of the housing stock in the County’s Community Conservation Areas was built prior to 1990. Improving the energy efficiency and sustainability of the housing stock in the CCAs could result in significant reductions of greenhouse gas emissions.

improvements that reduce energy usage and promote healthier indoor air quality in residential and non-residential buildings.

- (5) Require Energy Audits by certified personnel for all building rehabilitation projects receiving public funds.
- (6) Provide training and certification opportunities to County personnel in LEED accreditation, Building Performance Institute certification, Energy Star Certification and other certificate programs that promote energy efficient and sustainable building practices.
- (7) Encourage new construction for residential meet or exceed the design and construction standard of LEED silver certification, where feasible.
- (8) Establish incentives for developers to build high performance buildings with LEED Gold certification and above.
- (9) Upgrade building codes and provide incentives to allow, where feasible, new housing and major rebuilt (“gutted”) houses to be built to LEED standards, or equivalent.
- (10) Recommend that the County Council revise codes to incorporate the principles of LEED Neighborhood Design (LEED-ND) for residential developments.

LEED ~ Leadership in Energy and Environmental Design

A LEED-certified home is designed and constructed in accordance with the rigorous guidelines of the LEED for Homes green building certification program. LEED for Homes is a consensus-developed, third party-verified, voluntary rating system which promotes the design and construction of high-performance green homes.

Enterprise Green Communities

Green Communities is the first national green building program developed for affordable housing. It focuses on the use of environmentally sustainable materials, reduction of negative environmental impacts and increased energy efficiency. It emphasizes designs and materials that safeguard the health of residents and locations that provide easy access to services and public transportation.

Energy Star Certification

Homes that earn the ENERGY STAR certification must meet guidelines for energy efficiency set by the U.S. Environmental Protection Agency. ENERGY STAR qualified homes are at least 15 percent more energy efficient than homes built to the 2006 International Residential Code (IRC), and include additional energy-savings features that typically make them 20-30% more efficient than homes built to local residential construction codes.

Building Performance Institute (BPI)

BPI is a national standards development organization for residential energy efficiency and weatherization retrofit work. As an independent, not-for-profit organization, they bring together leading building science experts from across North America to develop their standards using a consensus-based methodology. Taking a holistic view, they ensure that all styles and ages of dwelling are included, and all climate zones are covered.

Earth Advantage

An Earth Advantage home is designed to improve energy efficiency by 15 percent over a conventionally built home. Every Earth Advantage home is designed to provide its residents with comfort and quality while maintaining high standards for energy efficiency, indoor air quality, environmental responsibility and resource efficiency. Earth Advantage, Inc. works with building professionals to help them understand and incorporate high performance green building practices and materials into their projects.

PUBLIC INFRASTRUCTURE

Public infrastructure consists of the facilities, equipment, and services needed for the functioning of a community. Infrastructure includes utilities for water and sewer, roads, bridges, storm drains, solid waste sites and public buildings. The Department of Public Works (DPW) is the county agency responsible for most of the County’s infrastructure items. The Baltimore County School System and Department of Recreation and Parks manage the infrastructure for schools and parks respectively.

DPW plans, maintains, and constructs public infrastructure in the safest, most efficient, and cost effective manner possible. All facilities built in Baltimore County’s urban area followed the county’s pattern and timing of growth. The majority of these systems were put into service during the growth boom of the 1950s and 1960s. Because of the age

of the infrastructure systems, the needs shifted from constructing new facilities to maintaining and replacing the existing ones.

However, in the rural areas, the County will continue to provide only those levels of services necessary to address basic public health, safety and welfare. The guiding *Master Plan 2020* policies are to design and scale all infrastructure improvements appropriately for the limited amount of growth and maintenance of rural character, while still providing for public safety. The County does not provide increased levels of service where population density does not justify them.

Public infrastructure is important in determining the timing, location, and intensity of development; it serves as a valuable tool for master plan implementation. The basic infrastructure functions shape how Baltimore County integrates with other areas of the Baltimore Region. A well-designed county infrastructure system helps create a holistic system for the region and state. Each system working together in a hierarchy can minimize impacts to the environment. The county road network is an example of how local infrastructure feeds into, and complements the state road system, and the federal interstate road system.

Basic infrastructure provides the foundation for where redevelopment and reinvestment take place from the private and public sectors. Maintaining and enhancing the infrastructure in areas that strengthen Community Enhancement Areas, Community Conservation Areas and Employment Centers will help minimize the obstacles to building and creating sustainable communities in Baltimore County.

Policy: The infrastructure projects in the Capital Budget and Program should be used to maintain existing healthy communities, and leverage county resources to direct future mixed-use growth to the Community Enhancement Areas.

Actions:

- (1) Maintain existing capital facilities. Maintaining and strengthening existing facilities protects the investments Baltimore

County has made, and ensures that capital items will not be paid for twice.

- (2) Consider capital projects for Community Enhancement Areas and Employment Centers that are the locations suitable for proposed mixed-use redevelopment projects.

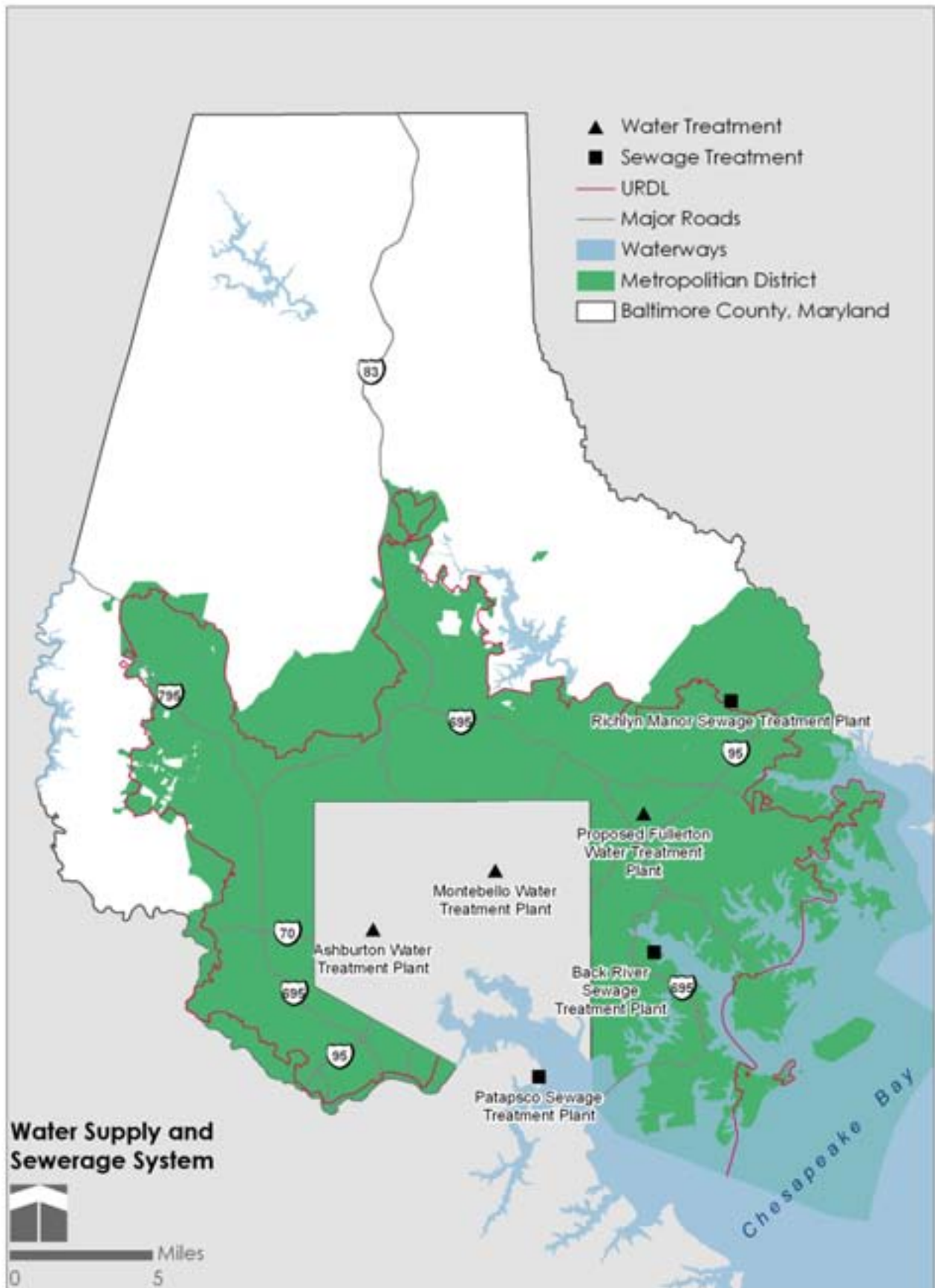
Water Supply System

The Baltimore County water supply system is part of the metropolitan water system serving Baltimore City (Map 10). There are three sources of water for the system: the Gunpowder River, which supplies the Prettyboy and Loch Raven reservoirs; the North Branch of the Patapsco River, which supplies the Liberty Reservoir; and the Susquehanna River. Water drawn from the three reservoirs is treated at the Montebello and Ashburton filtration plants, and then distributed to regional consumers. Susquehanna River water is used only on an emergency basis.

Baltimore County has another viable source of water supply, the prolific aquifer that exists within the geologic formation known as the Cockeyville Marble. This source of high quality water has been recognized as a natural resource worth protecting. In 1975, Baltimore County identified this aquifer as an area of critical state concern. Should the County ever be in a situation that would require it to find its own source of water, the Cockeyville formation will be its primary source. It is imperative that we protect this natural resource through a variety of techniques, including limiting the use of septic systems, modifying



Map 10: Water Supply and Sewerage System



land use regulations to prevent uses which may have adverse impact on the aquifer, and educating property owners who own land over the Cockeysville marble formation.

There are 13 distinct zones of water service. They are linked together by a series of pumping stations, transmission mains, storage reservoirs, and elevated tanks. Baltimore County now uses about 99 million gallons a day from the Baltimore system. About 30% of the consumption is used by commerce and industry. Residential consumption accounts for the remaining 70%. The system also supplies water for fire protection.

In the WRE, water supplies serving the County were compared to anticipated increases in the number of residents, and the corresponding water demand. Based on these population projections, reservoir capacities, and the additional source from the Susquehanna River, it is determined that there will be adequate water to serve Baltimore County's citizens living within the URDL until at least 2035. Additional information may be found in the WRE, adopted as part of *Master Plan 2020*.

Sewer System

Baltimore County constructs, operates and maintains all sewage collection and pumping facilities within the county (Map 10). There are 22 sewersheds that are divided into 80 sub-sewersheds. Baltimore County operates 104 pumping stations and one very small package treatment plant at Richlyn Manor. County-generated sewage is treated at two Baltimore City owned and operated wastewater treatment plants, at the Back River Treatment Plant near Essex and the Patapsco Treatment Plant at Wagners Point in South Baltimore.

Flow figures for existing and proposed populations projected out to 2035 fall within the limits of the existing NPDES permits for the wastewater treatment plants (WWTPs). These analyses show that the land use plan proposed in *Master Plan 2020* will be capable of achieving reductions in overall pollutant loadings to the Chesapeake Bay, as determined by State and Federal requirements. It is further demonstrated

that there will be sufficient capacity in the WWTPs to accommodate additional flow from populations projected Countywide until at least 2035. More detailed information can be found in the WRE.

The Metropolitan District

The Metropolitan District of Baltimore County is both the geographic area within which public water and sewer services are provided, and the quasi-public corporation through which public utility services are financed and managed. It was established pursuant to the Metropolitan District Act (*Acts of the General Assembly of Maryland of 1924, Chapter 539, as Amended*), and operates according to the provisions of Article 20 of the *Baltimore County Code, 2003*. The County does not have a legal mechanism to finance public water and sewer utilities outside the district. The Metropolitan District is the agency that maintains and operates the water and sewer systems for the Baltimore Region. Baltimore City is the jurisdiction responsible for the operation of the Metropolitan District, enabled through cost-sharing agreements with the remaining Baltimore Region jurisdictions.

Adjacent property owners outside the boundary of the Metropolitan District who wish to receive public water and sewer service may petition to be included in the district. The Baltimore County Council may, upon recommendation by the County Executive, and subject to the approval of the mayor and city council of Baltimore, extend the Metropolitan District boundary to include the petitioner's locality.

Policy: Continue active participation in the Metropolitan District.

Action:

- (1) To encourage a regional perspective, an investigation should be undertaken to determine whether an independent regional water/sewer management authority would better serve the Baltimore Region.

There are a few locations where the adopted urban rural demarcation line (URDL), the county's growth boundary, does not coincide with the Metropolitan

District boundary. The discrepancy between these boundaries leads to confusion.

Over the past 43 years (1967-2010) there has been little adjustment to the URDL. In fact, in balance, the URDL has contracted more than it has expanded, meaning that the urban area actually decreased in area, while the rural acreage increased. For any request to change the URDL, current standards provide for extensive review and public input, with significant burden placed on the applicant to prove there are public health concerns or similar issues as justification. This process has worked well in examining any proposed expansion or contraction of the urban area. As a general policy, in addition to those requirements specified in the zoning definitions, any subsequent change to zoning that involves changing an urban zoning classification to a rural zoning classification, or vice versa, should be immediately followed by a requisite review of the URDL.

Policy: The Metropolitan District Line should coincide with the URDL.

Actions:

- (1) Consider the benefits of moving the Metropolitan District line to coincide with the URDL.
- (2) Review the impacts of revisions to the URDL when zoning reclassification changes the designation of a property from rural to urban, or vice versa.

In future years, the County will need to increase its focus on maintenance and upgrading of the existing water and sewer infrastructure. Some system improvements are necessary to provide improved reliability of service.

Policy: Water and sewer infrastructure requires continuous maintenance and upgrading, as demand for service increases.

Actions:

- (1) Continue upgrading the sewerage pump

stations to increase capacity and improve reliability and energy efficiency.

- (2) Effectively monitor the pump stations for malfunctions.
- (3) Rehabilitate and replace sewer pipelines and manholes as needed.
- (4) Use high technology analytical tools to determine the optimal expenditure of resources.
- (5) Expand testing for sources of groundwater inflow and infiltration that reduce the sewerage system's capacity during wet weather conditions. Use test results to make repairs and thereby increase system efficiency and capacity.
- (6) Increase the frequency of sewer main cleaning to clear away roots, sludge and grease in order to maintain a fully functional conveyance system, reduce sewerage back-ups, and to provide a means of detecting early signs of structural failures.
- (7) Develop a major water purification and storage facility in Fullerton, which will complete the system of water treatment plants for the metropolitan system.
- (8) Expand the water main cleaning and lining program to prevent or correct "water line constrictions" (obstructions that reduce water volume and water pressure) in older pipes. Newer pipes are constructed with special linings that prevent constrictions from forming.
- (9) Continue to extend public utilities to all unserved communities within the URDL, giving highest priority to those areas that have failing wells or septic systems.
- (10) Ensure that sewer extensions to correct failing septic areas outside the URDL only address existing problems and do not stimulate growth and development.

Solid Waste Management/Recycling

The future environmental sustainability of Baltimore County depends heavily on its citizens and the County government engaging in responsible solid waste management and recycling practices. Winner of international, national, and statewide recognition for its solid waste management/recycling program on numerous occasions in the past, the County is well positioned for future progress.

Baltimore County’s overall (commercial and residential) waste diversion rate of 63% in 2008, as calculated by the Maryland Department of the Environment, ranked first out of all Maryland jurisdictions. This figure reflects a recycling rate of 58% plus the maximum 5% waste prevention credit for engaging in specific activities designed to minimize waste.

The leadership of Baltimore County in recycling is largely attributable to businesses in general, and the Sparrows Point steelmaking plant in particular, realizing the cost-effectiveness of waste recycling. The County also experienced substantial growth in residential recycling tonnages since the February 1, 2010 start of single stream recycling for 237,000 single-family homes and town homes.

Recycling is growing in the institutional sector as well. Most Baltimore County employees already have easy access to single stream-recycling collection at work, and these opportunities are expanding. The public schools and the community college system also implemented a recycling program.

There remain opportunities for improvement. Within the residential sector most recyclable material continues to be discarded as trash. Interring this at Eastern Sanitary Landfill (ESL) comes at a considerable cost to the taxpayer. Even more costly in financial and environmental terms would be the establishment of a new landfill in order to take pressure off the ESL, which has a projected 30-year operational capacity as of 2010. The County is actively working to expand single stream recycling to apartments and condominiums. Waste prevention and recycling is the most practical, convenient way

Conserve Space at the Eastern Sanitary Landfill and Extend Its Operating Life

The Eastern Sanitary Landfill Solid Waste Management Facility (ESL), Baltimore County’s only landfill that still accepts trash, located in the White Marsh area, is essentially “out of sight, out of mind” to most County citizens most of the time. In reality, it takes millions of dollars annually to keep the County’s landfill operating. Moreover, identifying, securing, and preparing a suitable site for a new landfill would involve huge difficulties and a great deal more expense. Therefore, prolonging the life of the ESL must rank near the top of the County’s planning priorities list.

Although already about half full, the County-owned ESL offers the opportunity for approximately 30 more years of relative independence in terms of solid waste management. ESL’s remaining life will depend in part on how well county residents prevent waste and participate in the recycling program. ESL’s remaining life will also depend on budgetary decisions regarding how much residential trash should be sent to waste to energy facilities and exported to out-of-state landfills.

that residents can make a positive difference with the environment and reduce landfill costs.

Policy: Promote solid waste reduction, reuse, recycling, and resource recovery to minimize the need for land filling, and to extend the useful life of the Eastern Sanitary Landfill Solid Waste Management Facility (ESL).

Actions:

- (1) Continue to promote participation by the 237,000 single-family homes and town homes in the County’s weekly single stream recycling collection program, which started on February 1, 2010.

Wheelabrator Baltimore

Located in Baltimore, Maryland, the Wheelabrator Baltimore waste-to-energy facility provides dependable, environmentally safe disposal of municipal solid waste for the City and County of Baltimore, while generating clean, renewable electricity for sale to the local utility. Designed, built, owned and operated by Wheelabrator, Wheelabrator Baltimore processes up to 2,250 tons per day of municipal solid waste. Wheelabrator Baltimore has an electric generating capacity of 60,000 kilowatts; the equivalent of supplying all the electrical needs of 50,000 Maryland homes. Wheelabrator Baltimore also supplies steam to the downtown-heating loop.

(2) Bring a total of up to 81,000 apartment and condominium units on board with single stream recycling collection.

(3) Continue to pursue the maximum 5% waste prevention credit available annually from the Maryland Department of the Environment, through such activities as promoting grasscycling (cutting grass high and letting it lie), hosting compost bin sales every year, and publishing a new Reuse Directory every other year.

(4) Continue to promote product stewardship alternatives (such as manufacturer and/ or retailer take back programs) to County acceptance of household electronic items for reuse or recycling, while maintaining three electronics reuse/recycling drop-off centers around the County.

(5) Expand the County Government Facilities Recycling Program consistent with cost-effectiveness.

(6) Maximize the use of waste to energy technology, including Wheelabrator Baltimore, L.P. in Baltimore City, regarding residential trash generated that is not reduced, reused, or recycled.



(7) Transfer out-of-state, rather than landfill at ESL, any material that the County does not manage by waste prevention, recycling, or resource recovery, to the extent feasible.

(8) Expand and/or improve the transfer stations at ESL and the Baltimore County Resource Recovery Facility (BCRRF) in Cockeysville.

(9) Continue and/or expand the beneficial use of landfill gas (the methane component), which started with the generation of electricity at the ESL landfill gas to energy facility in 2006.

(10) Intensify overall public education outreach regarding the County's solid waste/ recycling program to County residents.

TRANSPORTATION

Transportation is a key element of the Baltimore county Master Plan that will ensure a sustainable future for all residents. The goal of transportation is to provide infrastructure and services that:

- (1) Support diverse travel needs within the region
- (2) Foster responsible land use decisions
- (3) Enhance economic development strategies
- (4) Promote environmental stewardship



Historically, the growth of transportation in the Baltimore region has been a metamorphosis from a “radial star” pattern centered on the city of Baltimore. The former pattern served to deliver commuters and produce to the markets, ports, and employment centers within the City from outlying areas. This pattern also conveyed goods and services from the ports and urban manufacturing sites out to the expanding nation via routes such as Reisterstown Road, York Road, Philadelphia Road, Frederick Road, Harford Road and Baltimore National Pike.

The suburbanization that occurred after WWII and construction of the Baltimore Beltway (Interstate 695) in the 1960s, adding a ring pattern to the original system to form the current network, has facilitated the shift of commerce and commuters from the city to its surrounding suburbs (Map 11). Also during the last half of the twentieth century women began entering the workforce in record numbers. This created two-income, double-commuter households. The huge employment shifts from the City to the suburban counties, with the considerable increase in female workers, expanded the number of commuters and changed commuting patterns in the region. Today, the regional transportation system consists of multiple elements including rail, bus, air, and water in addition to the bridges and road network, upon which the majority of travel is conducted.

The County is a key participant in the regional transportation planning and programming process with the primary goal of integrating land use



patterns and transportation improvements. The County works collaboratively with the Baltimore Regional Transportation Board (BRTB), which consists of various state agencies, and other local jurisdictions, along with businesses, and residents to update federally mandated plans for the Baltimore metropolitan area.

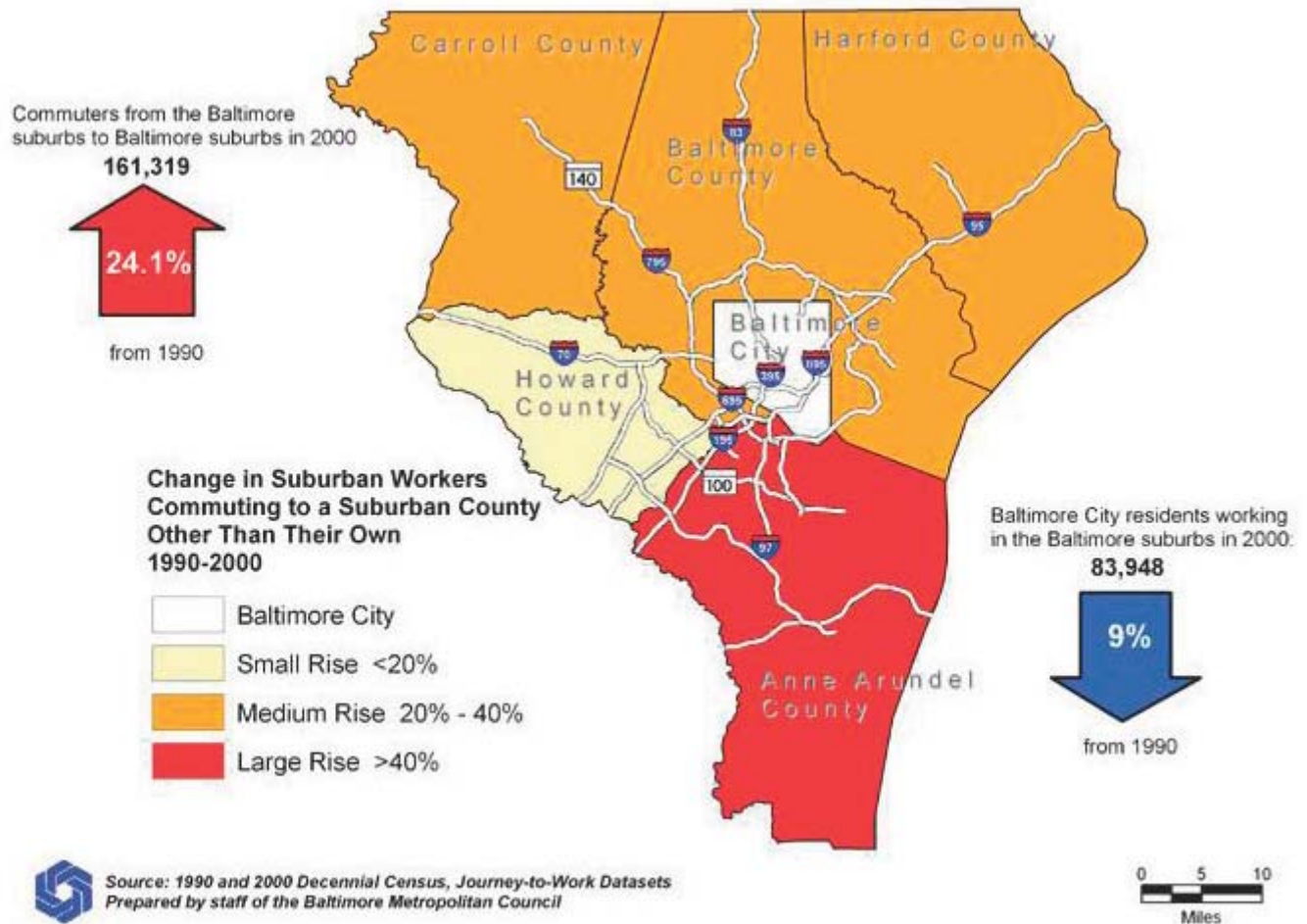
Land use decisions in the past have not adequately addressed growing transportation needs, and therefore permitted a considerable increase in vehicle miles traveled, consumption of green-fields, and water and air quality degradation. The existing transportation system has created a vehicular dependent pattern, giving rise to an imbalance of housing and jobs. In a community where housing and jobs are imbalanced, residents commute longer distances for, and spend more time on various types of trips, which may cause transportation-related environmental destruction and worsen quality of life.

Solutions to transportation challenges require continued regional collaboration and improved land management policies to ensure a sustainable future. The solutions will increase mass transit services and expand pedestrian and bicycle uses to improve efficiency of the existing system and create connectivity among all transportation modes. To advance sustainable concepts, *Master Plan 2020* proposes the following transportation policies and actions to promote development of compact, mixed-use, transit-friendly, walkable communities, and the transportation systems supporting these types of innovative communities.

Red Line

Since the creation of the Regional Rail Transit Plan in 2002, Baltimore County has been a strong supporter of the transit planning process, and the ultimate priority, which is the proposed Red Line from Woodlawn to the Johns Hopkins Bayview Campus in east Baltimore. The Red Line will make Baltimore County and the metropolitan area a more vibrant place to live and work. It will expand the local economy by making the region a more attractive destination for tourism and conventions. The Red Line will help reduce vehicular emissions and provide better travel options. Additionally, the multiple effects from the Red Line’s construction are anticipated to add nearly four billion dollars to the local economy.

Map I I: Regional Commuting Patterns



Policy: Continue Support of Proposed Regional Rail Transit Service.

Actions:

(1) Advocate and participate in Red Line Corridor and Station planning

(2) Encourage the Mass Transit Administration (MTA) to initiate studies for other potential rail services.

(3) Support implementation of the MARC Investment Plan.

Transit Oriented Development

Transit-oriented development (TOD) creates compact, walkable neighborhoods around transit stations. TOD is considered a smart growth strategy because it embarks upon the issue of growth location from a regional sustainability perspective, and it coordinates land use and transportation.

TODs range from high-density urban projects such as the Fruitvale Transit Village in Oakland, California, to a full-scale neighborhood at Orenco Station in Hillsboro in Portland, Oregon. The existing TODs nationwide, and in international cities may help illustrate planning and implementing principles for, and characteristics of a successful TOD. A TOD could accomplish many things: improve pedestrian safety, enhance the supply of affordable housing, generate revenues around transit stations, mitigate traffic congestion, boost transit ridership, improve air quality, preserve green fields and natural resources, conserve energy, provide medium or low-income families with access to economic opportunities, meet needs of changing demographics, serve central business districts, and strengthen a revitalizing industrial corridor.

Policy: Actively support Transit-oriented development (TOD).

Actions:

- (1) Use staff to serve as a transit liaison to expand and enhance transit services.
- (2) Establish and promote travel demand.
- (3) Continue to provide non-MTA transit service options.
- (4) Pursue local funding options for transit

Travel Demand Management

A private contractor currently coordinates the ride-sharing program for Baltimore County. The County should seek a more active role, possibly including this program within the government structure. Many more travel demand management strategies should be investigated, including alternative work schedules, various employee commuting options, reduced fees for transit passes, etc. Carpools and vanpools should be encouraged and supported by reserved parking and other programs including the guaranteed ride home, living close to work, and expanded park-and-ride lots. These various, mostly low-cost methods can pay huge dividends in the effort to reduce vehicle miles traveled (VMT) and the carbon footprint, but only if they are implemented in an effective and coordinated fashion.

service improvements.

Policy: Continue to plan and implement improvements to the County’s physical infrastructure using sustainable practices where feasible.

Actions:

- (1) Coordinate infrastructure improvements with land use planning efforts including local community plans, planned unit developments, and proposed compact, mixed-use developments.
- (2) Incorporate Complete Streets program concepts into review of development plans.
- (3) Include techniques to reduce pollutant loadings and runoff in the design of infrastructure improvements.

“Complete Streets” accommodate pedestrians, bicyclists, transit, and cars, creating multi-modal transportation networks. The complete streets movement provides safe and convenient user access and more choice in transportation modes, and has become a major tool for planning to improve communities. Through programs that rethink the physical design of streets, complete streets make cities and towns more livable and appealing to all residents by making room for pedestrians, bicyclists, and transit users on our auto-oriented roads (Source: American Planning Association).

Policy: Assure adequate roads appropriate for rural areas.

Actions:

- (1) Ensure practice of the *Rural Roads Standards Manual* and classify roads according to rural standards.
- (2) Provide adequate public notification and participation in capital improvement projects.
- (3) Evaluate proposed improvements to state and county roads and bridges regarding their impact on scenic resources in compliance with the adopted *Rural Roads Standards*. Where public safety allows, the narrow and/or winding character of roads is part of the scenic experience and ought to be preserved.

(4) Assess roads that serve as major traffic conduits to areas outside of the County to determine what impact this traffic has on the rural area. Work with the state, surrounding communities, and the adjacent jurisdiction to develop appropriate solutions to mitigate the impact.

Policy: Provide appropriate pedestrian facilities.

Actions:

- (1) Incorporate rural pedestrian standards into the Baltimore County Comprehensive Manual of Development Policies.
- (2) Ensure that new commercial and village center developments provide appropriate pedestrian facilities.
- (3) Evaluate providing or improving pedestrian facilities at existing rural commercial centers.

Policy: Expand pedestrian and bicycle policies and facilities to meet the needs of current and future residents, enhance safety, improve access to transit, and support community revitalization.

Actions:

- (1) Continue development of a plan for a comprehensive bicycle network within the County.
- (2) Incorporate the recommended Bikeways Plan concepts contained in the 2035 Regional Transportation Plan in design reviews.
- (3) Establish priorities for the use of capital funds for pedestrian and bicycle facility improvements.
- (4) Review all development plans, including plans for State and County capital projects, with respect to the need for pedestrian and bicycle improvements.

The Baltimore Regional Transportation Board (BRTB), the metropolitan planning organization for the Baltimore region, is responsible for developing a long-range transportation plan every four years. This long-range plan addresses the relationships between transportation and land use, the environment, and the citizenry of the Baltimore region. The current long-range plan, Transportation Outlook 2035, which is posted at <http://www.baltometro.org/content/view/925/562>, was completed in November 2007, and is intended to guide spending for transportation programs and projects for the next twenty years. The seven goals for Transportation Outlook 2035 reflect the various relationships in transportation:

Goal 1: Improve Safety

Goal 2: Maximize Transportation System Management and Operations

Goal 3: Increase Accessibility and Mobility

Goal 4: Preserve the Environment

Goal 5: Improve Transportation System Security

Goal 6: Link Transportation Investment to Land Use and Economic Development

Goal 7: Foster Inter-jurisdictional Participation and Cooperation



Projects in Capital Programs

STATE OF MARYLAND

Project Number	Location	Status
1	Belair Road, White Marsh Boulevard to Harford County	W
2	Baltimore Beltway, Harrisburg Expressway to I-95	W
4	Reisterstown Road, Garrison View to Owings Mills Boulevard	U
6	Beltway Bridge over Liberty Road	R
7	Baltimore National Pike Bridge over the Patapsco River	R
10	Pulaski Highway, Middle River to MD 43	U
14	Belair Road Bridge over Little Gunpowder Falls	R
18	Baltimore Beltway I-95 to I-70	W
81	Northwest Expressway Interchange at Dolfield Boulevard	C
F	MARC Reinvestment Plan	S
G	Red Line	S

BALTIMORE COUNTY

Project Number	Location	Status
5	Warren Road, York Road to Reservoir Property	U
9	Campbell Boulevard, Philadelphia Road to White Marsh Boulevard	C
17	Old Harford Road, Matthews Drive to Cub Hill Road	W
22	Rolling Road, Windsor Boulevard to Liberty Road	W
23	Owings Mills Boulevard, Lyons Mills Road to Liberty Road	C
24	Dolfield Boulevard, Northwest Expressway to Reisterstown Road	C
28	Lyons Mill Road, Painters Mill Road to Liberty Road	W
30	Cross Road, Forge Road to Chapel Road	W
32	Forge Road, Cross Road to Forge View Road	W
33	Hillen Road, Burke Avenue to Fairmount Avenue	W
45	Yellow Brick Road Extended to Middle River Road	C
48	Rossville Boulevard, Lillian Holt Drive to I-95	W
50	Cowenton Avenue, Joppa Road to Philadelphia Road	W
53	New Forge Road, Allender Road to Philadelphia Road	C
92	Putty Hill Avenue, Harford Road to Wilson Road	C

STATUS

C	Construct
S	Study
U	Upgrade
W	Widen
R	Replace

Requested Capital Improvement Projects
Not Funded

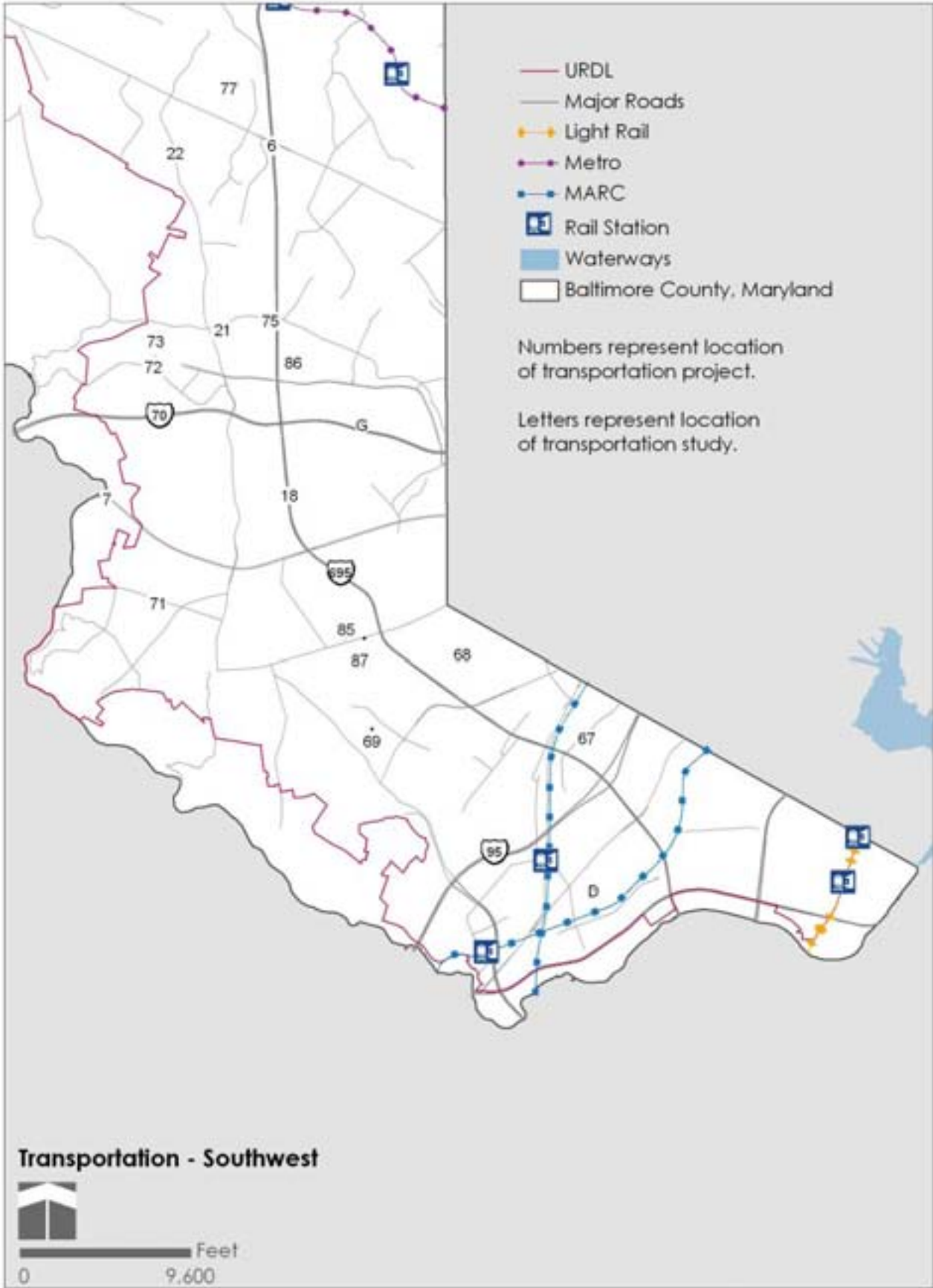
STATE OF MARYLAND		
Project Number	Location	Status
3	Paper Mill, Hunters Run Drive to York at Shawan Road	C
11	Interchange at White Marsh Boulevard and Philadelphia Road	U
36	York Road bridge over Western Run	R
37	Monkton Road relocation with Mt. Carmel Road	C
38	Harrisburg Expressway, Beltway to Shawan Road	U
43	Eastern Avenue, Martin Boulevard to White Marsh Boulevard	W
47	Philadelphia Road, White Marsh Boulevard to Cowenton Avenue	U
65	Northwest Expressway, Owings Mills Blvd to Reisterstown Road	W
70	Frederick Road to Baltimore Beltway	U
76	Westminster Pike, Carroll County Line to Northwest Expressway	W
A	CSX Rail Commuter Study to Carroll County	S
B	Towson Transit Access	S
C	Dundalk Transit Access	S
D	Southwest Commuter Rail	S
E	White Marsh Transit Access	S

Requested Capital Improvement Projects
Not Funded

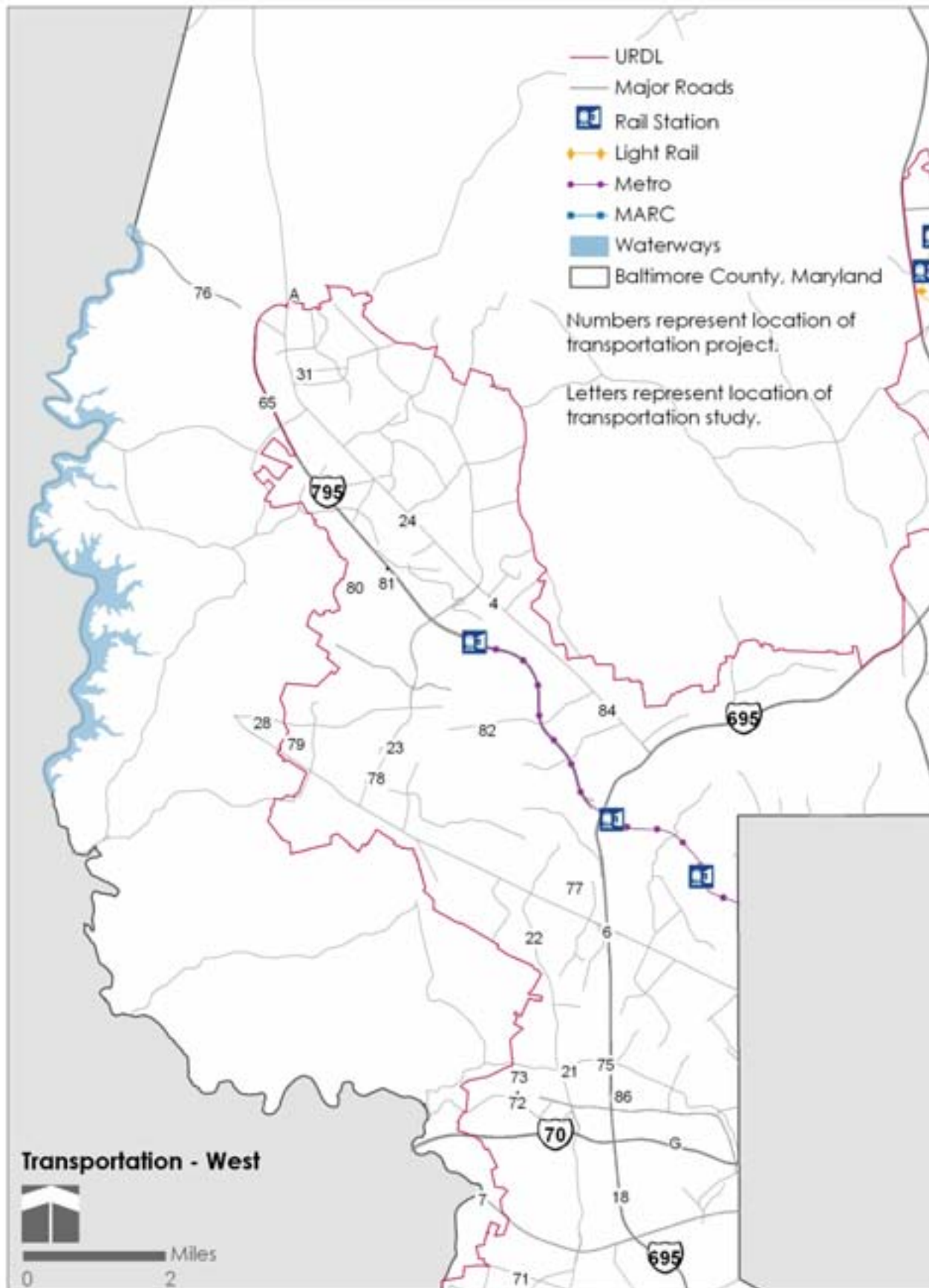
BALTIMORE COUNTY

Project Number	Location	Status
8	Kelso Drive, CSX to Pulaski Highway via Todds Lane	C/U
12	Earls Road Connector to White Marsh Boulevard	C
13	Walther Boulevard, Proctor Lane to Joppa Road	C
16	Proctor Lane, Skylark Court to Harford Road	C
21	Dogwood Road, Rolling Run Drive to Belmont Avenue	U
39	Virginia Avenue, Pennsylvania to Joppa Road	U
44	Transverse Road Extended to Bird River Road	C
46	Lenning Lane Extended to Yellow Brick Road	C
49	Ridge Road, Belair Road to Babikow Road	U
51	Joppa Road, Belair Road to Philadelphia Road	U
53	Forge Road, Forge View Road to Pulaski Highway	W/C
54	Klausmeier Road, Gunview Road to Belair Road	U
55	Northwind Road, Harford Road to Walther Boulevard	W/C
56	Snyder Lane, Joppa Road to Chapel Road	W
57	Perring Road, Waltham Woods Road to Summit Avenue	C
60	Babikow Road, Ridge Road to King Avenue	U
61	Ebenezer Road, Philadelphia Road to Pulaski Highway	U
62	Bucks Schoolhouse Road, Ridge Road to Perry Hall Blvd	U
63	Perry Hall Boulevard, Rossville Boulevard to Honeygo Boulevard	W
64	Perry Hall Boulevard, Southfield Drive to Silver Spring Road	W
67	Benson Avenue, City Line to Baltimore Beltway	U
68	Maiden Choice Lane, Wilkens Avenue to Frederick Road	U
69	Valley Road, Hilltop Road to Wilkens Avenue	W
71	Rockwell Avenue, Chalfonte Drive to Old Frederick Road	U
72	Security Boulevard HCFA to Fairbrook Road	C
73	Fairbrook Road, Security Boulevard to Rolling Road	C
75	Dogwood Road, Lord Baltimore Drive to Woodlawn Drive	U
77	Millford Mill Road, Liberty Road to Washington Avenue	U
78	Allenswood Road, Southhall Road to Collier Road	C
79	Deer Park Road, Liberty Road to Lyons Mills Road	W
80	Dolfield Boulevard, Northwest Expressway to Lyons Mill Road	C
82	McDonogh Road, Painters Mill Road to Reisterstown Road	W
85	Orban Avenue Extended to Egges Lane	C
86	Whitehead Road, Woodlawn Drive to Security Boulevard	U
87	Bloomingdale Avenue, Bloomsbury Avenue to Bishops Lane	U
90	White Marsh Road, Bucks Schoolhouse Road to Perry Hall	U

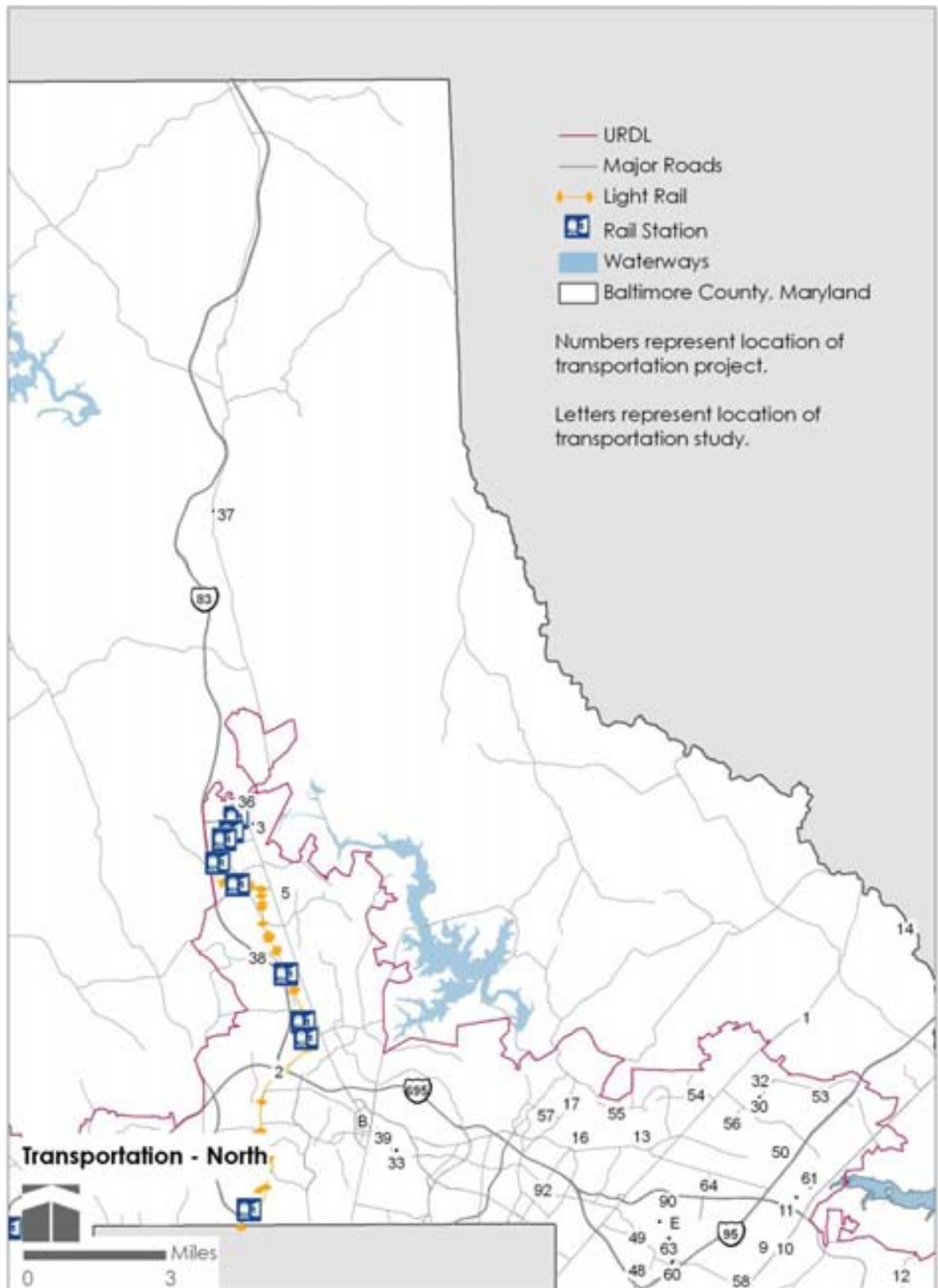
Map 12: Transportation - Southwest



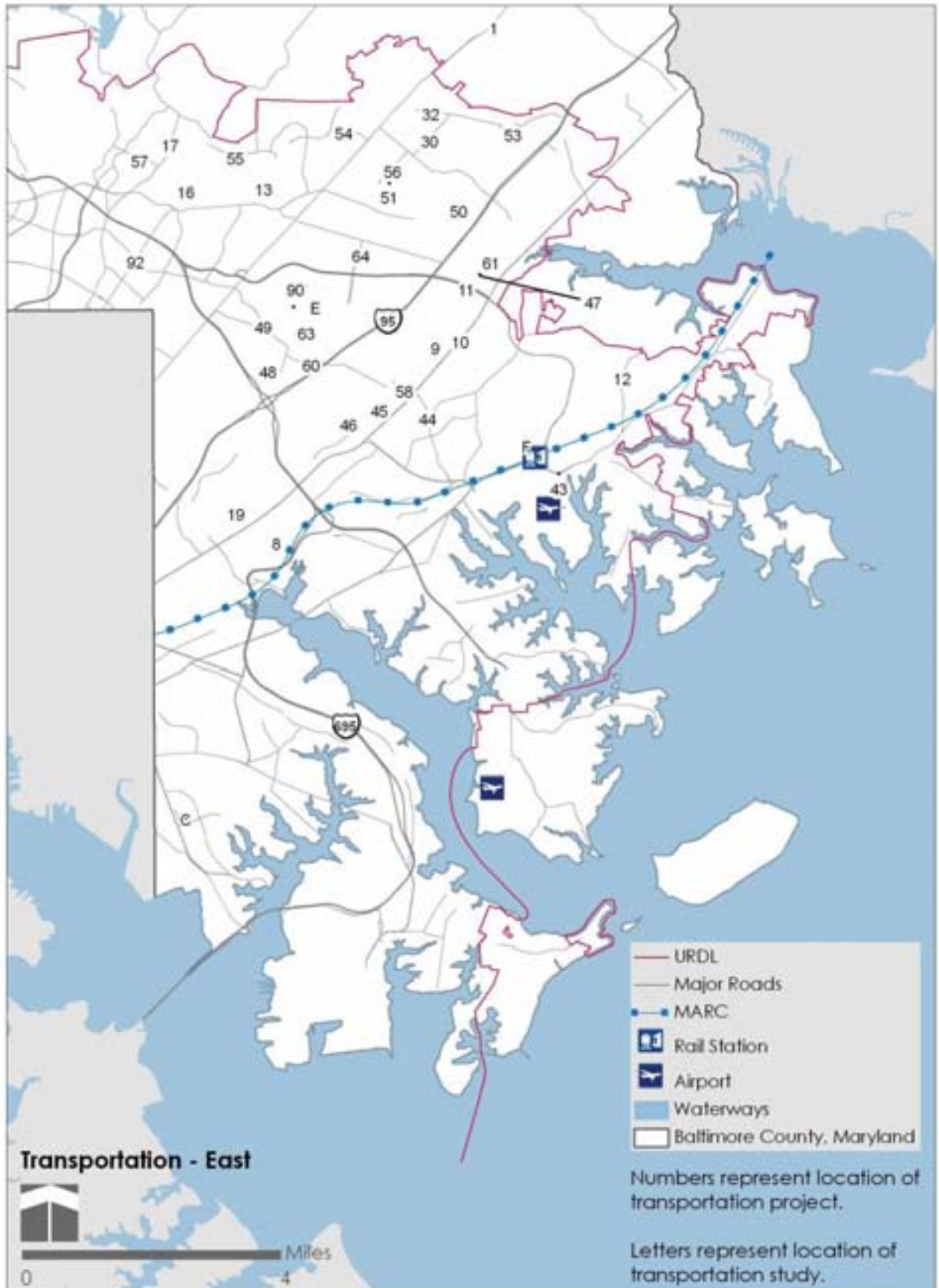
Map 13: Transportation - West



Map 14: Transportation - North



Map 15: Transportation - East



OWINGS MILLS GROWTH AREA

Conceived in 1979, the Owings Mills Growth Area is located in the northwestern part of Baltimore County. In 1984, the County Council adopted The Plan for Owings Mills as a Master Plan amendment. The guiding principle behind the Growth Area concept was to direct high quality, high density and intensive growth to areas where infrastructure was planned, staged and available. The area has convenient access to a regional transportation network (i.e. I-695, I-795) and the Owings Mills Metro (the area’s first heavy rail transit system connecting the Owings Mills area to downtown Baltimore City). The growth area is bounded by Winands Road on the south, Red Run on the west, Gwynnbrook Road on the north, Garrison Forest and St. Thomas Lane to Reisterstown Road on the east (Map 16).

The Owings Mills Growth Area is a 9,685-acre area containing 13,500 residential units in 2000 and 18,300 residential units in 2010. The area has become the location for major residential, commercial and office development over the last quarter century and is a strong contributor to the County’s economic well-

being. There are approximately 50,000 full or part-time jobs in the area (See Table 1). Growth of the residential units in the Owings Mills Growth Area and surrounding neighborhoods has created a robust consumer market with a population with above average household incomes and education. There has been substantial private and public investment in the growth area since its inception. Three community plans have been adopted for the area (Table 3).

The Owings Mills Growth Area is divided into six sub areas. Each sub-area has individual policies and actions that are based on the distinct character and preferred land uses of the sub-area. The sub-area policies and actions will create a balance of land use patterns in appropriate locations.

The six sub-areas are as follows:

- (1) The Owings Mills Town Center, which includes Owings Mills Mall.
- (2) Owings Mills Corporate Campus.
- (3) Northern Employment Corridor.

Table 1. Population, Households, and Employment, 2000 – 2020
Owings Mills Growth Area

Data Item	2000	2005	2010	2015	2020
Population	31,067	38,388	44,057	47,183	47,758
Households	13,486	16,505	18,876	20,296	20,712
Employment	31,970	42,123	49,589	51,992	56,912

Source: Round 7B forecasts, Baltimore Metropolitan Council, June 2009.

Table 2. Zoning Classifications
Owings Mills Growth Area

Zoning Classification	Acreage	% Total
Industrial	1,365	14%
Residential	6,663	69%
Commercial/Retail	654.19	7%
Office	873.64	9%
Deferred Rural	79.58	1%
Total Acres	9,635.20	

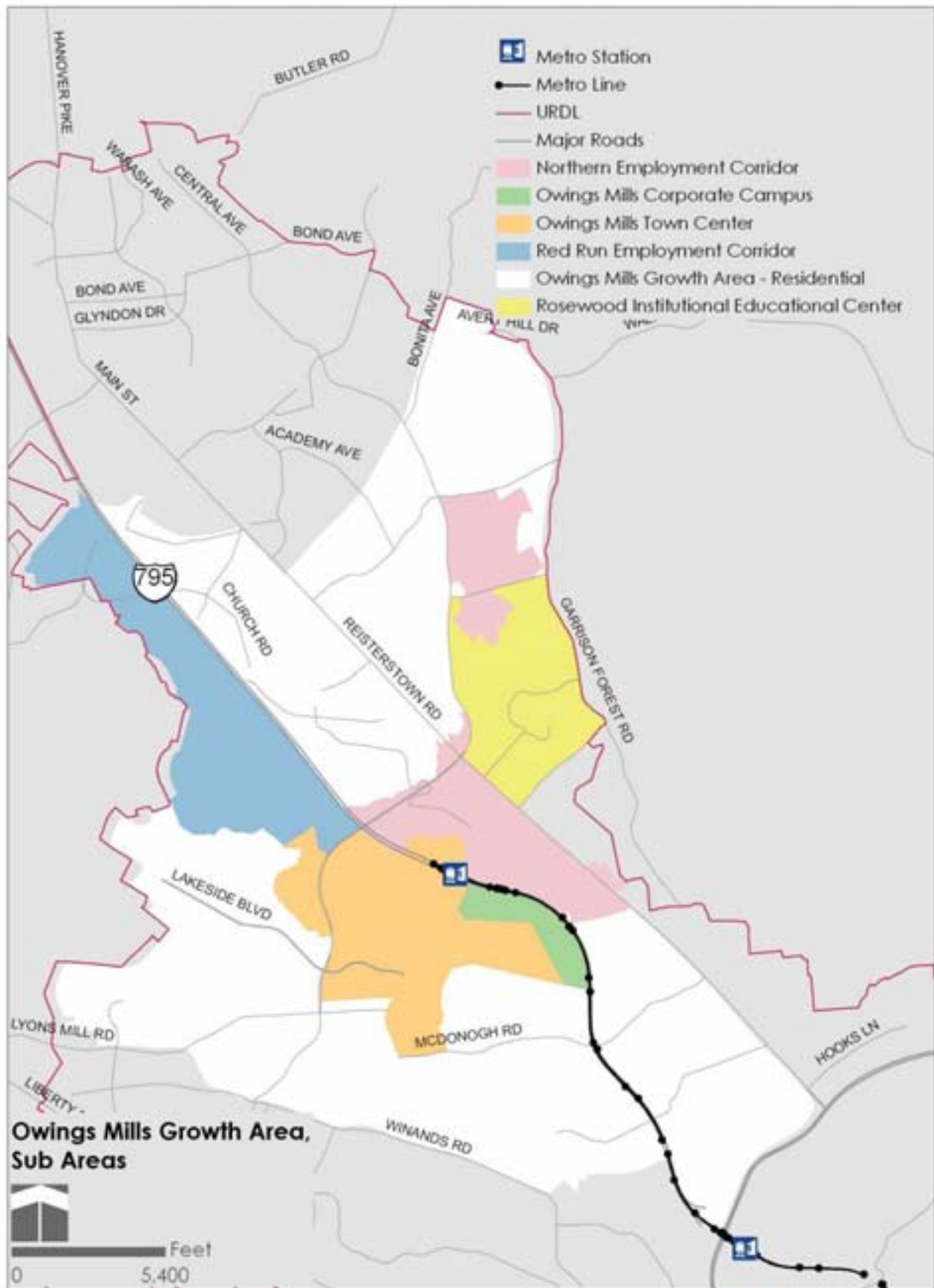
Source: Baltimore County Office of Planning, 2010.

Table 3. Adopted Community Plans

Community Plans	Adoption Date
Plan for Owings Mills, Maryland	May 21, 1984
The Owings Mills Park and Open Space Concept Plan	May 5, 1995
Rosewood Institutional Educational Center	May 20, 2010

Source: Baltimore County Office of Planning, 2010.

Map 16: Owings Mills Growth Area, Sub-Areas



- (4) Red Run Employment Corridor.
- (5) Residential areas, including Owings Mills New Town.
- (6) The Rosewood Institutional/Educational Area (formerly within the Northern Employment Corridor).

Owings Mills Town Center

The Owings Mills Mall was the first successful retail center to be constructed in the growth area following the completion of I-795 and the Metro rail system in 1986. The mall flourished initially but over time lost major upscale retailers. The mall's current level of vacancy and low customer volume give this critical property at the heart of the growth area a negative image that can affect the broader community. The Owings Mills Mall has access to a robust consumer market; however, it currently lacks the proper mix of uses and physical appeal of newer shopping alternatives. In 2006, residential redevelopment on a portion of the parking lot infused new life into the mall. The planned Metro Centre at Owings Mills offers an opportunity to complement and enhance the Owings Mills Mall with a main street mixed-use transit oriented development concept. The design integrates a dynamic mix of residential, office, retail, restaurants, a new public library, a community college building, and a year-round public gathering space.

This creates a pedestrian-friendly live, work, and play environment that encourages the use of public



transportation and existing infrastructure. If properly integrated with the Mall, the uses could have the necessary “critical mass” to rejuvenate the Owings Mills Town Center.

Policy: Reinvigorate the long-standing development plan to make this the mixed-use “downtown” of the Owings Mills Growth Area.

Actions:

- (1) Support efforts to expedite development of the Metro Centre and ensure that the new library and community college facility will be built.
- (2) Collaborate with Mall owners to develop and implement a mixed-use development plan based on successes such as the redevelopment of the Hunt Valley Town Centre.
- (3) Provide a safe vehicular and pedestrian connection between the Owings Mills Mall and the Metro Centre.

The Owings Mills Corporate Campus

The Owings Mills Corporate Campus has evolved into a premier destination for corporate headquarters, institutions and research organizations. The campus features high quality, cost effective workplaces with easy access to interstate highways, and the Metro. The campus is a 200 acre wooded setting that includes streams, aerated ponds, and a fitness trail. In order to assure the highest quality architectural design, private design guidelines were established to expedite the design review process for new parcels being developed. This provided good marketing tools for potential tenants, as they considered building or leasing at the Owings Mills Corporate Campus.

Policy: Promote the Owings Mills corporate campus as a premier destination for corporate headquarters.

Actions:

- (1) Continue to support private efforts to maintain the high quality appearance and

occupancy at the Owings Mills Corporate Campus.

Northern Employment Corridor

The Northern Employment Corridor consists of two areas, one south of Reisterstown Road and the other east of Owings Mills Boulevard between Gwynnbrook Road and Crondall Lane. The former contains mixed zoning with retail and manufacturing development and includes the Solo Cup plant slated for closure in 2012. The latter has flex warehouses and should continue as an employment-intensive area.

Policy: Retain employment-generating zoning in the Northern Employment Corridor in order to preserve employment opportunities.

Actions:

- (1) Explore ways to use Stevenson University's expansion and growing national reputation to stimulate business development in the surrounding area.
- (2) Promote manufacturing, office, and mixed-uses on vacant and underutilized properties within the Northern Employment Corridor.
- (3) Where manufacturing uses are being phased out, work with property owners to evaluate rezoning and redevelopment opportunities to accommodate a mix of employment, retail or residential uses on the



site and in the area to help revitalize the surrounding business and residential communities.

Red Run Employment Corridor

The Red Run Employment Corridor provides an excellent opportunity to enhance the appeal of Owings Mills and contribute to the County's fiscal well being. The Red Run Employment Corridor is home to many attractively designed office parks and for profit colleges such as Strayer University, Sojourner Douglas College and ITT Technical Institute.

It is important to have a ready supply of developable office and employment zoned land available to maximize opportunities to attract additional family-supporting employment and provide for workforce development.

As the result of a slowing economy, residential and retail uses were introduced to the sub-area on land that was designated for employment-generating uses. Additional residential and retail uses within the Red Run Employment Corridor will eliminate opportunities to attract new jobs.

Policy: Support employment related uses along Red Run Boulevard. Explore opportunities to increase the density of employment uses in the corridor.

Actions:

- (1) Ensure that the new Dolfield interchange on I-795 is designed to reinforce Red Run's primary role as a corporate employment corridor. Resist pressure for additional non-auxiliary retail and residential development in proximity to the new interchange, unless they are used within a true mixed-use concept.
- (2) Maintain existing zoning to promote the employment corridor.
- (3) Evaluate zoning or PUD requests to change M and OT zoned land to make sure that broad economic objectives are met.
- (4) Establish architectural guidelines for new

development along Red Run Boulevard.
 (5) Carefully evaluate proposed mixed-use development to assure that job creation is a priority along Red Run Boulevard.

Residential Areas, including Owings Mills New Town

The predominant land use in the growth area is residential (approximately 69 %) and is largely built out. The Owings Mills Round Table, a major stakeholder group consisting of over 20 corporations with more than 27,000 employees indicated that their primary concern is the quality of proposed housing being developed in the growth area.



Policy: Promote walkable communities and neighborhood connectivity.

Actions:

- (1) As funding permits, implement the Western Bike and Pedestrian Plan recommendations within the Owings Mills Growth Area.
- (2) Promote high quality housing and implementation of high quality standards on remaining housing development sites.

Rosewood Institutional Educational Center

The Rosewood Institutional/Educational Center Community Plan was to determine appropriate land uses and zoning due to the closure and impending sale of the State of Maryland owned Rosewood Center (an institution for developmentally disabled people of all ages). This new sub-area was formerly within the Northern Employment Corridor.

The plan identifies the preferred land use for this sub-area as institutional/educational. Stevenson University, the third largest independent, coeducational university in the State moved to an 80-acre area along Owings Mills Boulevard area in 2004. Stevenson University is envisioned to be the preferred master developer of the State of Maryland's Rosewood Center. The vision for the Rosewood Institutional/Educational Center includes an expanded Owings Mills campus with new classroom buildings

and athletic fields, publicly accessible open space and an amphitheater. The acquisition of the Rosewood Center by Stevenson University will help redefine Owings Mills as having a special sense of community/place.

Policy: Support institutional/educational uses as the preferred land uses within the sub-area. Allow existing land uses to remain and to expand, provided they are in compliance with existing zoning.

Actions:

- (1) Continue collaboration with the State of Maryland and stakeholders to implement the adopted community plan.
- (2) Requests for rezoning should not be approved within the sub-area.

Transportation

The Owings Mills transportation network has remained essentially unchanged since the 1984 plan. The growth area is maturing and road projects are underway that were more than 20 years in the making. These include improvements to Lakeside Boulevard, Dolfield Boulevard, Owings Mills Boulevard and Lyons Mill Road. A left turn lane on Owings Mills Boulevard south of Lyons Mill Road has recently been completed. Dolfield Boulevard was recently extended from Lakeside Boulevard to Red Run Boulevard.

The privately developed Owings Mills New Town and Owings Mills Corporate Campus provide good examples of design aesthetics, which include landscaped medians and tree-lined rights of way. These features project a positive image of the growth area. Because of the concentration of mixed uses, the Owings Mills Growth Area offers the potential to reduce local automobile dependence.

Policy: Complete the transportation network using design principles to create an attractive, well functioning system with an Owings Mill identity.

Actions:

- (1) Dolfield Boulevard extension from Tollgate Road to Reisterstown Road is designed and is pending right-of-way acquisition. Construction is anticipated in 2011. Dolfield Boulevard from Easter Court to Red Run Boulevard is planned as a developer's project.
- (2) The alignment for a new Dolfield Boulevard interchange with I-795 has been selected, although construction funds have not yet been programmed. A relocation of Tollgate



Road to intersect Dolfield Boulevard north of the current intersection is needed to accommodate the new I-795 interchange.

(3) Owings Mills Boulevard extension is planned in two phases. Phase 1 extension from Lyons Mill Road to Winands Road is under construction with completion slated for 2012. Phase 2 extends from Winands Road to Liberty Road and is 50% designed.

(4) Widening on the north side of Lyons Mill Road from Owings Mills Boulevard west to Deer Park Elementary School will complete a gap in improvements of travel lane, curb and gutter, storm drains and side walks. Existing site distance problems should also be corrected. Improvements on the south side will be a developer's project in conjunction with the Ballard property.

Recreation and Parks

The Owings Mills Growth Area boasts one of the County's five regional parks, the Northwest Area Regional Park. The park contains 322 acres and includes state of the art athletic fields with synthetic turf and lights, four baseball diamonds, picnic pavilions, and a hike and bike trail.

In addition to several school sites that double as recreation sites, the Soldiers Delight Natural Environment Area is a State Park located in proximity to the growth area. Soldiers Delight Natural Environment Area is comprised of 1,900 acres of serpentine barren. The nature reserve has over 39 rare, threatened, or endangered plant species as well as rare insects, rocks and minerals. The park also has a museum and five interpretive trails that are open to the public.

Hiking and biking trails have become major assets to many communities. The Red Run stream valley offers a great opportunity to create a trail system linked to the natural environment. A bike and pedestrian trail network planned in the early 1990s proposed incorporating an abandoned roadbed along the Red Run 100 year flood plain as part of a trail system. This trail system would link the area's

residential and employment uses to the Owings Mills Town Center.

The County has been acquiring parcels along the Red Run stream valley as part of the development process. The County now owns over 250 acres, and anticipates acquiring the remaining 100 acres within the next few years.

Policy: Continue to promote recreational amenities and activities within the Owings Mills Growth Area.

Actions:

- (1) Continue to pursue acquisition of parcels and/or easements to complement the area's Red Run stream valley trail system.
- (2) Implement the goals of the draft of the Western Baltimore County Pedestrian and Bicycle Access Plan within the Owings Mills Growth Area, as funding allows, or as private development occurs.

Schools

The quality of public schools in the Owings Mills Growth Area is critical, not only to a healthy community, but also to the ability to attract new businesses to the area. Over the last ten years, the County and State have made the following investments to assure meeting the area's educational needs:

- (1) Expanded Cedarmere Elementary School's capacity by 112 in 2008 with a 1.8 million dollar addition of 8,666 square feet, which added two classrooms, and three kindergarten classrooms.
- (2) New Town Elementary located on New Town Boulevard opened in 2001 with a capacity of 697.
- (3) New Town High School opened in 2003. The school sits on a rolling, 64 acre site on New Town Boulevard with a capacity of 1303. New Town High School was honored

by the Maryland State Department of Education for overall performance on the 2008 Maryland School Assessment.

Policy: Continue the County's commitment to quality education in the Owings Mills Growth Area.

Actions:

- (1) Continue to monitor residential growth, and plan for necessary school facilities.
- (2) Construct a new elementary school on the Ballard/Cover property.

Ensuring Development Quality

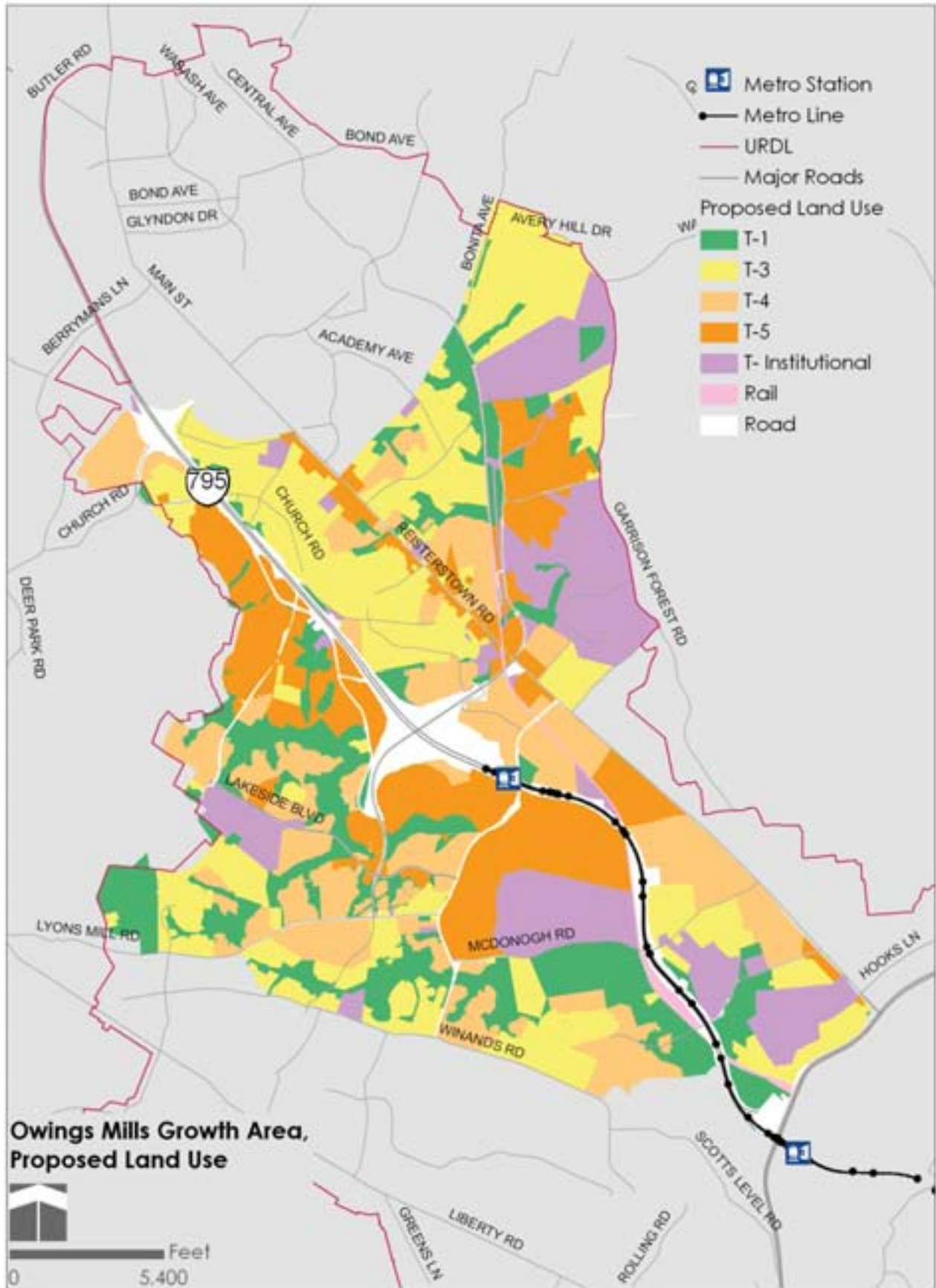
The continuing design objectives for Owings Mills are to create an attractive, well functioning physical environment, to project a positive image of the growth area and define a special sense of place. Tree-lined boulevards, landscaping, signs and high quality building materials can serve as unifying elements to shape a community identity for Owings Mills.

Policy: Public and private future development projects should incorporate common design features and a high quality of materials.

Actions:

- (1) Working with businesses and residents, develop standards for new private and public development to provide high quality and uniformity.
- (2) Evaluate the provision of an overlay district for Owings Mills to ensure that special standards are applied consistently.
- (3) Provide for wide sidewalks and bikeways to implement the goals of the draft of the Western Baltimore County Pedestrian and Bicycle Access Plan, as funding allows or as private development occurs.

Map 17: Owings Mills Growth Area, Proposed Land Use



MIDDLE RIVER REDEVELOPMENT AREA

The Baltimore County Council adopted the Perry Hall-White Marsh Plan on February 4, 1985. This plan detailed land use and development that was articulated in the Baltimore County Growth Management Program 1979-1995 and adopted in the Baltimore County Master Plan 1979-1990. This growth area was bordered by I-695, the Gunpowder River, Route 40 (Pulaski Highway), and Route 1 (Belair Road). Both the Baltimore County Master Plan 1989-2000 and Baltimore County Master Plan 2000-2010 continued to support this growth area.

Since the Perry Hall-White Marsh area was designated, over 10,850 new housing units, significant office and retail uses including the White Marsh Mall, Avenue at White Marsh, and the big box retail center along Campbell Boulevard have been constructed. The residential, retail and office areas are essentially built-out. Therefore, the Perry Hall-White Marsh area is no longer a growth area, but has evolved into a Community Conservation Area.

As a result of completion of Route 43 (White Marsh Boulevard), private ownership of the General Services Administration (GSA) Depot, and proposed redevelopment along Route 7 and Route 40 corridors, the properties adjacent to the Perry Hall-White Marsh growth area demonstrate redevelopment potential. The *Master Plan 2020* proposes a new area be designated as the Middle River Redevelopment Area.

This proposed new area is approximately 10,000 acres in size, with an estimated population of 19,000. There are about 35,000 full- or part-time jobs in the area (see Table 1). Zoning classifications vary in this proposed Middle River Redevelopment Area (Table 2).

Land Use

The proposed Middle River Redevelopment Area is currently employment-oriented with some residential development. It's among the largest employment centers in the Baltimore region and presents great potential for future growth. This area is diverse in land use and has been divided into nine sub-areas. (Map 19)

A prior study on the residential build-out of the Red Lion Sub-Area shows that the existing zoning could result in twice as much residential development. The Route 40 Study for the military Base Realignment And Closure (BRAC) determined that the existing zoning would allow 15 to 20 times more density than what is currently being provided. A detailed land use analysis, therefore, needs to be completed to provide a vision and preferred development pattern for each sub-area.

Policy: Determine the potential redevelopment impact and infrastructure needs through an in-depth analysis and extensive public participation. The nine sub-areas require different visions and solutions according to their unique characteristics and redevelopment potentials.

Actions:

- (1) Complete the study requested in County Resolution 10-09 for a Middle River Development Coordination Plan. The study will analyze existing and proposed development and assess infrastructure impacts.
- (2) Examine potential, practical build-out based on existing zoning.
- (3) Update current adopted community plans to reflect the visions of all nine sub-areas of the Middle River Redevelopment Area.
- (4) Complete a study that examines the feasibility, challenges and benefits of directing and prioritizing future development to specific sites within the boundaries of the redevelopment area through the use of both land use tools and economic incentives.
- (5) Prioritize and prepare detailed sub-area plans (Table 4).
- (6) Conform as closely as possible to the recommendations of the Middle River Community Plan until it is updated or amended.

Table 1. Population, Households, and Employment, 2000 - 2020
The Proposed Middle River Redevelopment Area

Data Item	2000	2005	2010	2015	2020
Population	15,659	18,231	19,519	20,663	20,973
Households	6,295	7,307	7,823	8,324	8,515
Employment	23,940	28,635	34,811	40,996	41,988

Source: Round 7B forecasts, Baltimore Metropolitan Council, June 2009.

Table 2. Zoning Classifications
The Proposed Middle River Redevelopment Area

Zoning Classification	Acreage	% Total
Industrial	6,119	62%
Residential	2,800	28%
Commercial/Retail	741	7%
Office	170	2%
Deferred Rural	87	1%
Total Acres	9,917	-

Source: Baltimore County Office of Planning, 2010.

Table 3. Adopted Community Plans
The Proposed Middle River Redevelopment Area

Community Plans	Adoption Date
Philadelphia Road Corridor Study	January 21, 1992
A Community Conservation Plan for Essex-Middle River	July 1, 1996
Eastern Baltimore County Revitalization Strategy	July 1, 1996
Windlass Run/Bird River Area Community Plan	January 14, 1999
Middle River-Bird River Community Plan	January 22, 2002
Middle River Employment Center Route 43)	September 3, 2002
Eastern Baltimore Pedestrian & Bicycle Plan	November 6, 2006
Middle River Community Plan	September 4, 2007

Source: Baltimore County Office of Planning, 2010.

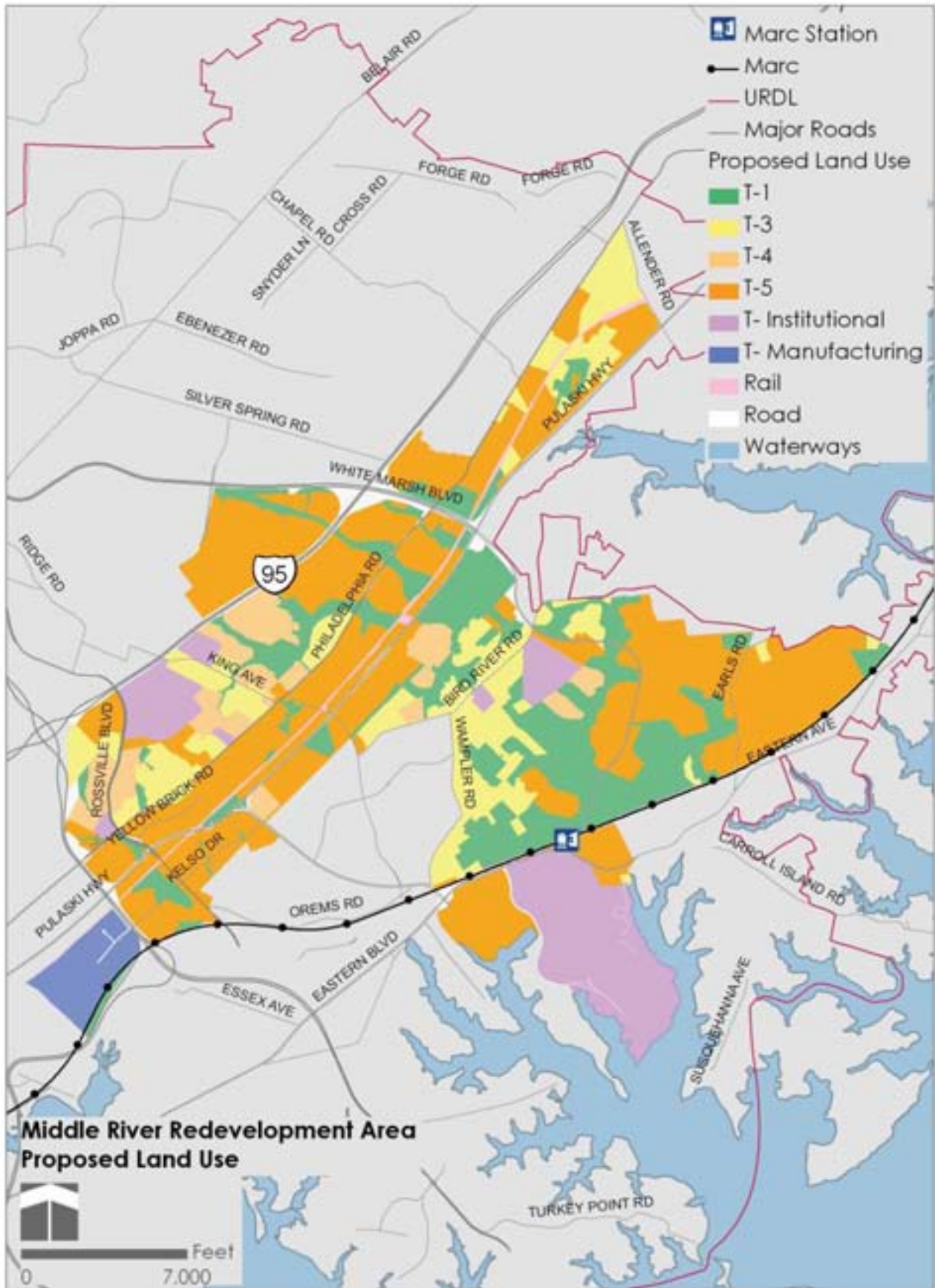
Table 4. Subareas in The Proposed Middle River Redevelopment Area

Area	Land
White Marsh Mall	Retail, Office
Route 7	Flex warehouse, contractor storage
Essex Community College / Franklin Square	Institution
Route 40 (Pulaski Highway)	BRAC Study Area
Route 43	Flex warehouse, Office
Lafarge	Quarry, contractor storage
Martin State Airport	Locheed Martin / GSA / Martin State Airport
Kelso Drive / Golden Ring Mall	Flex warehouse, Retail
Red Lion Road	Mixed use

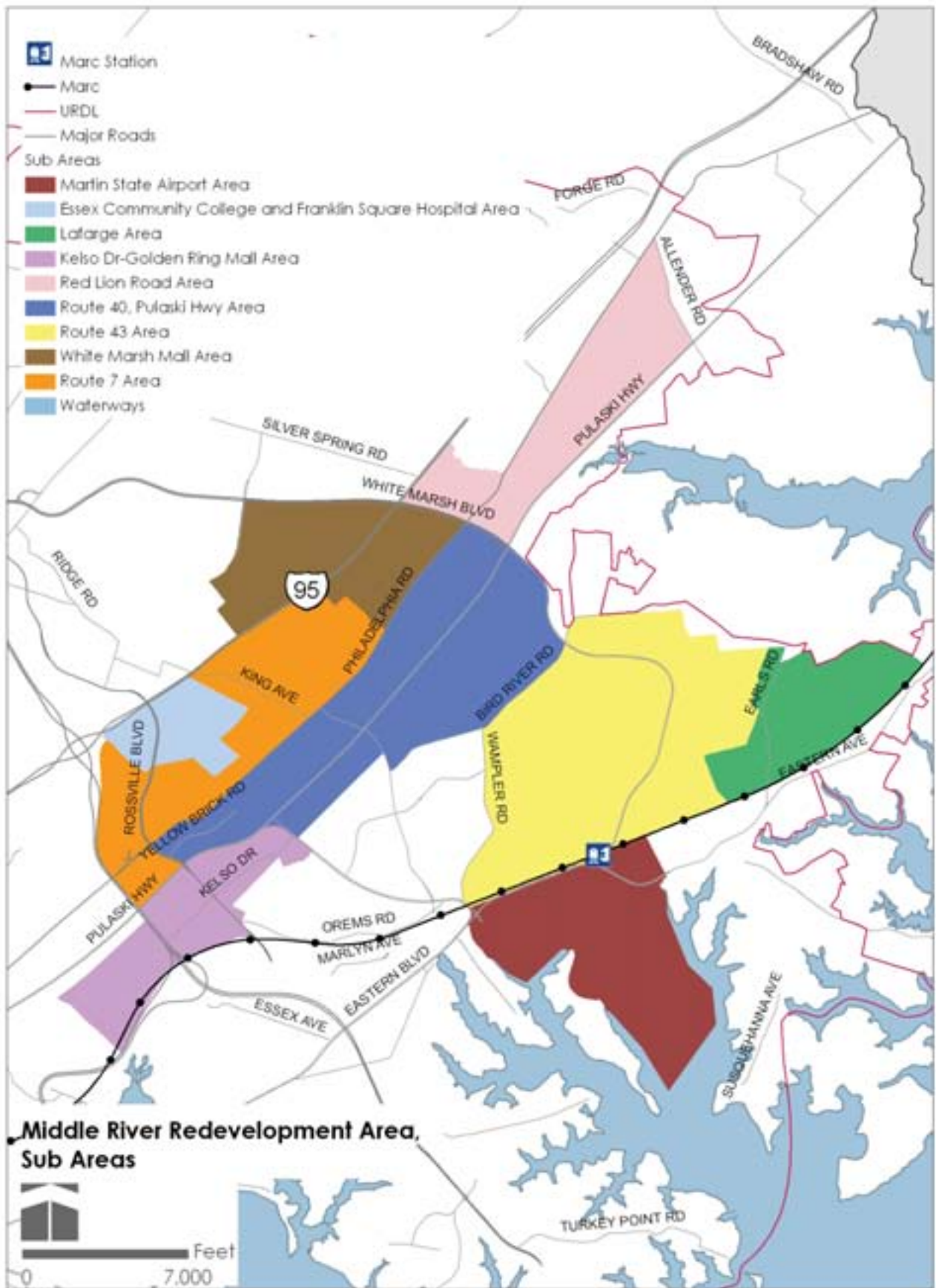
Source: Baltimore County Office of Planning, 2010.

GSA: General Services Administration.

Map 18: Middle River Redevelopment Area



Map 19: Middle River Redevelopment Area--Sub-Area



White Marsh Mall

The major land use in this area features White Marsh Mall, a regional mall, and entertainment and dining uses at The Avenue at White Marsh, surrounded by surface parking lots. Additionally, big box retail uses are located along Campbell Blvd between I-95 and Route 7. A county library branch and police station also are located in this area. The area is approximately 918 acres in size.

Action:

- (1) Working with the owners, create vertical, multi-story in-fill development connecting uses with a “main street”, including a pedestrian system.



The image above illustrates possible connections of White Marsh Mall and the Avenue at White Marsh with multi-story retail, office and possible residential uses.

Route 7

This area is approximately 412 acres in size and characterized as a mixed use corridor, connecting residential (located along west side of road) retail, industrial, (located along east side of road), and institutional uses. The residential development is built along the northwest side of the road; industrial uses are located to the southeast side off Yellow Brick Road. The extension of Yellow Brick Road is critical to alleviating industrial traffic on Philadelphia Road.

Action:

- (1) Create a roadway design to offer a reasonable transition between residential and employment communities.

Essex Community College/Franklin Square Hospital

The land use in this area is predominantly institutional, with some residential development. The area is approximately 789 acres.

Action:

- (1) Incorporate the college and hospital’s master plans into the County’s land use plan.

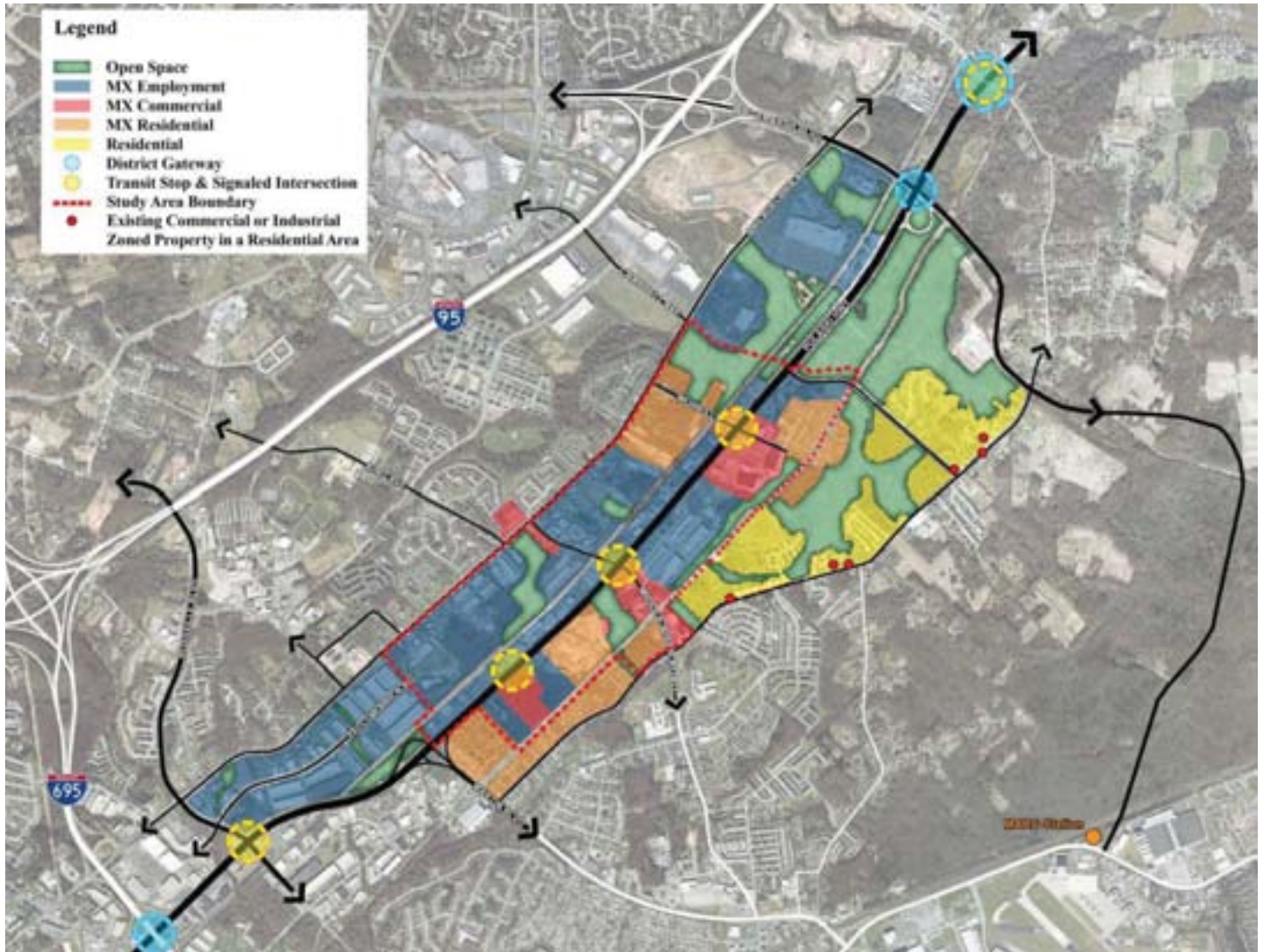
Route 40/Pulaski Highway

The County, with federal funding through BRAC, has completed the Phase I study of the Route 40 East corridor. The basic principles include accommodating mixed-use development, providing east-west road connections, reinventing Route 40 to reduce vehicular speeds, establishing more frequent cross street access, encouraging pedestrian and bicycle use, generating environmental benefits through road design, and enhancing transit services. A redevelopment study is underway that focuses on an 850-acre study area (Map 20).

Actions:

- (1) Encourage mixed-use (vertical) development, reduce speed of vehicular traffic, and improve pedestrian and bicycle use.
- (2) Complete phases II and III of the Pulaski Highway Redevelopment study. Phase III will include a design charrette that results in a buildable framework plan.

Map 20: Pulaski Highway Redevelopment Area



MX designates potential future mixed-use overlay zoning designations in which a variety of land uses are permitted.



Street trees, landscape medians, and architecturally interesting buildings encourage walking by creating a sense of place.

Route 43 (White Marsh Boulevard)

This large area contains about 2,369 acres. It currently contains low-density flex warehouse and some retail uses. This area was developed as the MD-43 overlay zone.

Action:

- (1) Implement the area's master plan (Middle River Employment Center) for future development and examine possibility of mass transit, as funding allows or private development occurs.

Lafarge Area

This area is approximately 465 acres in size and is characterized predominantly with use as a sand and gravel operation (Lafarge). Additional uses located within the area include contractors' equipment storage yards, junkyards, landscaping business and scattered residential. The Lafarge Chase Sand Plant and over 200 acres of additional lands located east of Baltimore Crossroads @ 95/MD Route 43 (White Marsh Boulevard) represent one of the last remaining large tract mixed-use development opportunities in eastern Baltimore County. The sand and gravel operation has an expected life of perhaps three years. Upon expiration of the sand and gravel use the area will be suitable for reclamation and redevelopment.

The presence of Amtrak, MARC, and CSX rail lines along the southern boundary of this area offers unique opportunities for potential commuter and freight related land uses. While it is important that this area incorporate a continued and significant employment emphasis of office and industrial uses, the inclusion of other supporting mixed uses such as appropriately scaled residential and retail development should be incorporated into the master plan for this area.

Traffic at present, is largely truck in nature, and vehicular access in and out of the area travels along Earls Road north to Ebenezer Road and then to Route 40 and I-95. These roads can best be characterized as rural in nature. The rural character of existing Ebenezer Road, Earls Road, and Bengies Road serve

as an inappropriate road network to accommodate the anticipated future growth of lands east of Baltimore Crossroads @ 95. Access south along Earls Road to Eastern Boulevard and west to MD-43 traverses a residential area. In the near term, an east-west road connection between Earls Road and MD-43 is needed. In the long term a vision and land use plan needs to be developed for the area. In order to fully capitalize on the transportation benefits created by the White Marsh Boulevard extension to Eastern Boulevard, more intense and upscale mixed use development should be implemented. The proposed roadway connection(s) must be appropriately sized to accommodate the substantial development potential of lands located to the east. These critical road connections must be implemented in order for the remaining lands east of Crossroads @ 95 to reach their fullest potential while still maintaining the rural character of the existing road infrastructure, and for the ultimate vision/employment/mixed-use/compact development goals for this area of Baltimore County to be realized.

Action:

- (1) Make an east-west connection between Earls Road and Route 43 in the short term; develop a vision and land use plan in the long term, as funding allows.

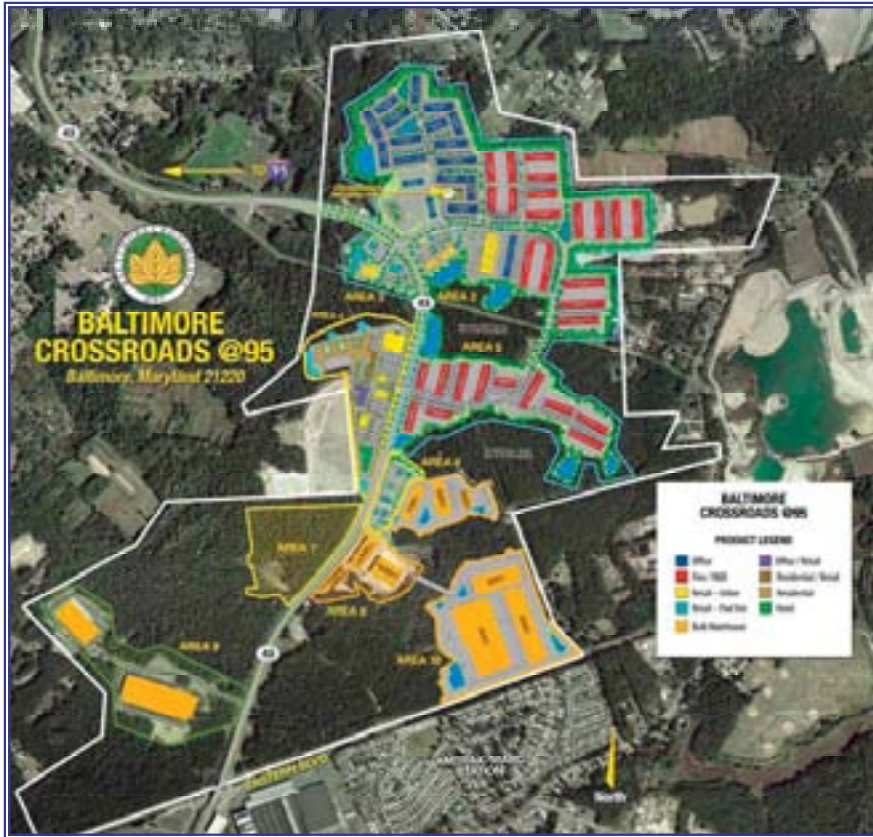
Martin State Airport Area

Although relatively small in size (1,150 acres), this area contains some of the largest buildings in the region. The General Services Administration (GSA) building is over 2 million square feet. The Lockheed Martin site is also occupied by several large structures, sizeable open space, and vast waterfront. One of the best attributes of the area is the convergence of transportation options. The Martin State Airport, east coast rail services, Route 43, Route 702, I-95, and Eastern Boulevard all intersect at this area.

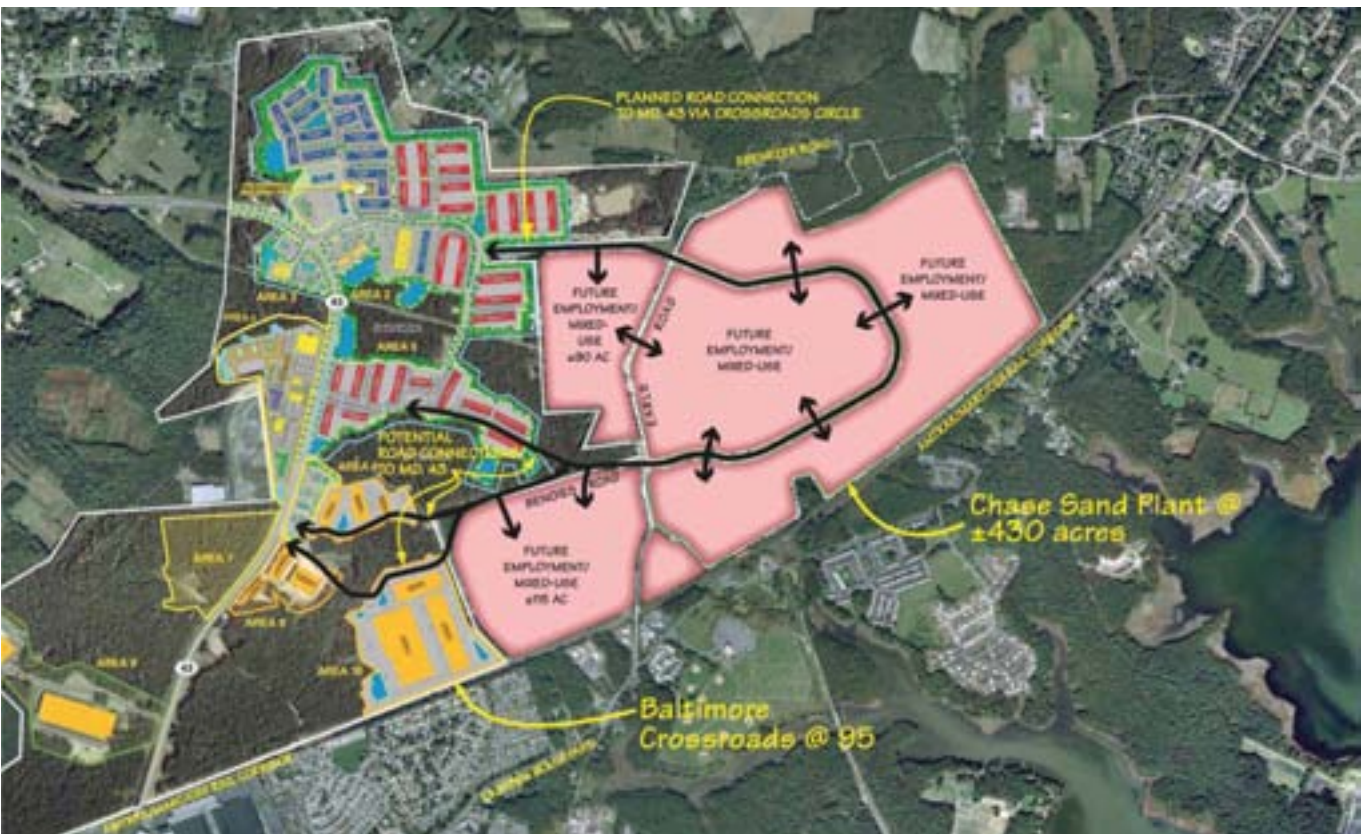
Actions:

- (1) Promote a mixed-use, transit-oriented development surrounding a train station stop.
- (2) Support the State and County study

Map 21: Baltimore Crossroads Master Plan



Map 22: Lafarge Master Plan



regarding the expansion of the existing MARC station to improve use of, and access to rail services.

Kelso Drive/Golden Ring Mall

This area is 605 acres in dimension and has the largest concentration of retail (Golden Ring Mall, recently redone with retail big box uses) and industrial uses. The area is located at the conjunction of I-695, Route 7 (Philadelphia Road), and Route 40 (Pulaski Highway). The Route 7 and 40 road segments carry the largest traffic volumes at this location.

Actions:

- (1) Support industrial uses and complete road segments in order for the road network to operate at better levels.
- (2) Implement a Complete Streets initiative within this area in order to assure pedestrian and bicycle safety.

Red Lion Road

Nearly 609 acres, this area demonstrates a variety of land uses and is easily accessible. The area takes in the Honeygo Reclamation Facility, RV-Park, contractor's equipment and storage yards, private junkyards, recreational facility, and residential development. The CSX rail line intersects the area.

Action:

- (1) Create a vision and land use plan for a mixed-use development incorporating the Route 40 BRAC Study.

Transportation

The Middle River Redevelopment Area includes an extensive road network. The area is both bordered and served by I-695, I-95, Route 43, Route 7, Route 40, Route 702, Martin Boulevard, and Eastern Boulevard. Route 43, Rossville Boulevard, Bird River Road, and Eastern Boulevard are major functional thoroughfares; however, there is lack of east-west connections



to them. Barriers to improving the east to west connections are I-95, CSX rail line, Windlass Run, and existing development.

The Martin State Airport, one of the two general aviation airports in the state, is situated in this redevelopment area. The airport is home to the Air National Guard, providing A-10 and C-130 transport service to the United States Army.

The Amtrak passenger rail service operates along the Amtrak line, passing through the southern portion of the Middle River Redevelopment Area. This rail service runs along the entire U.S. East Coast from Massachusetts to Florida. It also serves as a commuter rail line (MARC) between Perryville in Cecil County and Washington, D.C. This redevelopment area is divided by a major CSX freight line, which provides service along the east coast. The CSX line extends between Baltimore City and Aberdeen.



Policy: *Complete a transportation analysis to review the existing and proposed road network, mass transit options, pedestrian and bicycle accessibility.*

Actions:

- (1) Complete a full interchange at Route 7 and MD-43 using state or federal funding.
- (2) Provide connection east west between Earls Road and MD-43, as funding allows.
- (3) Support the MARC Station upgrade to full service.
- (4) Complete road segments – Campbell Boulevard, Mohr’s Lane, Kelso Drive, Yellow Brick Road, etc., as private development occurs.
- (5) Complete Campbell Boulevard, especially Mohr’s Lane between Route 7 and Route 40.
- (6) Design a streetscape for Route 40 between Martin Blvd. and MD-43 that supports compact mixed-use development.
- (7) Conduct mass transit analysis of area – bus service, bus rapid transit, CSX light rail line connection to existing services.
- (8) Implement critical pieces of the Eastern County Bicycle and Pedestrian Access Plan, as funding allows.

Environment

The Study area is located directly adjacent to the Chesapeake Bay. All of the drainage is in direct proximity to Back River, Middle River, Bird River, and the Gunpowder River. Because this area drains directly into the Chesapeake Bay, there is heightened concern by local residents regarding storm water management and water quality. The State and Baltimore County have extensive environmental regulations. There is concern and insistence within the residential communities that the area be redeveloped in a manner that improves the existing conditions.

Environmental issues involve reduced energy consumption via programs such as LEED. Improved water quality is achieved through storm water management and water quality management. Environmental site design is also a major redevelopment issue.

Action:

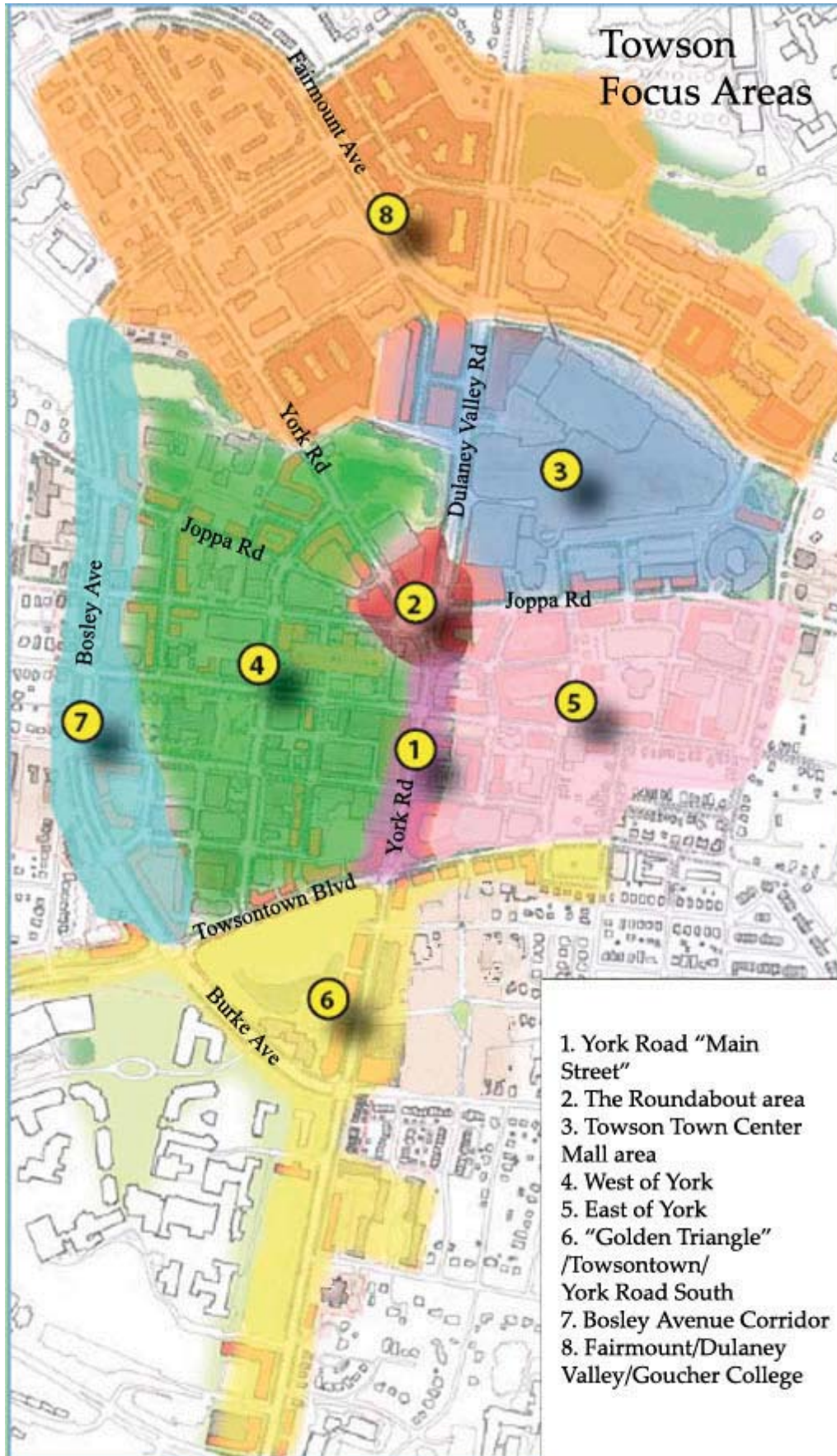
- (1) Consider an environmental overlay district for the Middle River Redevelopment Area that encourages utilization of LEED programs, requires Environmental Site Design, and use of best management practices to enhance water quality.

THE TOWSON URBAN AREA

Towson is the urban center of Baltimore County. In addition to being the seat of county government, it is the site of a substantial business district, three large hospitals, the circuit court and district court, two universities, and the Towson Town Center - a regional mall. The urban core of Towson is becoming a residential center as well, with several large apartment/condominium developments existing or proposed. These residential projects will help expand the market for businesses. Despite these significant assets, the urban core has historically underperformed as a commercial center, with recurring vacancies and a lack of commercial investment (Map 23).

During the 19th Century Towson developed as a traditional small town. Residents could meet most daily needs within walking distance, and enjoyed good transit connections to other areas of the region. In the 1950’s, with a shift to an automobile suburbanization, Towson became less centralized as a rural village. Goods and services that were once within walking distance were increasingly separated and pedestrian access became less of a consideration in land use and transportation planning. The 1964 Urban Renewal Plan for Towson embraced high-rise suburban development. The suburban development pattern that compromised pedestrian access in Towson also eroded its strong identity.

Map 23: Towson Focus Area



With the support of Towson business, professional, and community associations, the county implemented several UDAT recommendations, including streetscape improvements to Allegheny Avenue, the addition of on-street parking to the main street section of York Road, and operational improvements to the Towson Roundabout. Streetscape improvements to Washington Avenue, a public plaza in the courthouse block of Washington Avenue, and a signing and wayfinding project are also underway or are completed.

Downtown Towson has the potential to become a dynamic, economically viable commercial center, utilizing extended hours of service. Community, business, and government leaders have undertaken a long-term process to assure that Towson will become a more pedestrian-friendly destination.

In 2006, the American Institute of Architects Urban Design Assistance Team (UDAT) began the visioning process for making Towson more vibrant. This effort successfully introduced the concept of walkability as a basis for sustainable economic revitalization. Before implementation could begin, UDAT recommendations were assessed in greater depth, and a need for a more comprehensive approach to achieving walkability was recognized. Baltimore County retained the services of consultants with national expertise in walkability and place-making to facilitate the charrette process that resulted in the Walkable Towson Plan. This process involved a week of intensive study, a public meeting with feedback sessions, and significant citizen participation.

Policy: Support the Walkable Towson Plan, as funding allows, or as private development occurs. The application of this plan will over time create a vibrant mixed-use community, sufficiently diverse and resilient to withstand changing markets and shopping trends.

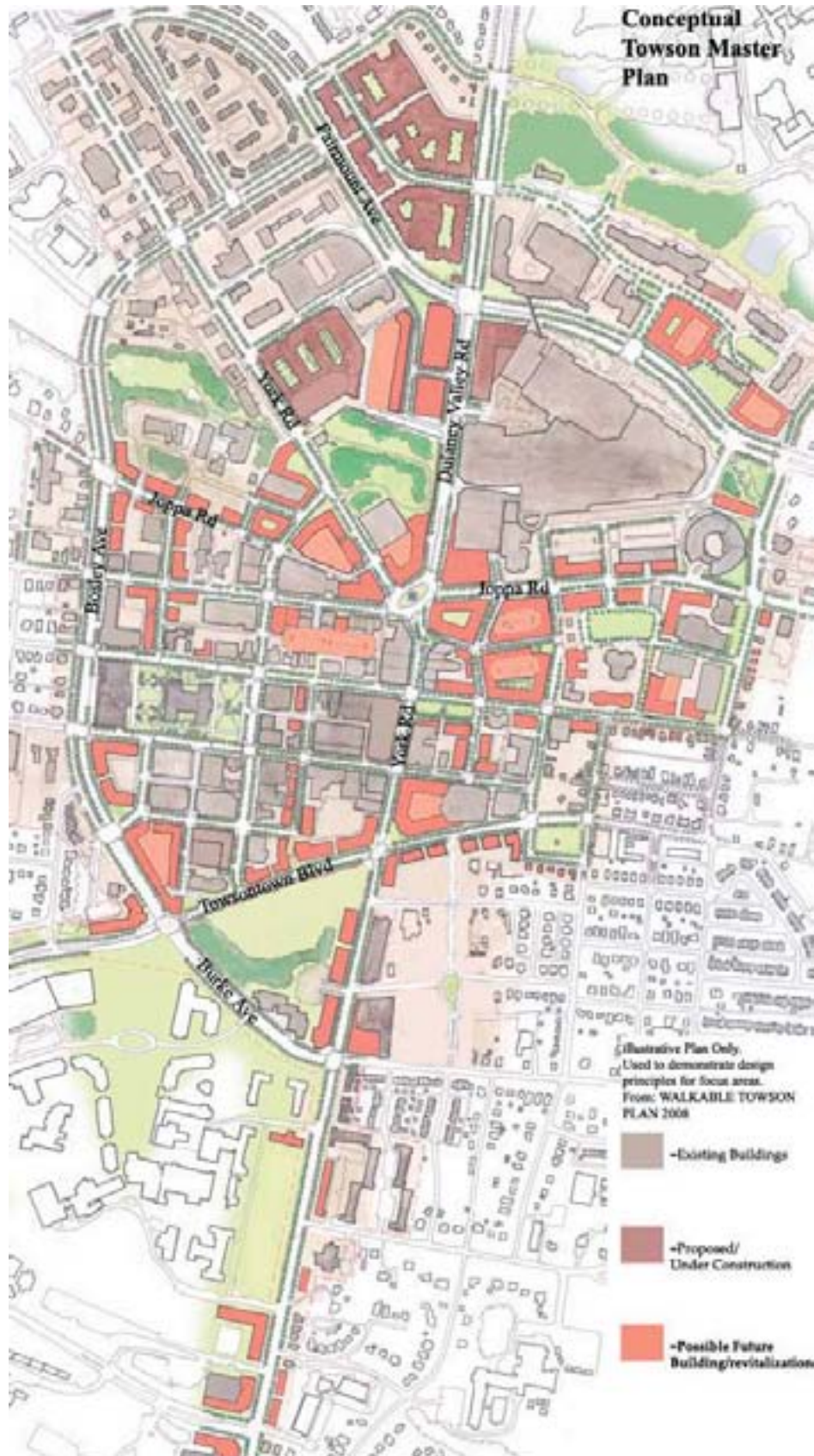
Actions:

- (1) Encourage buildings to be located adjacent to the existing street or sidewalk grid, and locate building entrances on the sidewalks facing streets.
- (2) Provide broad sidewalks to accommodate pedestrian traffic, amenity features, and street trees.

- (3) Align building façades along a build-to line to produce a sense of enclosure on the street that creates a distinct public space.
- (4) Maintain a pedestrian scale at the street frontage.
- (5) Encourage vertically mixed-use structures to promote street activities and foot traffic.
- (6) Provide numerous store front doors and large windows to boost visual interest along the street.
- (7) Continue replacing parking meters with parking boxes.
- (8) Encourage off-street parking, secondary entrances, and alleys be placed behind buildings to ensure pedestrian safety, and support elimination of curb cuts.
- (9) Erect decorative walls or fences with appropriate heights (3-4 feet and 4-5 feet respectively) for surface parking abutting sidewalks to define the street edge, and to allow for better visibility.



Map 24: Towson Master Plan





Policy: Strengthen compact, mixed-use, walkable development that is compatible with Towson’s urban character.

Actions:

- (10) Restructure blocks more than 400 feet long by adding a mid-block street or pedestrian walkway.
- (11) Monitor the roundabout to assess traffic operations and pedestrian safety, calm traffic, and provide a pedestrian focal point.
- (12) Install enhanced crosswalks, traffic calming measures and lighting at key crossings within the plan area.
- (13) Create a distinctive visual theme for wayfinding signs.
- (14) Design and construct “gateway” features at key locations and incorporate a transit waiting area at certain locations.
- (15) Consider recommendations made in the walkable Towson Study.
- (16) Design and implement a Greater Towson Bicycle/Pedestrian Network connecting to adjacent neighborhoods.
- (17) Streetscape improvements along Washington Ave and The Plaza in front of the Old Courthouse should be maintained and enhanced as the premier public space in downtown Towson.
- (18) Use the ‘Walkable Towson Plan’ - January 2008 as a blueprint for future improvements and actions.

- (1) Develop design standards and modifications to the zoning ordinance that create mixed-use zones.
- (2) Improve transit access to and within Towson, working with the MTA, private sector and educational institutions.
- (3) Develop a long-term plan for funding and implementing infrastructure upgrades.
- (4) Strengthen and promote County programs that could provide incentives for business façade improvements.
- (5) Develop a park-once plan for the Towson Urban Center. The plan should recognize the importance of maximizing on street parking for the success of the commercial core.

Policy: Recognize the sub-areas identified in the Towson UDAT, and promote redevelopment opportunities within these areas to create a unique sense of place.

York Road is “Main Street”

The three-block long section of York Road from the roundabout south to Towsontown Boulevard is downtown Towson’s “Main Street”. This is the commercial heart of Towson, and the historic pattern of York Road as the main commercial street remains, reinforced by the two major commercial cross streets of Pennsylvania and Chesapeake Avenues. Efforts to transform downtown into a more pedestrian friendly destination should begin here.

Furthermore, a tremendous potential for creating excitement in Towson’s commercial core is in the careful redevelopment of the roundabout area. The possible benefits in terms of identity, and desirability as a destination are considerable.

Actions:

- (1) Encourage private development of a mixed-use building over the northeast corner of Dulaney Valley Road and Joppa Road. The building should be an extension of the mall itself, with a prominent, street-level entry on the roundabout, leading pedestrians directly to and from the mall.
- (2) Establish and monitor a pedestrian and bicycle level of service for Towson.
- (3) Adopt new zoning that encourages the development of “liner buildings” with street level retail shops on Dulaney Valley Road along the entire front of the Towson Town Center parking garage to provide the necessary retail connection.
- (4) Work with SHA to improve pedestrian conditions along Dulaney Valley Road from the roundabout to Fairmount Avenue by adding on-street parking, reducing travel lane widths in both directions, and widening sidewalks.
- (5) Improve the west side of Dulaney Valley Road along Prospect Hill Cemetery. Improvements should include:

- Landscaping that creates a more visible and attractive edge to the cemetery,
- Resurfacing the concrete retaining walls with a more attractive material and possible creation of a mural,
- Recommendations for redesign of the covered parking entry to the Investment Building.

West of York Road

The area west of York Road is Towson’s office and government district. Large residential developments adding new residents will transform Towson’s “9-5” feel into a more vibrant community. There are many opportunities to build on this trend with

additional mixed-use residential development and redevelopment, to support businesses and enhance public spaces.

Actions:

- (1) Encourage and support the private redevelopment of vacant parcels, parking lots between buildings or other gaps in the built fabric along West Joppa Road, Washington Avenue, Baltimore Avenue, Allegheny Avenue and Chesapeake Avenue with 1st floor office use and upper story live/work units.
- (2) In the event that new development is proposed, a new north-south commercial street between York Road and Washington Avenue, extending from Pennsylvania Avenue south to Towsontown Boulevard should be encouraged.
- (3) Redevelop the Investment Building. This should be promoted, including possible incentives, for pedestrian friendly features to be incorporated at the base of the building.

East of York Road

The area of Towson’s commercial center east of York Road has been the site of investment in large residential, office and commercial projects. In order to preserve the economic viability of this investment, a strategy must be developed and implemented to make these buildings more accessible to pedestrians and to ensure the walkability of future projects in the area.

Actions:

- (1) Investigate the use of incentives for the development of residential and mixed-use projects on sites east of York Road that reinforce the character of East Towson.
- (2) Consider studying the Walkable Towson Plan recommendations for Fairmount Avenue.

The Triangle: York Road, Bosley Avenue, and Towsontown Boulevard

Creating better pedestrian connections between Towson University and downtown Towson will generate positive synergy. Seamless, pedestrian-friendly connections that produce an attractive college town identity are important to the economic sustainability and safety of the community.

Actions:

- (1) Investigate the use of incentives for the development of the Triangle to improve connections between Towson University and downtown Towson. Mixed-use buildings and student housing should be encouraged and supported facing the streets around the Triangle.
- (2) Study the feasibility of reducing the number of lanes in Towsontown Boulevard to make the area more pedestrian friendly.
- (3) Modify key intersections around the Triangle to make them more pedestrian friendly.
- (4) Using state funding, improve York Road between Bosley/Burke Avenue and Cross Campus Drive in front of Towson University by relocating the west sidewalk away from the traffic and installing a landscape buffer.
- (5) Consider recommendations for Towsontown Boulevard, as proposed by the Walkable Towson Plan.

of the Chesapeake Bay. The vitality of Baltimore County’s waterfront is intrinsic to the health of the County, and to the region as a whole.

The Baltimore County waterfront takes its shape from five major peninsulas and is the endpoint of the many creeks that feed into Back River, Middle River and Bird River. These peninsulas contain the communities of Dundalk/Sparrows Point, North Point, Millers Island, Wilson Point, Essex/Back River Neck, Middle River, Bowleys Quarters, and extensive County and State parks. The residential communities adjacent to Baltimore City were developed to house workers whose livelihoods were earned in the industrial and maritime activities found on the working waterfront. Religious, social and institutional organizations to support the residents are part of the fabric of these communities. Farther east and north, the waterfront developed as a vacation destination with small seasonal cottages lining the shore. These areas have remained largely rural, with only small clusters of neighborhood commercial uses inland, and single-family dwellings on the waterfront. While the waterfront has historically been categorized as urban for purposes of the master plan, in many cases the residential communities located along the shores are suburban, with single-family homes located on 50-75 foot wide lots. The Urban Rural Demarcation Line (URDL) delineates the urban areas from the more rural areas of the shoreline. Generally, the urban areas are located within the URDL while the rural areas are located outside the URDL. Until the 1990’s, the existence of water and sewer was also an indicator of the status of the waterfront. However, at the time of the adoption of this plan, the County has installed water and sewer services in the majority of the waterfront communities regardless of the URDL, to

THE WATERFRONT

The waterfront of Baltimore County consists of 219 diverse miles of shoreline that is both rural and urban in character. It is lined with residences, protected natural open space, recreational areas, maritime associated activities, agricultural fields, and working ports. It is rich in the history, traditions and lifestyle



address water quality of the bay and to improve public health.

Baltimore County has invested substantial resources on the waterfront including planning, infrastructure improvements, environmental restoration, land acquisition for new public spaces, and community enhancements. Many of the waterfront communities now have new streetscapes, improved amenities, and popular recreation destinations. The county also implemented far-reaching policies designed to protect certain critical areas in perpetuity. With these protections in place, and the demand for developing near the water's edge remaining high, examining how redevelopment can creatively be carried forward is an opportunity and a challenge for the next decade. This is especially true as we look to preserve and enhance the sustainability of our waterfront.

Water Quality

Sustainability is defined as development that meets the needs of the present without compromising future generations. In that regard, sustainability objectives and targets must be integrated into all phases of project planning and development, design and implementation. The County should endeavor to improve the ecological health of the waterfront using a variety of methods to protect and restore wildlife habitat and regenerate ecological capacity where it has been lost. It should promote design guidelines that consider the diverse architectural styles found in the region while utilizing sustainable practices and materials, and provide continual education including inter-jurisdictional cooperation. The health and future viability of the waterfront communities as a regional economic and recreational resource is specifically tied to the health of the water. When considered alone, the impact of any single development project may be negligible but when combined with all other development impacts within a watershed over time, may threaten fragile waterfront resources and diminish the quality of life.

Policy: Promote environmental and land use decisions that improve the quality of the Chesapeake Bay.

Actions:

- (1) Promote compact development in the buffer management areas applying best management practices for storm water management to comply with the State mandated Chesapeake Bay Critical Area requirements.
- (2) Place into preservation the undeveloped public land that is owned by the County and State to protect the rural character.
- (3) Encourage protective easements on tracts of forest and wetlands that are otherwise highly susceptible to development pressures.
- (4) Develop a plan to educate residents about habitat awareness, storm water and water quality management, recycling, invasive plant species, and proper disposal of hazardous waste.
- (5) Plant native trees, shrubs, and grasses in appropriate areas to increase forest buffer functions, forest diversity, and to reduce storm water runoff.



- (6) Install erosion control measures and reestablish wetland vegetation on public lands where shoreline erosion is a problem.
- (7) Investigate the use of incentives for individual property owners to control shoreline erosion.
- (8) Create incentives for development that are sustainable, and encourage innovative practices that will contribute to improving the health of the Bay.
- (9) Ensure responsible agricultural practices that incorporate vegetative buffers and other water quality best management practices.

Infill Development

In addition to the changing regional housing market, renewed interest and public investment on the waterfront has created a new residential housing demand in many of the county’s waterfront communities. These communities are platted with 50-foot wide lots along the waterfront and improved with homes of modest size. In the last 20 years, but especially since tropical storm Isabel, substantial residential development of a much larger scale occurred, presenting the following issues: increased impervious surface area, diminished viewsheds, reduction in public access to the water, and excessive permitting issues due to regulations that fail to consider current residential trends. A comprehensive approach, which includes architectural and design expertise, in addition to natural resource protection expertise is needed to meet the challenges that are specific to the neighborhoods of the waterfront and that will ensure the sustainability and compatibility of new development and redevelopment.

Policy: Assure infill development is compatible with the community (neighborhood) and develop appropriate zoning controls to regulate development in a way that achieves this goal.

Actions:

- (1) Work with communities to explore the

creation of waterfront-specific zones that address infill standards. The zone should be based on form-based zoning principles, and should seek to regulate design such that infill construction is compatible with existing communities and meets Chesapeake Bay Critical Area requirements.

- (2) Apply form-based waterfront zone regulations that would allow appropriate development and discourage zoning variance requests.
- (3) Strengthen regulations designed to protect water quality.
- (4) Establish waterfront design standards that include requirements for low impact development storm water management and water quality techniques.

Waterfront Placemaking/Destinations

Waterfront communities have a distinctive sense of place. Their history and unique features attract people and development. Buildings such as lighthouses, piers, docks and other maritime structures and the activities associated with them can be an impetus for redevelopment and enhance that distinctive sense of place. Baltimore County’s waterfront is rich in history and folklore that should be nurtured as a tourism and economic resource. The County should promote and facilitate the development of waterfront destinations that offer commercial and recreational amenities. Key to an enjoyable tourism experience is how one travels. Multiple linked waterfront destinations connected by various modes of transportation that take advantage of land, sea, and air will greatly enhance the waterfront’s appeal to visitors.

Policy: Foster distinctive, attractive communities with a strong sense of place, capitalizing on the waterfront heritage to attract interest.

Actions:

- (1) Consider tax increment financing (TIF) districts as a way to improve infrastructure to support water dependent activities.

(2) Expand the directional sign program to direct tourists to places of interest along the waterfront.

(3) Encourage a variety of private land and water based transportation options such as water taxis and bike paths. Providing both land and water based transportation options can help waterfront communities create a welcoming, pedestrian friendly environment that also accommodate the efficient movement of goods necessary to waterfront commerce.

(4) Pursue opportunities to upgrade marinas to waterfront destinations with mixed uses, and identify new locations for development of new waterfront destinations in the buffer management areas while protecting and enhancing water quality.

(5) Study the development of a commercial waterfront destination located on property owned by Lockheed-Martin at Dark Head Creek.

(6) Investigate possible locations for smaller destinations, assist owners/developers with practical strategies to develop these sites.

(7) Develop tours to link area destinations with a common theme, e.g., a tour of Fort Howard, Fort Carroll, North Point, Fort Armistead, Fort McHenry, Patterson Park and Federal Hill to interpret local military history.



Policy: The maritime zones established in 1992 to accommodate water dependent facilities and associated uses at a scale in keeping with the surrounding residential communities should be evaluated and updated to more appropriately guide this type of mixed use.

Actions:

(1) Integrate non-water related uses with water dependent ones that have traditionally defined the identity of the waterfronts to provide a more stable economic base.

(2) Adopt zoning regulations and building codes that support mixed-use development in a sustainable way.

Waterfront Access

Pedestrian access to the water should be connected to the built environment, and also accommodated in ways that protect natural resources. In addition to physical access, visual access to the water is highly desirable and should be achieved.

Policy: Create walkable communities with physical and visual access to the waterfront for public enjoyment

Actions:

(1) Within the limits of environmental

Neighborhood Marinas

Non-water dependent uses, such as residential waterfront development, can compete with water dependent uses like commercial recreational fishing and port commerce. Waterfront and coastal communities must find ways to balance these uses along the waters edge. Criteria for enabling neighborhood marinas to coexist successfully with residential neighborhoods are required for waterfront compatibility.

protection, maintain and where possible increase the view sheds for waterfront areas. Waterfront views are an eagerly sought amenity; communities can protect them by using compact design approaches.

(2) Improve ADA compliant connections for pedestrian access to the water, which will increase walking and biking and help to decrease the pressures of seasonal traffic.

(3) Design waterfront buildings in ways that preserve the view of the water and encourage residents and visitors to access the waterfront on foot. Continue to implement a waterfront directional sign program to help visitors find the best route to waterfront destinations.

(4) Study the issue of boat ramps, assessing the need for additional boat ramps at appropriate locations, identifying and remedying the barriers limiting the use of existing public boat ramps, and working with neighborhoods affected by existing community ramps to resolve issues such as ramp ownership, maintenance and security.

Recreation and Parks

Waterfront parks attract visitors to the area, stimulate interest in water related activities and the aquatic environment, provide invaluable recreational opportunities, contribute to the County’s quality of life, and generate economic benefits for surrounding communities. The County continues to place an emphasis upon increasing public access to the Chesapeake Bay and its tributaries, and has undertaken numerous waterfront park projects over the past decade.

Policy: Continue to provide high quality waterfront parks and related programs that accommodate a variety of recreational and leisure activities, while concurrently working to protect the Bay and its tidal ecosystem. The waterways should be made more accessible and the use of waterfront parks encouraged wherever appropriate within the framework of good environmental stewardship.

Actions:

(1) Maintain and upgrade the County’s existing waterfront parks.

(2) Evaluate park sites for water accessibility, including boat ramps, day piers, and canoe and kayak access points.

(3) As funding permits, continue to make capital and programmatic improvements to Marshy Point Park to enhance its role as the County’s premiere facility for environmental interpretation of the Chesapeake Bay and tidal ecosystems.

(4) Expand efforts to promote the use of waterfront parks.

(5) Seek to establish “water trails” between the County’s parks and other points of interest.

(6) Pursue collaborative efforts between community businesses and the County in program development and marketing.

Working Waterfronts

Working waterfronts generate substantial dollars for the region and state’s economy and are vital to the economic health and character of waterfront communities. Active viable waterfronts are also important cultural, historic and scenic areas. Maritime uses are part of our heritage and can provide the context for an exciting, vibrant tourism industry.

Policy: Protect and promote working waterfronts as important elements of a community’s maritime heritage and economy.

Actions:

(1) Preserve the County’s limited but valuable deep-water access for non-residential use.

(2) Promote and coordinate the redevelopment of industrial land in the waterfront area for port related uses.

(3) Participate in multi-jurisdictional efforts to create uniform zoning regulations within the port area.

(4) Continue to participate in the Port Land Use Development Advisory council to help compile a multi-jurisdictional maritime master plan and to promote regional development of the port resource.

Emergency Preparedness/Sea Level Rise

Tropical storm Isabel had a huge effect on the shoreline of Baltimore County, raising the level of the Chesapeake Bay to eight feet above mean high tide, which caused flooding of properties and roadways in much of the eastern Baltimore County waterfront. Resilience to natural hazards, such as storms and storm surges, sea-level rise and shoreline erosion is inextricably linked to the siting and design of development, and to the built and green infrastructure that supports it.

Policy: Public awareness and planning are crucial for safety and minimizing stress during weather events that affect the waterfront.

Actions:

(1) Develop an educational plan for updates on emergency preparedness, including communications, evacuation, traffic, area closures, visitor controls, damage assessment, clean up etc.

(2) Educate the public on the value of shoreline preservation in providing protection against storm damage.

RURAL COMMUNITIES

The rural portion of the County provides high quality drinking water, agricultural products, timber, scenic open space, wildlife habitat, fisheries, recreation, water sports and cultural and historic resources. New development changes the character of the countryside and may have detrimental impacts on these resources. Baltimore County's *Rural Land Management Areas*

protect resources and rural economies while permitting limited development. Since 1989, rural resources have been managed by growth policies for each Land Management Area. These areas include: resource preservation, agricultural priority preservation, rural residential areas, and rural commercial centers (Map 9).

Resource Preservation Areas

The Resource Preservation Areas are designated to preserve and protect the historic, cultural, recreational and environmental resources in the rural areas, while allowing a limited amount of residential development. Designated resource preservation areas include Patapsco/Granite, Soldiers Delight, Loch Raven and Prettyboy and Liberty Reservoirs, Gunpowder, and the Chesapeake Bay.

Policy: Preserve valuable cultural, historic, recreational, and environmental resources by limiting development and acquiring available land for public benefit.

Actions:

(1) Recommend that the County Council use the following guidelines in evaluating rezoning requests:

- Carefully evaluate any proposed zoning changes that would permit additional residential density or increased commercial development in the R.C.6, 7, and 8 zones.
- All zoning in the Chesapeake Bay Critical Area (CBCA) should ensure the most appropriate land use to minimize development impacts and preserve quality of life in surrounding communities, and meet existing CBCA designations.
- Comply with the County's commitments in the regional Reservoir Watershed Management Agreement and Action Strategy to

not increase development densities in the reservoir watersheds.

(2) Complete detailed studies to determine the existing and potential residential densities in resource preservation areas.

(3) Consider limiting residential densities to one dwelling unit per 25-50 acres. Consider limiting density calculation to net density for resource zones.

(4) Delineate and coordinate the public use of resource preservation areas for recreational benefits.

(5) Protect and foster forests and stream systems through conservation easements that prevent the continued fragmentation of these critical resources.

(6) Continue to support State and County programs that encourage sustainable forest management and initiatives to retain forestlands for multiple ecological and economic benefits.



Policy: Manage land development to limit conflicts with the agricultural industry to safeguard lands preserved through easements.

Actions:

(1) Continue to enforce local policies, ordinances, regulations and procedures that stabilize the agricultural and forest land base.

(2) Review and, if necessary, revise zoning and development standards to promote conditions suitable for production, processing and sale of agricultural products.

(3) Include prime and productive soil standards and a maximum lot size to ensure that large parcels are not split to create large residential lots.

(4) Evaluate increasing the minimum acreage for subdivisions in the RC 2 zone to reduce environmental impacts and development pressure on agricultural resources.

(5) Evaluate regulations to eliminate resubdivision of lots created between 1975 and 1979 in the RC 2 zone.

(6) Require that placement of State agricultural or conservation easements shall not result in an increase in density over that permitted without the easements.

Agricultural Priority Preservation Areas

(Note: Policies and Actions to foster a sustainable agricultural industry may be found in the Economic Vitality section. Preservation of the agricultural land is discussed in the Land Resources section.)

While the County is a national leader for the use of restrictive agricultural zoning and planning for agriculture, there are threats to its continued success. Despite the diligent efforts to maintain and expand the agricultural zoning, incremental development continues to threaten the protection of resources and the viability of the agricultural industry. Zoning and development controls need to be reviewed and strengthened to assure that the goals of the Master Plan and the Baltimore County Zoning Regulations are being achieved.

(7) Monitor development within the APPA's to ensure that residential and non-agricultural uses protect the resources and do not overwhelm the operation of agricultural businesses.

(8) In general, zoning changes made in the agricultural priority preservation areas should protect the County's agricultural industry.

(9) Consider adding criteria to the Baltimore County Zoning Regulations (BCZR) to require the evaluation of proposed development impacts on agricultural uses located on prime and productive soils.

(10) Assure that development will have limited impact on active agricultural operations by reviewing, and, if necessary, revising setback requirements.

(11) Review uses permitted by right and special exception in the RC 2 zone to determine whether any uses that are inconsistent with the purpose of the zone should be removed and consider additional performance standards, which will mitigate the impact of the proposed uses on the adjacent farm or easement property.

(12) Enact "Right to Farm" legislation and institute a nuisance mediation board for farm operations.

(13) Consider whether certain institutional uses now permitted in the RC 2, RC 7 and RC 8 zones should be eliminated. Establish performance standards for institutions that are found to not have significant negative impacts if limited by the standards.

Rural Residential Areas

The rural residential areas are a mix of single-family residential development and woodlands, farm fields, stream valleys and areas of significant historic and cultural value. They have accommodated the bulk of new residential development in the rural areas.

Associated with rural residential development, there may be institutional uses, such as religious establishments, which are preferred to be located in proximity to residences, rather than in Resource Preservation or Agricultural Priority Preservation Areas. Included in the rural residential land management areas are Parkton, Chestnut Ridge, Hereford, Jacksonville, Kingsville, and Patapsco/Granite.

The 1979 growth management program designated rural residential areas as suitable for development. The 1989 Master Plan recognized some of the issues created by this choice. The 2000 Master Plan recommended limiting rural residential development. The majority of the land within these areas is zoned RC 5.

The intensity of this development is a suburban residential pattern with densities equal to one dwelling unit per 1-1/2 to 2 acres. Because this rural-suburban residential development is dependent upon well and septic services, the development pattern takes on a haphazard appearance and consumes large quantities of land. This type of development comes at a tremendous cost in terms of traffic, increased infrastructure demands, disruption of the rural character, and adverse impacts on functional values of rural land and water resources.

Policy: Limit suburban development in rural areas.

Actions:

(1) Conduct detailed land use studies to





determine: 1) buildable areas, 2) agricultural areas, and 3) environmentally sensitive areas.

(2) Recommend that the County Council consider rezoning requests for additional office, business or industrial zoning in rural residential areas, in conjunction with the recommendations of any approved plan for the area.

(3) Adopt County standards appropriate for rural residential areas that include open space, architecture, site layout, lighting, bicycles, and pedestrians.

(4) Adapt cluster principles to maintain adjacent forests and open space, which help retain rural character.

(5) Provide effective buffers between development projects to maintain rural character.

(6) Preserve and connect open spaces through cluster development and open space acquisition.

Rural Commercial Centers

Only two designated rural commercial centers will continue to provide local services and facilities for the surrounding rural area. These centers are Hereford and Jacksonville.

The two rural commercial centers contain a certain

mass of retail and office service uses that should not be spread or repeated throughout the rural areas. These areas will continue to be the only locations within the rural area where such services will be concentrated. The size, scale, and quality of development have been a continuing issue in these centers. In addition, the ultimate build out limits of these areas needs to be considered.

Policy: Manage growth in rural commercial centers

Actions:

(1) Manage development through specific rural commercial center master plans that are regularly updated. The master planning process should determine the ultimate boundaries and build out of these areas

(2) Develop overlay districts or specific zoning classifications with design performance criteria unique to each of the centers so issues of use, size, scale and design are addressed. Each center has unique characteristics that should be enhanced by new development.

(3) Adopt development performance guidelines and standards to ensure design quality, scale of uses, natural resource protection, buffers to agricultural uses, adequate open space close to homes, and pedestrian accessibility.

(4) Provide infrastructure support such as stormwater management.

(5) Provide adequate buffers and transitions between commercial projects and differing adjacent land uses to maintain rural character.

HISTORIC AND CULTURAL RESOURCES

Baltimore County has a wealth of cultural and historic resources. Historic communities are generally well planned with diverse architectural styles that are visually interesting. They are built at a human scale and are almost always walkable. Historic resources link us to our past – they provide tangible evidence



of the County's cultural, social and architectural past, and are a testimony to the women and men who came before us to shape our destiny.

Baltimore County has two historic designations that protect its resources to the highest degree possible: the Landmarks List and the County Historic District. Structures with either designation are protected from demolition and all exterior alterations are subject to Landmarks Preservation Commission (LPC) approval.

The Landmarks List is comprised of structures that contribute significantly to Baltimore County's history because they are associated with a person, group, event of historic importance; they are a distinctive example of a particular architectural style and/or they are a good example of the work of a master builder or noted architect. Other criteria spotlight the resource's artistic merit, or whether it contains and may be likely to yield information or materials important to prehistory or history.

A Baltimore County Historic District is more difficult to establish because proprietors owning at least 75 percent of the land within the designated area must agree to form an historic district. New developments are subject to LPC approval, which ensures compatible infill development.

Two other historic designations afford limited protection. The 1966 Historic Preservation Act created the National Register of Historic Places (NRHP). The NRHP is a record that includes National Register districts as well as individually listed properties. Both categories require a thorough

review during the planning phase of federally funded projects. A National Register designation provides no protection against demolition or inappropriate exterior alterations, nor do they provide any control over the compatibility of infill development. On the other hand, contributing structures within a National Register districts, as well as individual properties listed on the NRHP, are eligible for the County Historic Property Tax Credit, which at least assures the retention of the integrity of properties participating in the tax credit program.

Policy: Promote historic preservation through improved education.

Awareness is growing about sustainability and the importance of living in a manner that is environmentally responsible. Redevelopment of an existing building is the ultimate form of "green" development, as opposed to demolition.

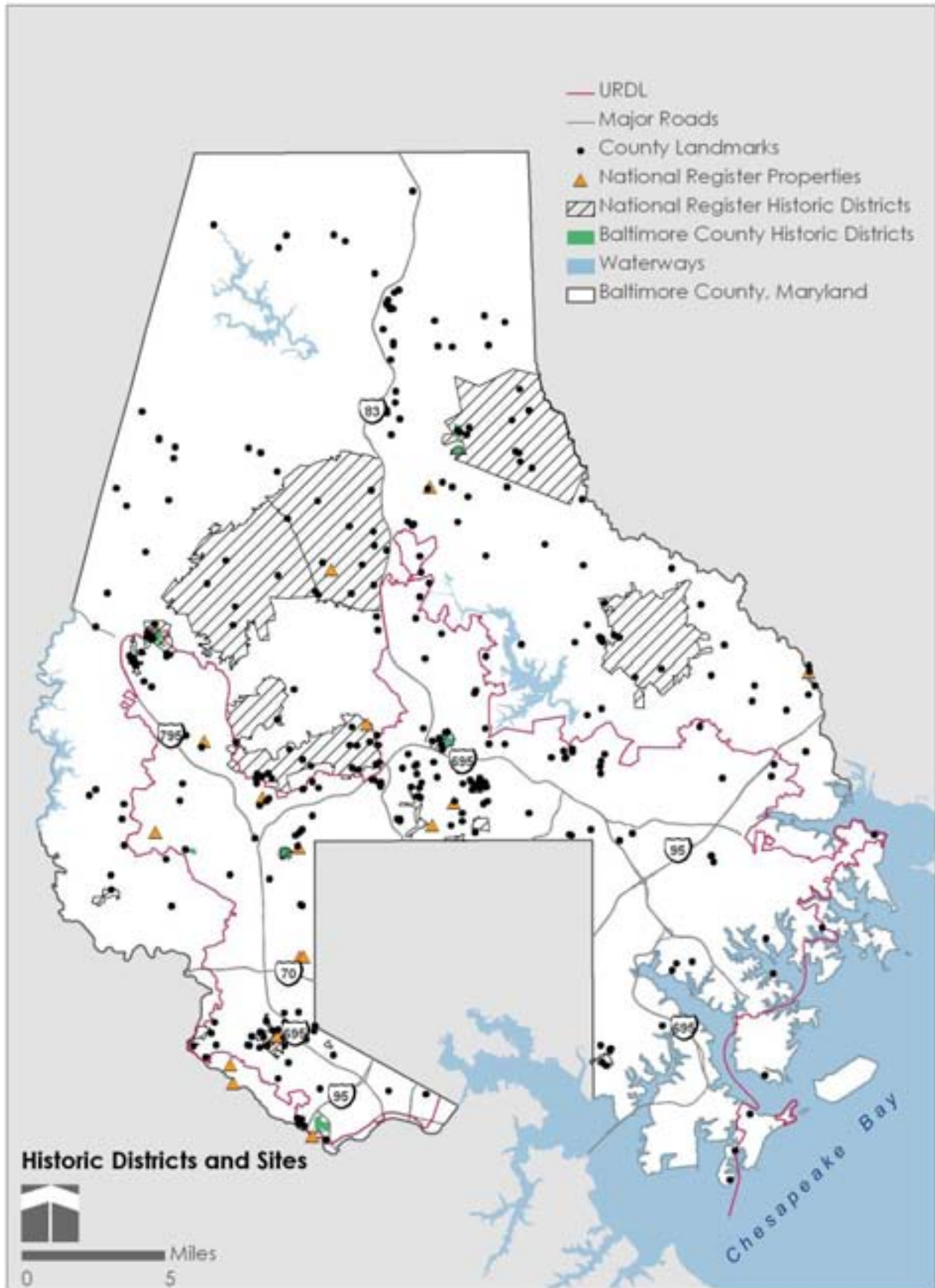
Actions:

- (1) Provide information about preservation issues so the public can make informed decisions about historic resources.
- (2) Develop programs to educate the public about the economic, environmental, and cultural benefits of historic preservation.
- (3) Make pertinent information available on the Baltimore County web site along with links to additional sources and studies.

Policy: Preserve historic structures and their settings.

The preservation of historic resources was an issue raised in the 1979, 1989 and 2010 Master Plans. Considerable progress has been made in response to the actions recommended in these documents. Amendments to the County's Preservation Law clarified vague regulations. The County enacted a very generous and popular historic property rehabilitation tax credit program to make the rehabilitation of historic buildings more feasible. Numerous properties were added to the Final

Map 25: Historic Districts and Sites



Landmarks List, and several new National Register Districts were created. Yet, while Baltimore County takes pride in these accomplishments, the need for preservation has lost none of its relevance today.

The property tax credit program for the rehabilitation of historic properties has been a great success for residential properties and for comprehensive commercial rehabilitation work. But the smaller, more routine maintenance projects for income-producing properties have not benefited. As a consequence, there is little incentive for commercial property owners to maintain their properties. Under the current law, residential property owners receive a 20 percent property tax credit on eligible rehabilitation costs. Income-producing properties receive a 10 year freeze on the property tax increase generated by the rehabilitation, i.e. the work has to be substantial to result in the reassessment of the property's value. Small jobs, such as painting the historic façade of a small shop, putting on a new roof, or installing a new air-conditioning unit does not result in a reassessment and therefore, is not eligible to receive a tax credit. Yet it is precisely these types of routine maintenance projects that are needed to keep historic commercial buildings in good repair. The National Register District of Reisterstown is probably the best example of a designated historic area that would benefit greatly if the historic rehabilitation tax credit program for income-producing properties would be widened to provide a tax credit for improvements under \$ 50,000. Additionally, there are numerous income-producing structures on the Landmarks List that would benefit from the program. The optimal way to encourage historic preservation is when property owners agree to preserve and maintain their historic resources out of their own volition.

Actions:

- (1) Continue to utilize nomination to the landmarks list as a means to safeguard historic buildings.
- (2) Encourage and facilitate use of the County's historic property rehabilitation tax credit program.



Policy: Preserve and protect cultural resources.

Many older communities have structures that are valued by local communities, but do not meet the criteria for landmarks listing for one reason or another. Such cultural resources are frequently found in the County's former village centers, in older African-American communities and on commercial routes along old toll roads. A cultural resource may be an old school house, a former movie theater, a lodge, a church, or a store where people used to gather. It also may be an entire community that is in danger of having its roots forgotten.

Churches and schools in the County's older communities are other cultural resources that are frequently endangered. Churches are often too small to meet contemporary needs and/or may have dwindling congregations that are no longer able to support the church. Likewise, one or two room country schools, or schools that were a product of segregation have ceased operations. They often have little architectural interest but are of importance to their respective communities. Alternative uses and grant opportunities should be explored to keep these resources viable.

The 1979 Master plan recognized 39 Historic African-American Communities as valuable cultural resources. The 1989 Master Plan began to address the need for improving basic services and infrastructure, rehabilitation of historic buildings, and the importance of improving the quality of some housing in these communities. While much has been done over the

last 20 years to enhance the quality of life in these communities, some are still in need of assistance. This Master Plan builds upon previous efforts to acknowledge that Baltimore County’s diversity is greatly enriched by its historically African-American communities, and recognizes the important of continuing to protect and enhance these valuable cultural resources.

Actions:

- (1) Incorporate a list of cultural resources in community plans and explore the best methods to preserve them.
- (2) Continue to work cooperatively with the Department of Public Works, the Office of Community Conservation and the communities to support improvements to preserve and enhance Historic African-American Communities.

Policy: Increase awareness about the importance of archeological resources.

Baltimore County needs to strengthen the preservation of archeological resources, as much of the County’s history is buried in the ground. Greater attention should be paid to archeological resources in cases where there has been little previous disturbance associated with redevelopment or road projects.

Action:

- (1) Educate the public and other agencies about the importance of archeological resources.

Policy: Coordinate historic preservation with the County’s rural strategy.

In rural agricultural areas, the preservation of historic resources presents a unique opportunity. Historic structures in the countryside tend to derive part of their historic significance from their bucolic setting, which is frequently tied to its economic function. Typically, the historic resource is composed of the primary structure along with a cluster of functionally and visually related outbuildings, such as barns,

springhouses, and stables, set in a pastoral landscape of fields, streams and woodlands.

Rural areas that have retained their historic character, continue to be among the County’s most desirable places of residence. Historic structures tend to be more compatible in design, scale and massing with the rural landscape than modern housing. However, sustaining the bucolic beauty of the rural landscape is challenging because maintaining a historic home can be expensive, and many property owners prefer newer and larger homes. Generally, rural subdivisions change the character by flatly grading the landscape with larger homes that are visible for miles. Even a single inappropriately designed or poorly sited new dwelling can dramatically alter the rural character.

Historic preservation goals coincide with agricultural preservation goals, environmental protection objectives and scenic preservation aims of the Master Plan in several ways. Historic properties tend to be smaller and thus create less impervious surface. Historic preservationists support the retention of a property’s traditional agricultural use, thereby preserving scenic resources. Finally, saving and restoring structures, instead of replacing them with new structures, is in itself an act of sustainability that preserves historic resources.

Actions:

- (1) Encourage owners of rural historic resources to place their property on the Landmarks List – particularly properties that



are important to the agricultural history of Baltimore County and which are located along scenic routes.

(2) Continue to protect designated “view sheds” of historic resources, either by limiting new development within view of the historic resource, or by buffering new development from the view of such resources.

SCENIC RESOURCES

The preservation and enhancement of the scenic resources in Baltimore County is an essential component contributing to the quality of life of residents. Scenic resources consist of scenic corridors, scenic views, and gateways. In 1991, the County adopted a set of development guidelines that have raised awareness and recommended development alternatives for protecting scenic resources.

Scenic Corridors and Views

Most of the scenic corridors and views are located in rural areas. The scenic view map provides the beginning of a list of the views for establishing a comprehensive inventory in the near future. Following the adoption of the 1989 Master Plan, the County produced a series of scenic route maps for each council district, which combined the significant visual and historical elements into self-guided scenic tours. The protection of the Interstate 83 (I-83) corridor in northern Baltimore County is a showcase of the inter-governmental efforts on scenic views preservation.

The endeavor for preserving scenic corridors and views ought to emphasize lands zoned for resource protection including RC 2, RC 4, and RC 7. The County will continue to maintain coordination with the State Highway Administration (SHA) and seek available state and federal funds for protection of scenic corridors and views.

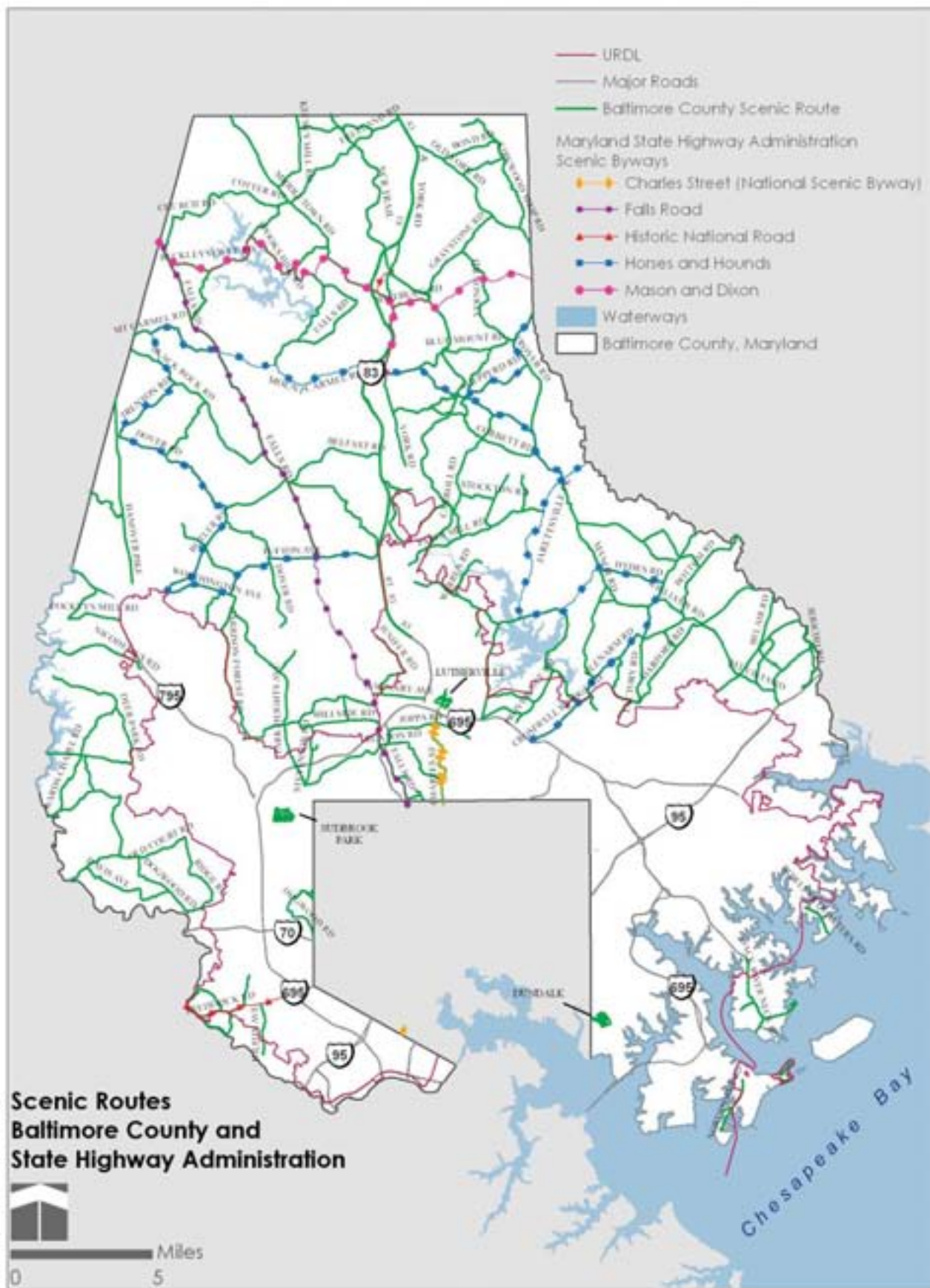
Policy: Preserve scenic corridors and views through proper zoning and coordination with federal and state governments.

Actions:

- (1) Coordinate scenic resource management practices with the national and state Scenic Byways Programs.
- (2) Continue to preserve properties within the I-83 scenic view shed through easement purchases, as funds are available and through RC4 clustering.
- (3) Evaluate proposed improvements to state and county roads and bridges regarding their impact on scenic resources in compliance with the adopted *Rural Roads Standards*. Where public safety allows, the narrow and/or winding character of roads is part of the scenic experience and ought to be preserved.
- (4) Assess proposed development impacts on scenic resources.
- (5) Clarify language regarding scenic corridors and views protection and make it consistent amongst the Master Plan, Comprehensive Manual of Development Policies, Baltimore County Zoning Regulations, Baltimore County Code, and SHA Context Sensitive Solutions for work on scenic byways.
- (6) Establish criteria for identifying significant views and geocode them on maps.
- (7) Apply a systematic methodology for evaluation of scenic routes and preservation techniques.
- (8) Update scenic resources map in accordance

The County has emphasized its efforts on preserving the scenic view shed of I-83 between the Thornton Mill overpass and the Pennsylvania line, which runs through one of the most scenic piedmont areas in the County. Farms, forests, streams and rural homesteads feature both sides of I-83 in northern county. Many properties adjacent to I-83 have been preserved either as parkland or through various easement programs, including donations and purchase of development rights. There has been significant progress in this effort: between Belfast Road and the Gunpowder River, more than half of the scenic corridor has been protected.

Map 26: Scenic Routes



with the most recently adopted state scenic byways.

(9) For properties along scenic routes or within scenic viewsheds, variances, amendments, and special exceptions should be granted sparingly.

Charles Street National Scenic Byway

Charles Street is a main thoroughfare stretching from downtown in the City of Baltimore to Towson in Baltimore County. The County and the City of Baltimore collaborated with interested citizens, civic groups, and state agencies, developing a byway management plan for Charles Street. The purpose of this plan was to prepare for the nomination of Charles Street as a National Scenic Byway. In autumn 2009, the U.S. Secretary of Transportation Ray LaHood designated Charles Street a National Scenic Byway, together with 41 other designations in the nation to the America's Byways® collection. This designation allows the City of Baltimore and Baltimore County to apply for grants for preserving and enhancing scenic characteristics of Charles Street.

Policy: Preserve and enhance the Charles Street National Scenic Byway characteristics.

Actions:

- (1) Apply for grants to implement actions outlined in the Baltimore County portion of the Charles Street Byway Management Plan.
- (2) Collaborate with the Baltimore County Office of Tourism to prioritize activities in compliance with the Byway Management Plan

County Gateway Designations

Gateways are important elements of the County's visual fabric contributing to the community identity and the sense of transition between urban and rural development. Gateways can be located within either urban or rural areas, and mostly at the boundary between urban and rural areas. The specific design treatment of development for these gateways may vary, depending upon the location and structural type of gateways. In addition, the County worked with

The National Scenic Byways Program is part of the U.S. Department of Transportation, Federal Highway Administration. The program is a grass-roots collaborative effort established to help recognize, preserve and enhance selected roads throughout the United States. Since 1992, the National Scenic Byways Program has funded 2,832 projects for state and nationally designated byway routes in 50 states, Puerto Rico and the District of Columbia. The U.S. Secretary of Transportation recognizes certain roads as All-American Roads or National Scenic Byways based on one or more archeological, cultural, historic, natural, recreational and scenic qualities.

the State Highways Administration (SHA) to develop bridge designs along the 695 Beltway that strengthen the sense of arrival into the adjacent communities and promote the community uniqueness.

Policy: Enhance gateway designations through evaluation, design, and construction.

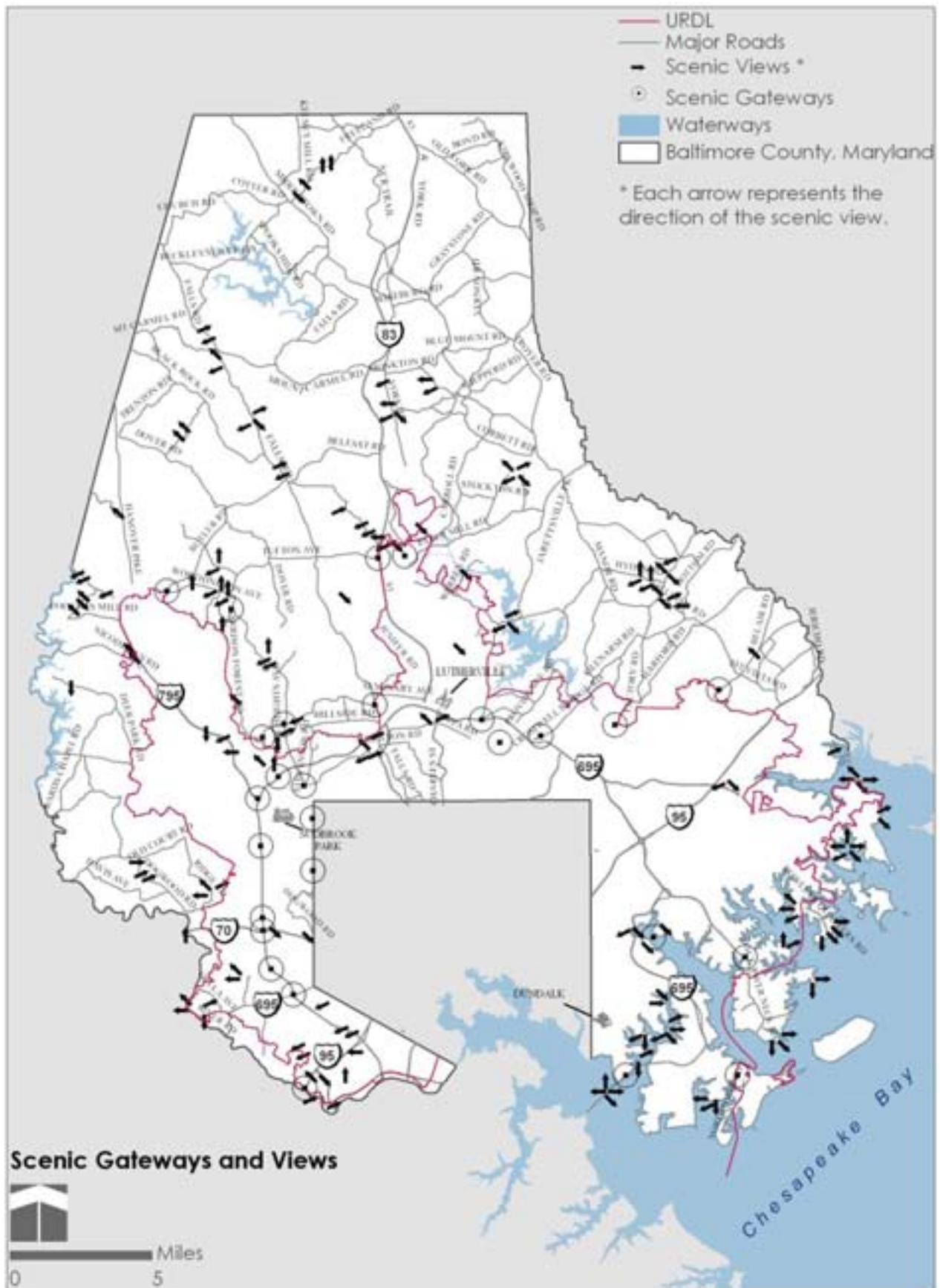
Actions:

- (1) Evaluate existing gateways and identify additional gateways.
- (2) Formulate appropriate design guidelines as part of community plans and streetscape projects.
- (3) Examine the design aspects of proposed development as part of the development review process.
- (4) Develop general guidelines for gateways in the Comprehensive Manual of Development Policies.
- (5) Continue to work with SHA to develop bridge designs at gateway locations.

There are numerous gateways in Baltimore County. Prime examples include:

- (1) The entry to the Cromwell Valley from Towson north of the I-695 Beltway;
- (2) Crossing the bridge northbound on I-83 passing Shawan Road;
- (3) The bridge designs over the I-695 Beltway entering Towson at York and Dulaney Valley Roads, Reisterstown at Reisterstown Road, Catonsville at Frederick Road, and on Charles Street;
- (4) The community logo, landscaping, and old railroad bridge abutment in Towson; and
- (5) The continuous streetscape along Eastern Avenue, from Route 702 to the bridge at Middle River Road leading to the waterfront communities.

Map 27: Scenic Gateways and Views



COMMUNITY SERVICES

To achieve a sustainable society, we should provide equitable access to all community services such as safety from perils, superior educational, recreational and health services, and adequate public infrastructure including water, sewer and transportation.



PUBLIC EDUCATION

Policy Framework

The world our children will inherit is facing major environmental, economic, political, and social challenges. Scientific and technological advances on a global scale have accelerated the rate of change affecting future generations. Regardless of class, ethnicity, language, or ability, all of our children will need to be prepared for success in the future.

Quality schools are fundamental in preparing future generations of county residents for full and productive lives. Schools are the focal point and a vital asset in the community. The location and function of public schools has an important role in forming stable, vibrant, sustainable communities. Maryland Smart Growth Principles, including walkability, cycling, reducing costs on new infrastructure, improving student health and safety, promoting social equity, and enhancing community cohesion have meaningful implications for school location and size.

The Baltimore County Public School system (BCPS) is the third largest in Maryland. Approximately 104,000 students are enrolled in 173 schools, centers, and programs. Baltimore County Public Schools (BCPS) are diverse in student population. Over the past ten years, the minority population grew from 13 percent to 52 percent of the total student population. Students served by the Free and Reduced Meals program increased from 10 percent to 40 percent. The percent share of students in the English as a Second Language (ESL) program rose from 1.4 percent to 3.2 percent. BCPS employs 17,000 faculty and staff members including 8,850 classroom teachers. Every year, BCPS graduates over 7,400 students, and about sixty-three percent of them pursue higher education directly.

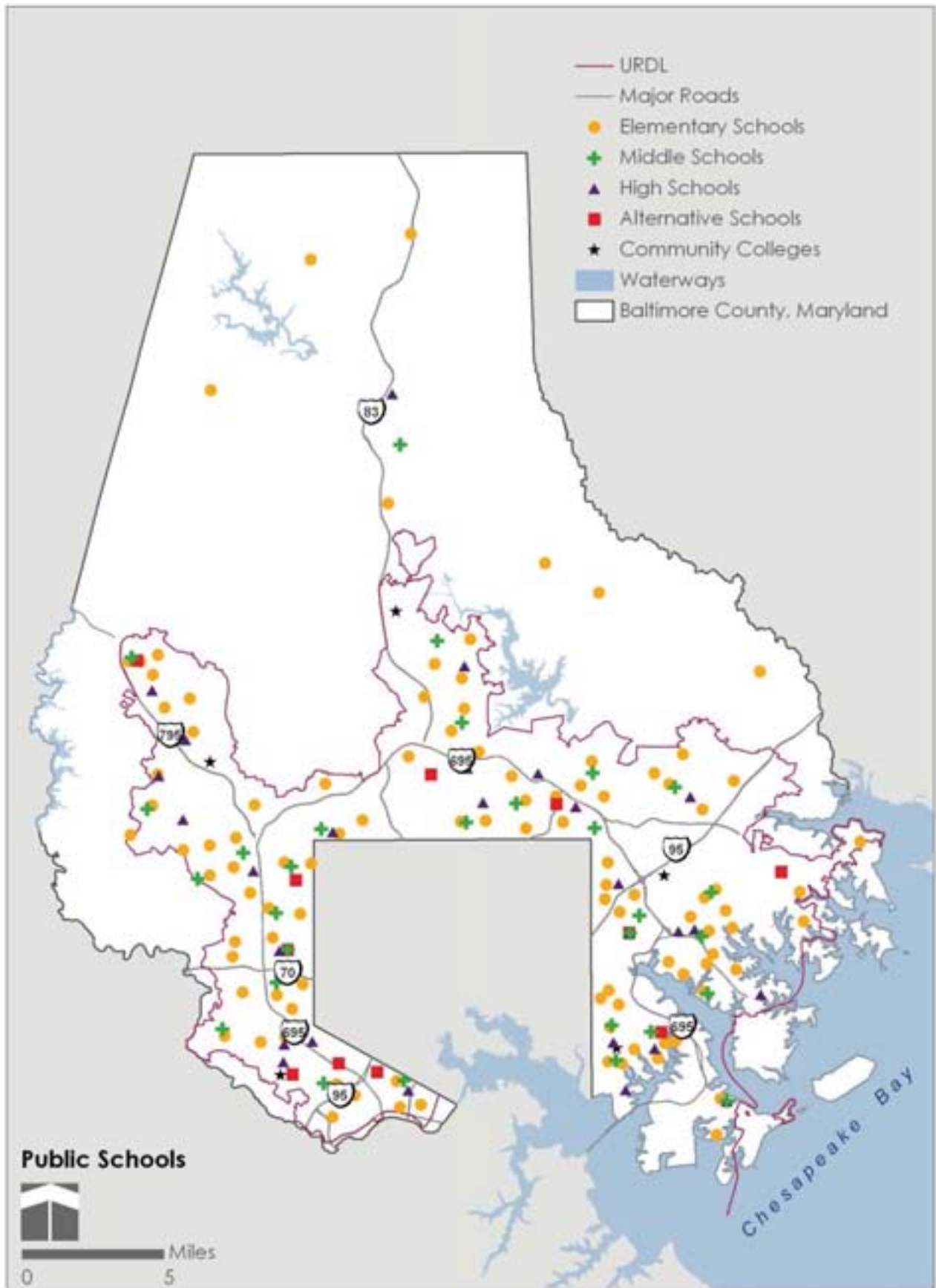
The BCPS *Blueprint for Progress* is built on a foundation of clear standards, quality instruction, and individual accountability. The County's public schools are committed to providing a quality education that develops knowledge, skills and positive attitudes so that each student may reach his or her maximum potential. The *Blueprint for Progress* complies with the Maryland Bridge to Excellence Act and serves as the framework for the Educational Facilities Master Plan (EFMP). The *Blueprint for Progress* also sets forth a number of performance goals with specific indicators for each goal, measuring student achievement and defining school system accountability for achievement. The *Blueprint for Progress* is updated periodically to incorporate new requirements and to make adjustments based on the system's progress.

The goals of Baltimore County Public Schools are: improving achievement for all students, maintaining a safe and orderly learning environment in every school, and using resources effectively and efficiently. A component of a quality educational experience includes providing resources to ensure schools are adequate for instructional purposes. The County must balance the needs between new school construction and the renovation of existing schools when providing adequate facilities to mitigate overcrowding, provide support for current program needs, and prepare school facilities for multiple and adaptive uses in communities. New school construction, to the extent possible, should occur within the Urban Rural Demarcation Line (URDL).

The efficient and appropriate allocation and use of classroom space is one of the greatest challenges facing public school systems nationwide. Each year, BCPS reviews capacities and enrollments to monitor and address facility needs at each school. It is critical to assess new growth and neighborhood turnover to balance expenditures. In accordance with state models and guidelines for growth management, school construction dollars focus on additions and renovations to existing schools within the Priority Funding Area (PFA) (closely corresponding to the URDL) including growth areas featuring higher density, mixed use development. New school construction shall also occur in the PFA. Decisions by the BCPS concerning renovation, expansion, or replacement of aging schools are based upon feasibility studies that ensure school buildings are safe, functional, and meet contemporary program requirements.

The plans for renovations, additions or new construction included in the EFMP should be consistent with *Master Plan 2020*. BCPS updates the EFMP annually to determine school facility needs and outline educational program policies for quality of education and community services. The Master Plan identifies the scope of issues and articulates policies in connection with public education to provide the guidance to the County Council in adopting land use strategies. *Master Plan 2020* likewise endorses a continued collaboration between the public school system and local government aimed at both school

Map 28: Public Schools



facilities planning and the County’s development and planning process.

Policy: Improve achievement for all students through continued development and implementation of the Blueprint for Progress.

Actions:

- (1) Include the vision, mission, belief statements, and performance goals of the *Blueprint for Progress* in the annual EFMP.
- (2) Provide effective instructional programs to enable all students to reach high academic standards in English, Mathematics, Science, and Social Studies.
- (3) Strengthen public partnerships for education involving principals, teachers, staff, community stakeholders, parents, or guardians in educational and decision-making processes.

Policy: Use resources effectively and efficiently for renovation, addition, or construction.

Actions:

- (1) Coordinate with the public and private sectors to provide accurate data as the basis for short-term and long-term enrollment projections.
- (2) Maintain the accuracy in the long-range enrollment projections within 5% of those generated by the Maryland Department of Planning.
- (3) Fund the capital program to deal with critical infrastructure in schools, including Green renovation of facilities.
- (4) Improve the learning environment through the expansion of educational enhancement into all school renovation projects.
- (5) Support the Operations Preventative Maintenance Program along with the

implementation of the Comprehensive Maintenance Plan.

(6) Continue to align the Capital Improvement Program with the distribution of instructional programs.

(7) Continue to collaborate with the County Office of Planning to evaluate potential capacity issues and develop relevant solutions and adjustments.

(8) Establish a phased renovation plan to bring schools into compliance with applicable accessibility codes.

(9) Cooperate with the County agencies to examine policies regarding the template for new school sites in the site bank inventory.

Policy: Encourage community activities using public school buildings.

Actions:

(1) Continue to expand the use of school buildings to serve as community centers for activities for residents from diverse backgrounds.

(2) Foster positive links between public schools and communities.

The BCPS’ Site Bank Inventory is a collection of properties throughout Baltimore County co-owned by the Board of Education and Baltimore County Parks and Recreation. Since 1952, a Joint Use Agreement has facilitated the co-funding, co-use, and co-ownership of school sites. BCPS currently has 13 sites totaling 332.01 acres in the Site Bank. These are legacy sites holding the potential for future schools in areas of need. In regards to site holdings that are no longer viable as future school sites, BCPS seeks to exchange such “leverage” sites for more opportune sites that are capable of sustaining future schools in areas of future growth and need. All site purchases are approved and aligned through the BCPS and the County’s capital improvement process. Sites must meet state approval through the Interagency Committee for Public School Construction prior to use as a school site. Since many key sites in the Site Bank have transitioned to successful school facilities, the need to replenish the Site Bank emerges as a priority.

(3) Encourage community participation in decision-making in relation to the use of school buildings to ensure responsiveness to community needs.

(4) Explore viable shared-use and co-location opportunities among schools and agencies for the provision of services to schools and communities.

(3) Build on the initiative by the Baltimore County Manufacturing Training Consortium to recruit students for manufacturing careers and ensure that they are academically prepared for the positions available within the local manufacturing industry.

(4) Support regional workforce development initiatives and public/private partnerships to improve the regional workforce

Providing Workforce Development

An educated work force is essential for the success of economic and community conservation goals. Gainfully employed individuals contribute significantly to the tax base and the maintenance of their homes and communities. The skill level of the local work force is sometimes the critical factor in a company's decision to locate or remain in a certain area. Baltimore County businesses report that the quality and availability of labor are among their top concerns. Workforce education begins at the earliest stages and is based on a strong system of public education. Baltimore County provides numerous programs that address workforce education.

Policy: Continue to strengthen ties between business and educational institutions at all levels to bring about a coordinated system of basic and career education, training, and retraining for all parts of the work force. Encourage the joint development of specific internship and work-study programs by businesses and schools.

Actions:

(1) Coordinate education tracks with the Community College of Baltimore County (CCBC) on general education, basic skills instruction, arts and science courses, career education, employment skills training, and enrichment courses.

(2) Continue to incorporate the services provided by the Baltimore County Office of Employment and Training (OET) to provide county residents opportunities for job enhancement.

PUBLIC SAFETY AND HEALTH

A community depends on a safe and healthy environment to be sustainable. Threats from criminal activity, accidents, natural disasters, disease outbreaks, and terrorist attacks all require a strong and coordinated response by government, businesses and citizens. The Baltimore County Police Department, Fire Department, and Volunteer Firemen's Association and its member volunteer companies, work collaboratively with the Baltimore County Office of Homeland Security and Emergency Management to provide an appropriate, effective, coordinated response during emergencies. Other County agencies may



assist in these events, including the departments of Health, Public Works, Environmental Protection and Resource Management and Permits and Development Management. Public and environmental health is also protected through the routine inspection services performed by the County (food service facilities, public swimming pools, etc.). Assurance of public safety and health remains the highest priority for the Baltimore County Government.

The County will continue crime, fire and health emergency prevention strategies through local public participation efforts, educational awareness campaigns, and information exchange on a local and regional basis. Even with the county's prevention strategy, public safety emergencies will continue to occur. Furthermore, efficient, timely and coordinated responses to emergency events by appropriate government agencies will be ensured through improved communication, training, and continuous monitoring and evaluation of emergency response systems.

Law Enforcement

A combination of efforts is needed to fight crime, including local and regional cooperation on improvements to communication and information analysis and exchange. These efforts are greatly aided by the latest technology that can allow for faster responses to events and quicker analysis of crime trends.

The Department is committed to maintaining the partnership with Baltimore County Public Schools, helping to ensure a safe environment for students, faculty and staff, and providing positive role models for youth. Through a mentoring program, police officers can guide youth, supporting them, as they become responsible adults.

Additionally, traffic safety is an increasing concern. Every year, approximately 75 people are killed in traffic crashes in Baltimore County, many more than are killed in criminal incidents. Since vehicle miles

In order to provide and even higher level of Public Safety education that was already being delivered to

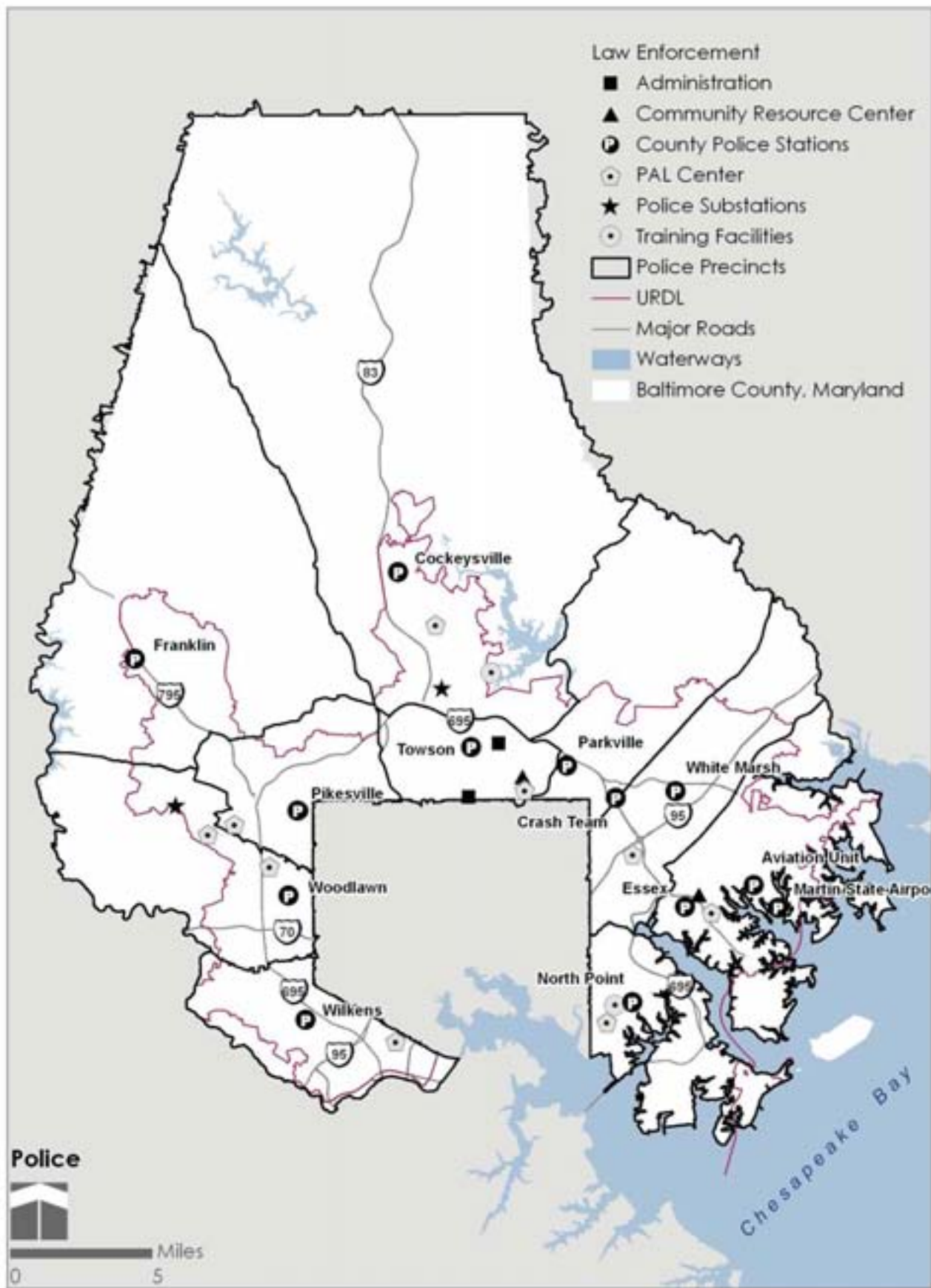
traveled (VMTs) are increasing at a rate far greater than the population, the Police Department needs to ensure that traffic safety is an organizational priority. The successful development of walkable communities and decrease in VMTs will help reduce the rate of vehicle accidents.

Policy: Prevent and reduce criminal activity through effective communication and cooperation on a local and regional basis, improved information compilation, analysis and assessment including use of the latest technology.

Actions:

- (1) Continue to work with first responders from across the region to improve interoperable communications, intelligence/information sharing, explosive device response capabilities, and equipping personnel with appropriate personal protective equipment and other specialized gear.
- (2) Create a Suspicious Activity Reporting (SAR) system to capture, store, analyze and effectively disseminate information reported by the public and agency members.
- (3) Strengthen existing partnerships, and initiate new collaborations among local, state, and federal entities to enhance regional incident response and recovery capabilities.
- (4) Identify critical infrastructure, key resources and other sensitive locations within Baltimore County and build mutually beneficial partnerships with stakeholders of these locations. Assist with vulnerability assessments and efforts to ensure protection and resiliency of these locations. Continue to expand the Automated Critical Asset Management System (ACAMS) critical infrastructure database to include operational response plans.
- (5) Gather and analyze timely, actionable intelligence and incident related information. Disseminate gathered information to the

Map 29: Police



appropriate individuals and/or agencies to best mitigate threats and risk while maintaining privacy, civil liberties and civil rights. Intelligence and information sharing infrastructure, systems and partnerships must continually be assessed to enhance performance in this area.

(6) Seek partnerships with government and private entities to expand responses to target areas, and promote a community-based approach.

(7) Continue to administer homeland security and emergency preparedness training and exercises.

(8) Continue to investigate improved technology in all areas of law enforcement.

(9) Continue to seek grant funding for needed equipment, training, and for assisting the private sector and non-profit organizations with target hardening (strengthening the security of a building to reduce the risk of attacks or thefts).

(10) Update technology for the Crimes Against

After September 11, 2001, the Baltimore County Police Department (BCPD) became one of the first in the state to create a Homeland Security Division. Together with the County Office of Emergency Management, the BCPD significantly updated the County Emergency Operations Plan to ensure a countywide comprehensive approach to preparedness planning, and response to all incidents, man-made or natural, in an efficient and effective manner. Personnel are assigned to the Maryland Coordination and Analysis Center (MCAC) and the Joint Terrorism Task Force (JTTF) and hold leadership roles on the Maryland Anti-Terrorism Advisory Council (ATAC) and Baltimore Urban Area Security Initiative (UASI). The BCPD partnered with the Department of Homeland Security (DHS) and the private sector to identify critical infrastructure within our jurisdiction, and completed vulnerability assessments to address target hardening. (Strengthening security of a building to reduce risks of attacks or thefts) Baltimore County is the first jurisdiction in the state, and one of the first in the country to implement the Automated Critical Asset Management System (ACAMS). This program is a web-based tool that collects information on critical assets, compiles the data, assists with vulnerability assessments, and generates a variety of reports.

Data-driven policing, particularly the Data Driven Approaches to Crime and Traffic Safety (DDACTS) model provides an opportunity to maximize the use of limited resources in areas with significant numbers of criminal and traffic incidents. Baltimore County is currently a national demonstration site for this approach.

Children and the Economic Crimes Units to improve their capability to monitor current “cyber crime” trends.

(11) Review all development and design plans of county facilities to ensure use of Crime Prevention Through Environmental Design (CPTED), as adopted in the Comprehensive Manual of Development Policies (CMDP).

Policy: Educational awareness, outreach efforts, and partnerships with the community assist in reducing crime and victimization.

Actions:

(1) Continuously improve community outreach, educational and awareness efforts as the first line of defense against a terrorist act in our community.

(2) Expand the education and outreach efforts of the Department to assist new and larger groups of non-English speaking people.

(3) Increase the coordination with ethnic community groups including use of social networking programs.

(4) Disperse multicultural aspects of inclusion, victimization and crime prevention to citizens, civic leaders and Department members utilizing presentation, referrals and intervention techniques.

(5) Provide enhanced comprehensive victim education to the elderly with improved programs regarding economic crime and home security.

(6) Use gang presentations to enlist the citizenry in both reporting and resisting gang

activity in their communities.

(7) Expand the Domestic Violence program to support all parties affected by incidents of domestic violence

(8) Increase the scope and level of service to encompass the children, family members and the abusers in the service delivery process associated with domestic violence. The lethality assessment tool will be incorporated into all high-risk domestic violence incidents.

Policy: Early intervention with juveniles helps prevent crime, and reduces the influence, activities, and recruitment efforts of gangs.

Actions:

(1) Continue support of the School Resource Officer (SRO) program into all schools, or at current schools based on need (increased population, juvenile crime, curriculum needs).

(2) Revise the SRO program to reintroduce the three School Programs Unit lesson plans (Stranger Danger, Gun Safety, Community Helpers Program) back into elementary schools.

(3) Identify new topics for all schools based on current crime prevention, personal safety initiatives and research-based programs.

(4) Grow and adapt current programs directed at youth (diversion, counseling and prevention), in response to data analysis available.

(5) Review the present substance abuse program “Drug Awareness and Resistance Education” (DARE) taught to middle school students to determine if it should move to other programs.

(6) Continue and increase the gang awareness training effort to inform all citizens regarding

the recognition of, and the dangers of gang activity.

Policy: Ensure that traffic safety is an organizational priority.

Actions:

(1) High visibility traffic enforcement will be emphasized as a primary countermeasure to reduce crimes and crashes and promote compliance with traffic laws.

(2) Fully implement and support the Data Driven Approaches to Crime and Traffic (DDACTS) model as a primary method of operational deployment within the Police Department.

(3) Implement technology initiatives to improve the efficiency of police reporting (broadband capability in patrol vehicles) and data collection efforts (automation of traffic enforcement and reporting).

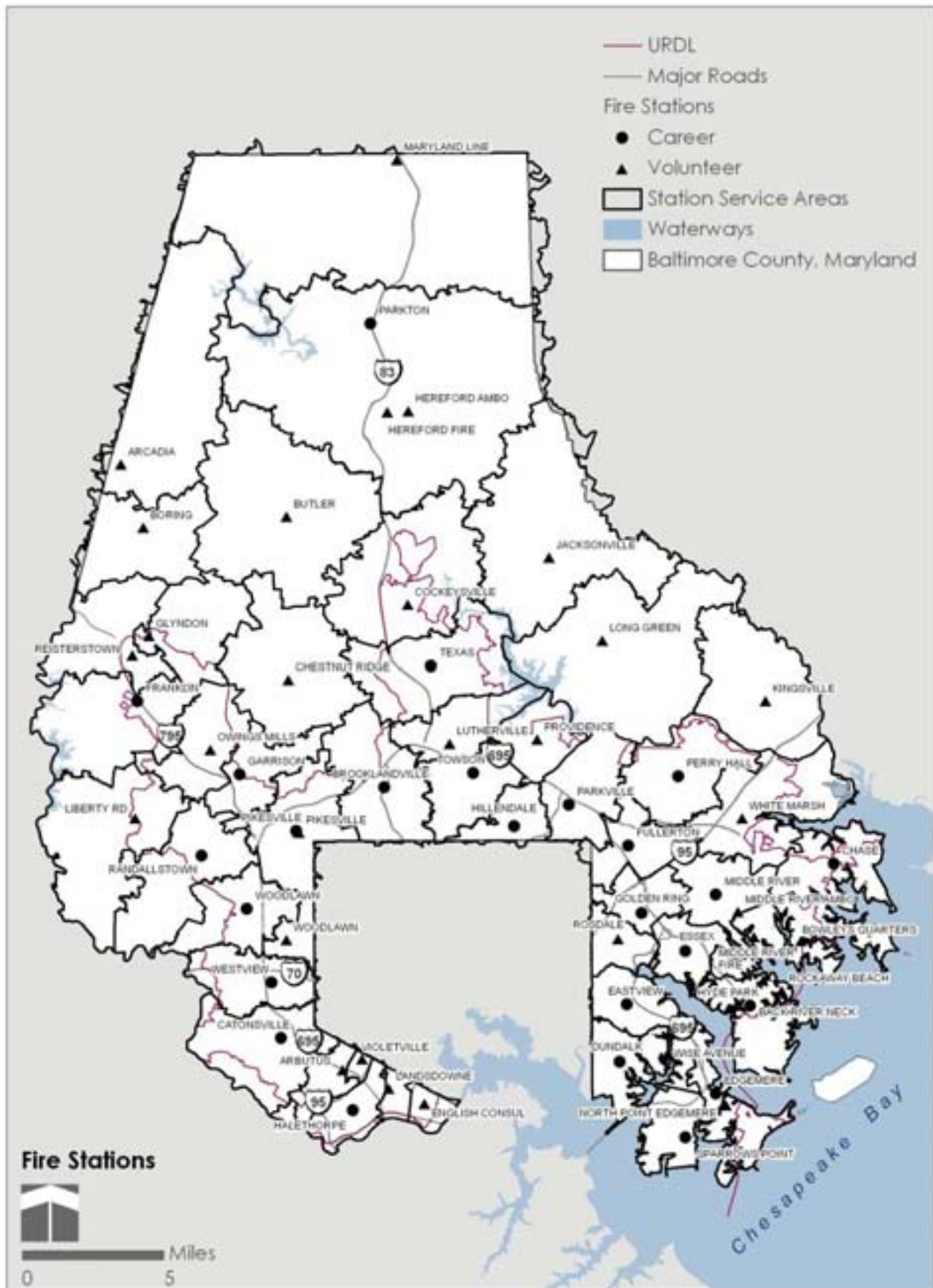
(4) Use new technology to improve upon analytical capabilities and deployment of resources according to crash/crime data.

Fire Safety

The Baltimore County Fire Department and Volunteer Fireman’s Association and its member volunteer companies provide fire protection, emergency medical and emergency rescue to the county’s citizens. Baltimore County maintains a high level of readiness to respond to natural and manmade disasters. Through

The Baltimore County Office of Homeland Security and Emergency Management is organizationally located in the Fire Department and tasked with coordinating the county’s emergency preparedness, response, and recovery efforts. The office supports the delivery of essential services by public agencies and private entities during major events that threaten public safety, plans multi agency drills and exercises, and promotes citizen emergency preparedness awareness and training. The office manages the allocation of state and federal homeland security grant funds and is the county’s liaison with the Federal Emergency Management Agency (FEMA) and the Maryland Emergency Management Agency (MEMA).

Map 30: Fire Stations



a program of integrated emergency management, all departments, agencies, and many private organizations plan for mitigation of hazards, prepare for future emergencies, and assist the community in returning to pre-disaster conditions. In the past, public safety was considered primarily the responsibility of a limited group of public agencies delivering law enforcement, fire, rescue, and emergency medical services. Now, virtually every county agency has an emergency response role to play. County employees have embraced this concept. Employees from many agencies are NIMS (National Incident Management System) trained. This commitment to an expanded public safety role is demonstrated when agencies from a variety of disciplines work collaboratively to deliver comprehensive services to county residents during emergencies.

Baltimore County recognizes the importance of a prepared citizenry. The Office of Homeland Security and Emergency Management presents “Neighbors Helping Neighbors”, an all-hazards training program, to residents several times a year at locations throughout the county. The program teaches residents how to help themselves and their neighbors during an emergency and in the first, critical 72 hours following an emergency. The office also conducts numerous emergency preparedness presentations for public and private organizations.

The Baltimore County Jurisdictional Planning Group (JPG) brings together consumers, advocates, service providers, government officials, and others involved with emergency preparedness planning who share information, and ideas to ensure that the interests of Baltimore County residents with special needs are represented and addressed.

Policy: Maintain a high level of preparedness for all types of emergencies, including natural disasters and terrorist acts.

Actions:

- (1) Coordinate the delivery of services before, during, and after an emergency to ensure effective mitigation, preparedness, response, and recovery efforts.

- (2) Promote NIMS compliance and training of all appropriate county agencies.

- (3) Plan and coordinate multi-agency exercises to ensure readiness to respond to emergency events.

- (4) Promote emergency preparedness public education of all county residents, including those with special needs, by continuing citizen-training programs like Neighbors Helping Neighbors. Work with other agencies to support their emergency preparedness public education efforts.

- (5) Ensure effective use of homeland security grant funds to maximize public safety and preparedness.

- (6) Monitor changes in technology and recommend adoption of cost-effective technologies that enhance preparedness.

Interoperability

Interoperability between jurisdictions has always been an important part of public safety. Mutual Aid has, is, and will be a mainstay of response and incident mitigation. September 11, 2001 brought radio interoperability to the forefront. Baltimore County built a 20 channel, analog, 800mhz radio system in the late 1980's. Surrounding jurisdictions have followed with a mix of analog and digital systems. The nature of these systems made it difficult to accomplish the goals of interoperability. As technology moves forward, so have the capabilities of our radio system, thus meeting our needs.

Policy: State-of-the-art equipment with on-going maintenance and improvement is required for effective communication for emergency responders.

Actions:

- (1) Share system access with mutual aid partners allowing all radios to function on the same system.

- (2) Continue purchasing analog /digital radios that seamlessly change between system types.
- (3) Use the regional CMRC (Central Maryland Regional Communications System) as alternative regional communications channels.
- (4) Use the FMARS (Fire Mutual Aid Radio) high band radio.
- (5) Enable patching capabilities within Fire communications.
- (6) Maintain a cache of spare radios that can be issued to mutual aid agencies.

In order to provide and even higher level of Public Safety education that was already being delivered to the citizens of Baltimore County, it became necessary to institute a Fire Station based education and prevention program. This program trained personnel in the Fire Stations to administer educational safety programs to the public. Using all Fire station personnel to assist in this outreach resulted in a 126% increase in citizens' participation.

Policy: Safety education opportunities must be readily available to the public.

Actions:

- (1) Ensure that all personnel continue to deliver quality, comprehensive educational programs to our citizens.
- (2) Constantly re-evaluate the citizen base that is being reached and institute ways to reach groups that have special needs.

Outreach

A need was identified to provide better community outreach with the purpose of helping to make citizens aware of how to prevent home emergencies before they occur. As a result, the Safety Awareness for Everyone (S.A.F.E.) neighborhoods program was instituted. This program identifies, through various resources, neighborhoods with a high incidence of requests for emergency assistance (from various

county agencies). The Public Safety Education office in coordination with other County agencies identifies available resources that can help abate the need for emergency assistance. Afterwards, representatives from those agencies walk throughout the neighborhood talking to residents, addressing their concerns, and providing information on how to keep their homes and families safe.

Policy: Community outreach by the County will assist citizens to make their homes and neighborhoods safer.

Actions:

- (1) Walk through neighborhoods with appropriate County agency representatives to answer citizen's questions and concerns.
- (2) Provide and institute an educational community outreach program that teaches constituents how to keep their homes and families safe.

Fire Inspections

The Baltimore County Fire Prevention Code requires fire safety inspections of all structures and premises, except single-family and multiple family dwelling units. Under a comprehensive inspection program involving personnel in fire stations and the Fire Marshal's office, more than 25,000 annual fire inspections are conducted. These inspections greatly contributed to a low fire death rate in the County for many years.

Recently, more focus has been placed on inspecting places of assembly and providing additional supervision for patrons of these establishments through the "Crowd Manager's Program". The requirement of "crowd managers" for these occupancies has provided an additional means of safety and direction in the event of a fire emergency.

As more residential boarding and care facilities have emerged (assisted living facilities for the elderly, child care centers), fire inspections also increased to ensure safety for the different groups that populate these

facilities. Self-evacuation by some of these residents is often not possible, so it is critical that fire safety requirements be met.

Providing fire protection to the more rural areas of the County also continues. Working with the Baltimore County Volunteer Firemen's Association, there is a continuing effort to identify acceptable areas where rural water tanks and dry fire hydrants are needed. There are 117 tanks and/or dry hydrants installed in various non-metropolitan locations. This investment resulted in an improvement in the rating by the Insurance Services Office from a Class 9 to a Class 6.

Policy: Ensure building safety

Actions:

- (1) Ensure that proper time intervals are maintained between fire safety inspections for all applicable building uses and occupancies.
- (2) Monitor the building industry's technological advancements to ensure occupant and firefighter safety in the event of fire.
- (3) Continue to enforce and improve local codes, laws, and regulations.

Policy: Strengthen Volunteer Fire Service

Actions:

- (1) Continue to support volunteer fire companies through financial contributions, training, and technical assistance.
- (2) Assist volunteer fire companies with outreach and fundraising.

Policy: Provide water for fire suppression

Actions:

- (1) Work cooperatively with residents of established communities to locate or improve fire fighting water sources.

(2) Ensure that new residential communities comply with appropriate requirements for rural fire protection.

(3) Pursue new technology to transport and use water more efficiently in rural fire fighting efforts.

(4) Encourage the agricultural community to work with the Fire Department to locate and improve water sources on farmland.

(5) Continue to work with developers and builders to place large capacity (30,000 gallon) tanks strategically in rural areas. The Baltimore County Fire Code requires these tanks or alternatives.

(6) Continue identification of viable areas for additional rural water resources.

Non-Emergent

Emergency medical calls to 911 are absolutely necessary if a citizen is badly injured, or acutely ill with life-threatening injuries. There are many instances however, where if citizens are adequately trained, and injuries are not quite so severe, the patient may be treated and transported to a nearby medical facility. The number of non-emergent calls can be reduced if citizens could provide first aid for non-life threatening conditions at the scene. In cases of heart attacks, proper use of an automated external defibrillator (AED) can save a life, and/or prolong a life until help arrives. Availability and proper use of an AED when citizens are trained in first aid contributes greatly to reducing loss of life and further injury. Training in schools and nursing homes enables those personnel to gain the knowledge that may assist emergency medical technicians prior to their arrival.

Policy: Reduce non-emergent calls to 911; reduce injuries and loss of life through educational and training programs and distribution of certain medical equipment.

Actions:

- (1) Continue the expansion of Baltimore County’s public access defibrillator program, Project Heartbeat. This program provides businesses, community groups, and churches the ability to purchase AED’s, or automated external defibrillators, at a reduced price. AED’s, combined with early access to 911 and CPR, have proven to save lives of the victims of sudden cardiac arrest.
- (2) Continue to enable cardiopulmonary resuscitation (CPR) and First Aid Training to be available to all citizens.
- (3) Work with Baltimore County Schools to train all county school nurses in the handling of emergency medical incidents prior to the arrival of the paramedics and emergency medical technicians (EMT’s).
- (4) Develop a comprehensive training program for use in the county’s nursing homes. This program is designed to assist nursing home personnel in making the right decision regarding transport of ill and injured residents.

Health

Physical, mental, and emotional wellbeing are important predictors for the overall health of a population. The Baltimore County Department of Health is the agency charged with assessing the public health needs of Baltimore County residents and developing programs to address these areas. Persistent barriers to optimal health include access to primary and preventive health services, and knowledge about behaviors that can promote good health.

Currently, the core clinical services of the Department of Health are delivered in eight regional health centers across the County. The majority of these centers were established decades ago, prior to master planning efforts. Therefore, these centers are often not located near other County facilities where multiple services can be easily accessed. There exists opportunity to plan for the best locations to make health services most convenient for our citizens.

Policy: Increase access for all citizens to the County’s public health programs through strategic placement of Department of Health services.

Actions:

- (1) Collaborate with the appropriate County agencies to determine underserved communities and the specific public health needs of targeted neighborhoods.
- (2) Partner with County planners to explore opportunities for collocation of Department of Health services with existing and proposed government and community centers.
- (3) Continue coordination of public health and programs with local hospitals.

Unintentional Injuries

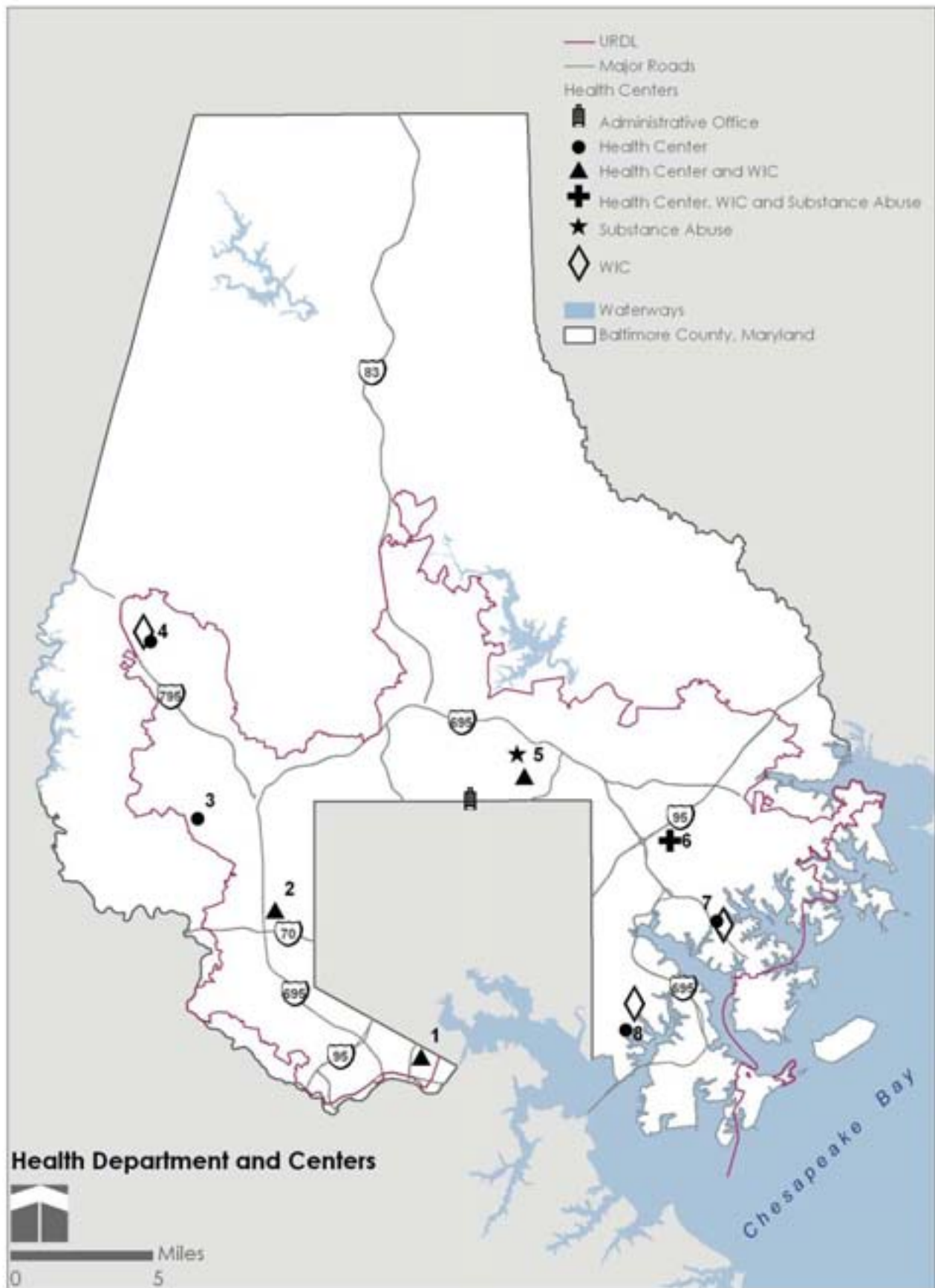
Unintentional injuries are a leading cause of illness, disability, and death both nationally and in Baltimore County. Commonly called “accidents,” unintentional injuries occur in every age group across the lifespan. The Department of Health maintains that unintentional injuries can be substantially reduced, by providing County residents with the appropriate information and other resources necessary for prevention.

Policy: Reduce preventable illness and disability resulting from unintentional injuries.

Actions:

- (1) Continually work with Baltimore County providers and hospitals to determine the leading causes of unintentional injuries and the groups that are most frequently impacted.
- (2) Develop injury prevention programs that are tailored to specific demographic groups, utilizing reliable data and best practices.
- (3) Monitor and report the impact of the County’s injury prevention efforts.

Map 31: Health Department and Centers



HEALTH DEPARTMENT CENTERS	
1	Baltimore Highlands-Landsdowne Health Center – 3902 Annapolis Road, 21227
2	Woodlawn Health Center – 1811 Woodlawn Drive, 21207
3	Liberty Family Resource Center – 3525 Resource Drive, 21133
4	Hannah More Health Center – 12035 Reisterstown Road, 21136
5	Towson Health Center – 1046 Taylor Avenue, 21286
6	Eastern Family Resource Center – 9100 Franklin Square Drive, 21237
7	Essex Health Center – 1538 Country Ridge Lane, 21221
8	Dundalk Health Center – 7700 Dunmanway, 21222

Physical Activity

Chronic health conditions including diabetes, heart disease, and obesity are leading causes of death and disability nationally. The occurrence and severity of many of these illnesses can be prevented with physical activity. In recognizing the importance of safe, convenient, and accessible exercise facilities, the Department of Health will implement several actions to promote physical activity among County residents.

Policy: Promote outdoor physical activity in all regions of the County, in collaboration with appropriate County agencies.

Actions:

- (1) Determine existing facilities that are suitable for physical activity.
- (2) Identify facilities that can be enhanced and used for physical activity.
- (3) Identify resources, including land and funding, to enhance or create spaces that can be used for physical activity.
- (4) Support development of well-designed compact, mixed-use, walkable communities that encourage walking.

Community Environmental Health

The County has long recognized the need to promote and protect Public Health through disease control and protection of the food supply. It has become increasingly acknowledged, however, that Public Health also benefits dramatically from increased

environmental quality. Obvious relationships exist between enhanced air and drinking water quality and the need to respond to disease vector control issues in an environmentally responsible manner. There are also more subtle relationships between environmental conditions and both the personal and policy-derived quality of life standards the public has come to expect. The importance of environmental health is greater today due to changing lifestyles of citizens, as people increasingly consume food outside of their homes and travel for water recreation.

Food Safety

The focus of Baltimore County’s Environmental Health Programs and initiatives is to protect the vital resources necessary to ensure public health and provide information to the public regarding their safe and productive use of, and interaction with, those resources. This is achieved through planning, education, monitoring, and regulatory enforcement in the areas of Food Safety, Construction Plan Review, Community Hygiene, Recreational Hygiene, and Environmental Site Assessment. Baltimore County has over 3000 commercial food service facilities. State law mandates inspections of these facilities with regard to food safety practices. The inspections also allow environmental health personnel to evaluate waste disposal practices that may contribute directly to trash and offal contamination of streams, damage to sanitary sewers, and increased use of pesticides.

A professional staff of Registered Sanitarians routinely inspects these facilities and also responds to citizen complaints or requests from other agencies. DEPRM maintains a computer data base system that allows the comparison of environmentally related food service

facility issues with incidences of sanitary sewage overflows and pest control issues. This effort includes the maintenance of an informational web site and an on-going educational program for food service facility owners/operators.

Policy: Routine and complaint-based inspections will reflect any discernable relationships between facility operational practices and potential environmental impacts.

Actions:

- (1) Continue to inspect food service facilities on a regular basis to ensure that proper practices are being implemented.
- (2) Continue to prioritize complaint-based inspections.
- (3) Continue to develop better educational outreach.

Construction Plan Review

DEPRM is required by State and County codes to review the plans for any new construction, or significant renovation of commercial food service facilities and public swimming pools. While this function has been traditionally concerned with the facilitation of safe food handling in restaurants, and disinfection capability and safety in pool construction, more emphasis has recently been placed on how design and function affect environmental conditions.

The quality of waste generated at commercial food service facilities regarding the production of fats, oils and grease (FOG) is now recognized as a major factor in the restriction of flow, and eventual blockage of segments of the sanitary sewer system. Sanitary Sewage Overflows (SSO's) caused by grease blockages, especially along densely developed corridors, have resulted in significant pollution events that have created biological impacts and increased nutrient loadings in fresh and tidal waters. Baltimore County, the EPA, and the Department of Justice have entered into a Consent Decree that requires the County to address FOG.

The back washing of filter material at public swimming pools, and seasonal draining of chlorinated water, can also adversely affect nearby streams. The plan review process allows an opportunity to encourage, and in some cases require holding tanks or drain fields designed to reduce chlorine concentrations to minimal levels before the effluent reaches a watercourse.

Policy: Review of food service facility and public swimming pool plans will address potential environmental issues.

Actions:

- (1) Review food service facility plans to ensure compliance with proper food handling requirements.
- (2) Develop criteria for proper control of fats, oil, and grease.
- (3) Ensure that pool plans incorporate measures that protect downstream watercourses.
- (4) Provide educational material to the food and swimming pool industries, and the public, regarding food and pool safety.

Community Hygiene

Community Hygiene issues typically encompass the following: illegal dumping of trash, junk and debris, improper storage and disposal of some household-related hazardous chemicals, pest/disease vector control, pet waste accumulation, proper handling of potentially hazardous materials during the deconstruction of residential and commercial buildings, construction dust control, elimination of standing water, and poor maintenance of residential sewer laterals and septic systems. All of these issues may have both direct public health implications and may cause secondary environmental damage.

Policy: Continue to enforce community hygiene regulations.

Actions:

- (1) Investigate citizen complaints regarding community hygiene issues.
- (2) Provide web-based educational material and take advantage of promotional opportunities.
- (3) Promote community involvement in clean-up activities.

Recreational Hygiene

Recreational Hygiene is typically defined as the study and enforcement of effective means of promoting Public Health during associated recreational activities. As many such activities take place out of doors, good environmental quality is essential. Baltimore County recognizes this link and has actively taken measures to monitor conditions, especially in fresh and tidal recreational waters to help minimal public exposure to unhealthy conditions. The US EPA Beach Act of 2000 mandates biological and chemical sampling of County waters. This sampling is required to determine that minimum biological swimming standards are met.

Policy: Continue to implement a recreational hygiene program through a better understanding of environmental factors.

Actions:

- (1) Continue recreational sampling as mandated by the Beach Act of 2000 and provide accurate, timely information to the public.
- (2) Continue to explore how this program can practically interface with the goals of the 2006 Baltimore Watershed Agreement.
- (3) As feasible, increase sampling to collect broader baseline data on water quality.

SOCIAL SERVICES

The Department of Social Services, in partnership with state and county agencies, provides income support, housing and social work services to Baltimore County residents who are in need. The department provides families, adults, children, or adolescents with services, including rental subsidy, fuel and electricity payment assistance, adoptive foster parenting, shelters, abuse and negligence prevention, childcare services, self-improvement, caring for the elderly or disabled, employment assistance, mental health treatment, and financial support for food and medicine.

The County is facing a range of issues in providing social services for the underserved. The demand for affordable housing continues to increase. Fair market rents have risen, which contributes to an increase in the Housing Assistance Payments in the Housing Choice Voucher program. While sales prices in the County nearly doubled in the past years, incomes have grown less than one quarter. The County’s annual survey on homelessness showed that the homeless rate has grown by more than 25 percent from the previous year, resulting from lack of affordable housing, disabilities, eviction, or unemployment. In 2009, the County served 5,000 residents in its various programs to assist the homeless.

The rise in home heating/cooling costs due to increases in natural gas, electricity, has created a burden on many residents, particularly low and moderate-income households. Toxicity of environmental conditions contributes to illness, including allergies, asthma, bronchitis, and maladies. In addition, the County is experiencing an increase in foreign immigrants. This new demographic trend reinforces the need for a greater cultural sensitivity, and bilingual publications, programs, and services.

Transportation is also a significant barrier to receiving services and obtaining employment. Equally important is the need for job readiness, career preparation, and vocational training for low and moderate-income families or persons. These two issues combined with housing comprise the primary needs for low and moderate-income families or persons. The Homeless Roundtable’s needs

assessment identified housing, employment, and transportation as key elements to independence and self-reliance.

The County recognizes challenges and opportunities, and continues to strive to enhance community vibrancy for its diverse residents. The Consolidated Plan provides for the utilization of federal, state, and local resources and funds: the Community Development Block Grant (CDBG), HOME Investment Partnerships Program (HOME), Emergency Shelter Grant Program (ESG) and other programs to create decent housing, expand economic opportunity, and ensure a suitable living environment for underserved families, persons, and communities.

Policy: Increase the availability of affordable, decent permanent housing to low and moderate-income families or persons.

Actions:

- (1) Provide direct assistance to tenants through the HOME funded Tenant Based Rental Assistance (TBRA).
- (2) Direct the HOME funds to create and preserve rental housing for low-income households.
- (3) Continue to create the availability and affordability of homeownership opportunities through a strategic investment of the HOME funds.
- (4) Maintain the Single Family Rehabilitation Loan Program with CDBG funds to ensure a suitable living environment.
- (5) Invest resources and human capital for affordable housing using environmentally sound building techniques.
- (6) Offer mortgage financing for low and moderate-income persons at reasonable rates, using non-discriminatory lending practices.
- (7) Build partnerships with fair housing

advocacy groups, county agencies and neighboring jurisdictions to eliminate discriminatory practices.

Policy: Improve the supply of housing and services to persons with special needs.

Actions:

- (1) Utilize CDBG funds to increase the access to housing and public facilities for persons with disabilities.
- (2) Provide supportive services and transitional housing for people who are homeless, in the emergency shelter, or at risk of being homeless.
- (3) Provide grants for landlords to supply housing for persons with disabilities through the Housing Accessibility Modification Program (HAMP).
- (4) Apply governmental funds to create housing vouchers for persons with HIV/AIDS as part of the Housing for Persons with Disabilities Program.

Policy: Expand economic opportunities and provide adequate transit and public services for the underserved.

Actions:

- (1) Provide job opportunities and training for low and moderate-income persons to empower self-sufficiency and reduce generational poverty.
- (2) Assure provision of affordable housing opportunities close to job opportunities and services relating to employment.
- (3) Create linguistic resources and provide public services to meet health, safety, business, and educational needs of new immigrants.

(4) Improve public transportation and services transporting for the underserved to access employment opportunities and public assistance.

(5) Establish a transit-oriented development (TOD) overlay zone that promotes workforce housing near public transportation.

(6) Encourage development of new mixed-income, transit-oriented communities that are located near major employment hubs.

(7) Link neighborhoods, commercial corridors, and civic uses through bicycle trails and pedestrian paths.

(8) Continue to provide income support and social work services for County residents in need.



New technologies, services, resources, and collections provide opportunities for BCPL to meet the ever-changing needs and expectations of all segments of the population. BCPL continues to provide services, programs, and resources that support education, personal enrichment, community building, and business development for County residents, businesses, or visitors.

LIBRARIES

The Baltimore County Public Library (BCPL) is one of the best and busiest library systems in the nation. The library plays a unique role in our communities, providing active, positive learning experiences for all customers. Annually, there are 482,000 library cardholders and 5,833,000 visitors in 17 branches, using 5,000 BCPL programs. The library loans more than 10 million items annually. There are about 972,000 uses of public computers in BCPL branches. BCPL upholds a long tradition of excellent customer services. The library's overall customer satisfaction rating is 96 percent.

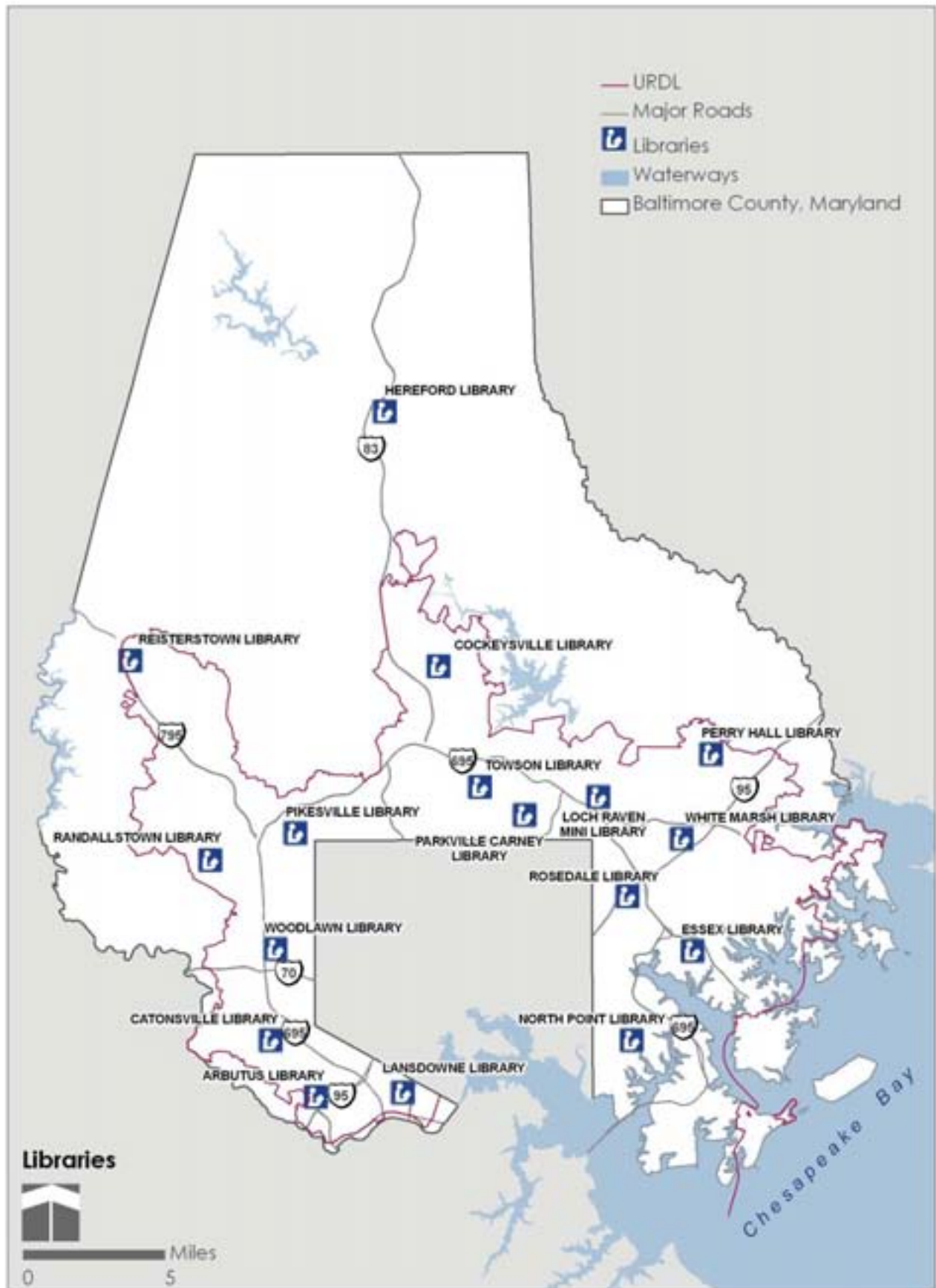
The current population of more than 800,000 is growing in diversity. There is an increasing number of people from the Hispanic or Latino origin, non-White races, senior citizens (65 years of age or older), foreign-born persons, adults with high school diplomas or advanced education, and those employed in professional and service occupations. BCPL is responsible to respond to the various needs of this evolving mixture of unique communities, and will reap many benefits from the broadening diversity.

Policy: Provide all residents with contemporary resources and services via various media and excellent customer assistance.

Actions:

- (1) Create young readers (age 5 or under) by promoting early literacy for reading, writing, listening, and learning.
- (2) Stimulate imagination among students with reading, viewing and listening for pleasure.
- (3) Assist students with homework in order to succeed academically.
- (4) Supply teens and adult customers with up-to-date materials for their life-long learning.
- (5) Offer an easy access for customers to information on programs, activities, and services of county agencies.
- (6) Connect customers to ever-growing resources and services via the high-speed Internet access.

Map 32: Libraries



Policy: Increase the operational efficiency through facilities maintenance and improvement, technology development, and collections acquisition and management.

Actions:

- (1) Upgrade or maintain library facilities to provide customers with a comfortable and safe physical environment.
- (2) Improve overall public services through the use of technology.
- (3) Develop and implement the Marketing Plans to support targeted BCPL programs and services.
- (4) Continue to acquire, maintain, or share collections useful and interesting to customers.
- (5) Include libraries with public meeting areas as part of civic space in newly designed Community Enhancement Areas, where feasible.



its citizens and visitors. Parklands provide venues for recreational facilities and activities, while at the same time preserving significant areas of natural resources that serve as integral green infrastructure. Parklands and recreational facilities also provide economic and social benefits, ranging from enhancing nearby property values, to promoting tourism and patronage of local businesses, to supporting community conservation. The County’s collection of parks, school recreation centers, open spaces, greenways and other recreational facilities is supported by vast areas of Baltimore City-owned reservoir lands and State-owned and managed parklands and natural environment areas that both preserve the natural environment and offer predominantly natural resource-based forms of recreation. The State and local parklands and recreational facilities complement one another, combining to form an invaluable network of public lands that, together with lands protected under other other land preservation and regulatory programs, help to make Baltimore County a recognized national leader in land conservation.

The recreational opportunities offered through Baltimore County’s parklands and recreational facilities are varied, and range from organized programs offered by the Department of Recreation and Parks through the efforts of 45 non-profit, volunteer-based recreation and parks councils, to free-time activities such as walking, visiting a playground and picnicking. Recreational activities promote physical and mental well being and provide a platform for social interaction and personal growth.

RECREATION AND PARKS

This section of the master plan, as well as other recreation and parks related information included or referenced within this plan, functions along with the most recently adopted Baltimore County, Maryland Land Preservation, Parks and Recreation Plan (LPPRP) as the key planning doctrine for the Baltimore County Department of Recreation and Parks. The LPPRP, required by Title 5, Subtitle 9 of the Natural Resources Article of the Annotated Code of Maryland, serves as a guide for meeting the recreation, park and open space needs of the citizens of Baltimore County. In preparing the *Master Plan 2020* parks and recreation content, the recommendations and mandates of several other documents and planning policies were likewise considered and incorporated. These include the *Baltimore County Master Plan 2010*, the existing State of Maryland Land Preservation, Parks and Recreation Plan, various adopted Baltimore County community and special purpose plans, and the State’s recently

To adhere to State and County growth management policy, most parks and recreation resources provided by the County are and will continue to be concentrated within urbanized areas in which the majority of the population resides. However, Baltimore County recognizes its responsibility to serve all of its citizens, and will accommodate the rural population by providing strategically situated parks and recreational facilities.

Policy: Acquire a variety of parklands and recreation sites to achieve parkland acquisition goals and meet public recreation needs.

Parklands serve a variety of important roles. They are the venues for recreational facilities, preserve invaluable green space and help protect and preserve the natural environment, serve as a gathering place for the surrounding community, are proven to enhance nearby property values, support economic development, and contribute to public health.

Actions:

- (1) Utilize Program Open Space (POS) as a key funding source for the acquisition of parkland.
- (2) Strategically target all available parkland funding resources to areas of existing and projected future needs, whether these needs be acreage-based, facility-based, resource-based, or policy-based. Specific focus will need to be applied to the County's

proposed Community Enhancement Areas (CEAs), where population growth will be concentrated. Parklands and facilities needed for the CEA should be provided within and/or in close proximity to their bounds when possible to promote walkability and sustainability.

(3) Employ the Baltimore County development process to provide quality local open space, obtain fees-in-lieu where appropriate (to help fund park acquisition and development), and to secure vital greenway connections. Continue to refine the open space dedication process to ensure that local open spaces are deeded to the County, homeowners' association, or other appropriate party in a timely and accurate manner.

(4) Reinvestigate and update, as needed, the County's policies and regulations pertaining to Greenways. Continue to require the dedication of Greenways within the County development process and employ these lands to create trail and path networks such as those underway in and around the Owings Mills Growth Area. The Department of Recreation and Parks should work with the Office of Planning and other county agencies to add community plan recommended greenways and other appropriate linear land areas to the Greenway Map, which identifies land areas that must be preserved by dedication or easement.

(5) Exercise all means necessary for the acquisition of key prospective park sites, up to and including the powers of master plan conflict and eminent domain.

(6) Work with landowners to secure tax credits and similar agreements that will enable them to donate or sell their land at a reduced value to the County or local established land trust if such properties would be of sufficient public recreational or open space benefit.



Map 33: Greenways



(7) Continue support of the Neighborspace Program as a proven mechanism for preserving smaller neighborhood-oriented open spaces.

Recreational demands and preferences perpetually change, so that activities popular in one decade may not be in strong demand in the next. This impacts the types and quantity of recreational facilities that must be provided to meet the needs of County citizens. In some cases parks are retrofitted to replace no longer needed facilities with amenities that support activities that have increased in popularity. In other cases, new facilities not even envisioned until recent years (dog parks, for example) are being provided to meet widespread public demands. The County must remain vigilant of shifts in recreational demands, and be prepared to renovate and enhance existing parks, or create new parks to provide needed facilities.

Policy: Provide a diversity of recreational facilities and areas to meet the needs of citizens, and to serve the organized programs of the local recreation and parks councils.

Actions:

(1) Provide a sufficient quantity of traditional outdoor recreation facilities such as ball diamonds, athletic fields, sports courts, playgrounds, and picnic areas.

(2) Provide sufficient indoor facilities and access time to meet expanding demands for year-round recreation, to serve programs that require indoor space, and to facilitate use by community and civic organizations.

(3) Construct additional trails and paths to meet growing demands for linear-based forms of recreation such as walking, jogging, and bicycling. Work with County and State agencies to establish pedestrian and bicycle connections between parks, residential areas and other points of interest, in conjunction with the county's pedestrian and bicycle plans and community plans. Community

Enhancement Area standards and plans should include strong pedestrian and bicycle access components so as to encourage non-motorized forms of transportation and provide associated recreational opportunities.

(4) Provide appropriate service amenities such as restrooms, storage areas, parking areas, sidewalks and paths, and facility/security lighting.

The Department of Recreation and Parks has served the citizens of Baltimore County for over sixty years. The recreational facilities throughout the County's park system have widely varying ages, and there is an on-going need to renovate and retrofit park amenities so that they remain safe, functional, and attractive.

Policy: Renovate and rehabilitate parks to address the issues of facility aging and outdated recreational infrastructure.

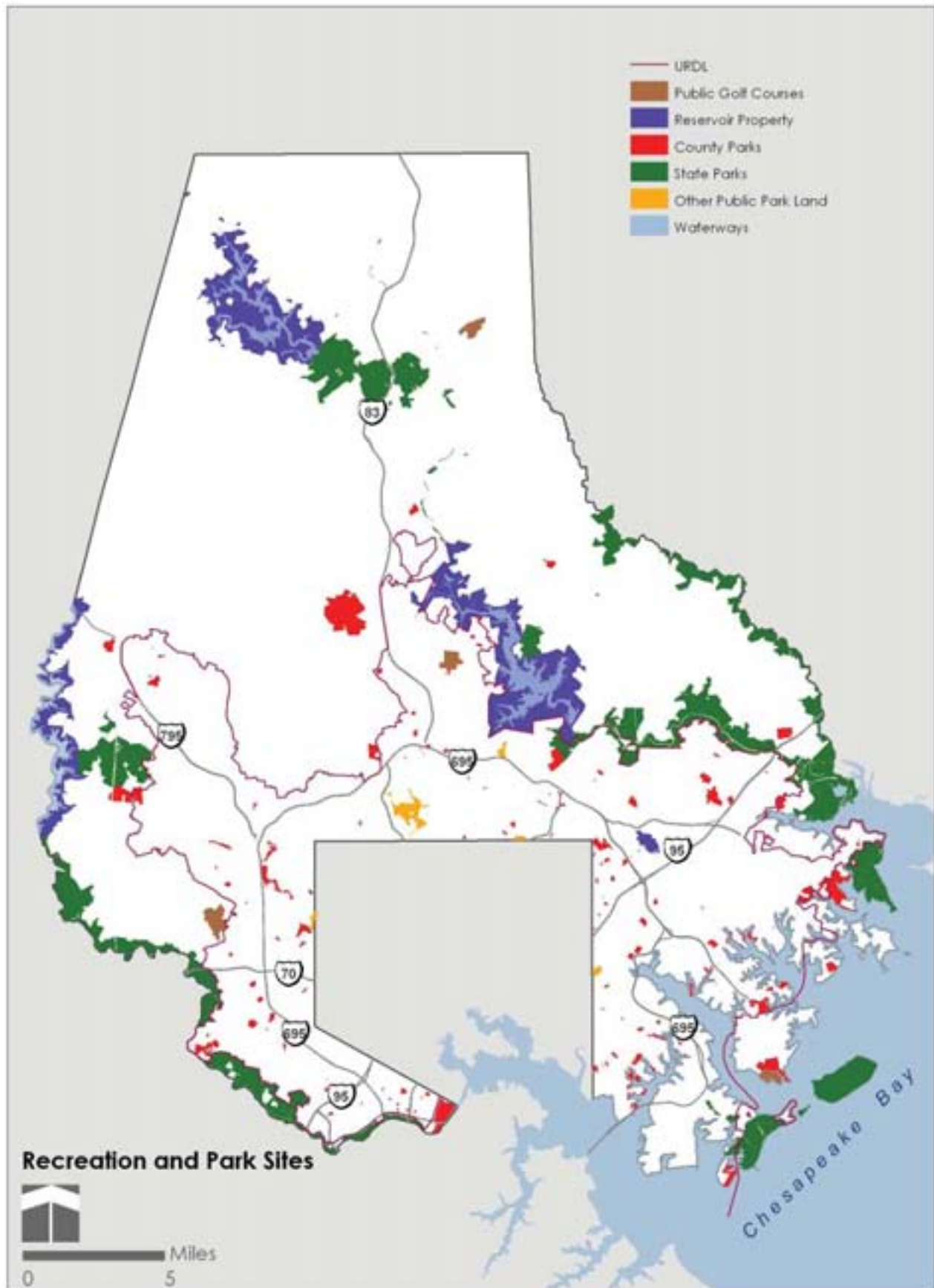
Actions:

(1) Evaluate the functionality and condition of the County's older parks, and conduct appropriate site redesign, rehabilitation, and improvement projects.

(2) Where appropriate continue comprehensive capital renovation programs, including existing programs for playground equipment, courts, fields, facility lighting, and parking lots; seek opportunities for the expansion of such programs to other types of recreational facilities and support amenities.



Map 34: Recreation and Park Sites





(3) Explore opportunities for reutilizing or retrofitting facilities for other recreational purposes if they are no longer needed or desired.

Parks, open spaces, and recreational facilities are vital to the form and function of the community. Baltimore County has utilized parks as a viable community enhancement and revitalization tool, and will continue to do so within new initiatives such as the Community Enhancement Areas.

Policy: Participate and play a vital role within community revitalization programs such as the County's renaissance initiative.

Actions:

- (1) Provide quality parks and recreational facilities within community revitalization areas and renaissance communities. Where appropriate, replace unsuitable or poorly functioning land uses with parks that will help to enhance the community.
- (2) Actively participate in community redesign processes, recognizing the important role that parks play in providing and maintaining attractive, healthy neighborhoods.
- (3) Maintain parks in older communities to ensure that these sites remain attractive and functional, and contribute to the strength of the community.

(4) Continue to require the provision of appropriate and adequate open space opportunities within or in proximity to the County's proposed Community Enhancement Areas. Evaluate the required local open space requirements to ensure that these remain adequate.

The Chesapeake Bay and Baltimore County's wealth of waterfront lands are invaluable resources that help define the County and region. Recognizing that the vast majority of the population resides in non-waterfront communities, the County is committed to providing all citizens plentiful opportunities to experience the Bay and its tributaries through public parklands. The County and State waterfront parks range from entirely natural and pristine sites to venues that provide amenities such as boat ramps, fishing piers and swimming beaches for public use.

Policy: Expand waterfront access to the Chesapeake Bay and its tributaries.

Actions:

- (1) Provide an assortment of recreational facilities at the County's waterfront parks, ranging from water-specific facilities such as boat ramps and fishing piers, to general amenities including picnic pavilions, playgrounds and paths.
- (2) Utilize Marshy Point Park and Nature Center on Dundee and Saltpeter Creeks as a key platform for providing citizens of the region with opportunities to experience, learn about and gain an appreciation for the Chesapeake Bay and its ecosystem.
- (3) Evaluate all existing waterfront park sites to assure adequate use, while undertaking appropriate environmental conservation measures.
- (4) Participate in the National Park Service-led *Captain John Smith Chesapeake National Historic Trail* initiative, employing the trail as

a tool for increasing tourism and park visitation.

(5) Designate viable water trails to connect waterfront parks and provide opportunities for canoeing and kayaking. Seek to establish an interpretive water trail on the North Point Peninsula as part of the county, state and federal efforts to commemorate the bicentennial of the War of 1812 and the Battle of North Point (1814).

Policy: Pursue alternative funding sources for park acquisition, development, capital improvements, recreational programs and special events.

Actions:

- (1) Aggressively pursue both public and private grant opportunities.
- (2) Solicit businesses and citizens for donations and expand the scope of existing sponsorship programs.
- (3) Enter into appropriate manage-lease and similar agreements to provide citizens with recreational opportunities that are outside the scope of what may feasibly be offered by the County.
- (4) Procure surplus State lands that are of recreation, parks, or open space benefit when these become available.

Parklands play a vital role in helping to preserve vast natural areas and protect and sustain the environment. Nearly 70% of the parks, open spaces, and recreation sites owned by the County are undeveloped, serving as green spaces that have environmental benefits ranging from protecting and enhancing water quality, to helping cool surrounding air temperatures through a proliferation of trees and vegetation. Parks, even when developed with recreational facilities, typically have less impervious surface and feature more preserved natural areas than most other forms of urban/suburban land use. Finally, the County's interpretive facilities and parks provide the venues

through which citizens, especially students and children, can experience and learn about nature first-hand.

Policy: Promote a greater appreciation for the natural environment through interpretation and hands-on experiences, and expand efforts to protect sensitive environmental areas within the County's parklands.

Actions:

- (1) Perform assessments of existing and future park sites to delineate sensitive environmental areas and to identify appropriate protective measures.
- (2) Promote environmental awareness through the use of interpretive signage and educational programs at both the County's interpretive centers and general park sites.
- (3) Work with DEPRM on such projects as stream and shoreline restoration, floodplain, reforestation, wildlife management, and forest health assessments.
- (4) Collaborate with County agencies and other partners to improve green design standards and enhance sustainability for recreation facilities.

The County and the Department of Recreation and Parks have long been committed to making recreational opportunities available to all citizens,



regardless of their abilities or disabilities. Adaptive facilities and programs provide a diversity of recreational options and ensure that no individual be denied the opportunity to enjoy quality leisure time experiences.

Policy: Enhance park and facility accessibility and provide quality recreational opportunities for individuals of all abilities.

Actions:

- (1) Continue to provide access from parking areas and park entry points to site amenities.
- (2) Ensure that new facilities are sufficiently accessible and meet Americans with Disabilities Act Guidelines (ADAG).

The recreational tastes of individuals are as diverse. The County recognizes that artistic, cultural, and historical activities are also popular leisure pursuits that should be available. A broad array of arts programs, ranging from dance to pottery making, are offered through the local recreation and parks councils. Further, the County provides special facilities such as Banneker Historical Park and Museum, the Lurman Woodland Theater, and Holt Park and Center for the Arts as venues for programs and activities.

Policy: Expand opportunities for citizens to participate in and experience arts programs and events, and historically and culturally significant sites.

Actions:

- (1) Provide arts and cultural programs at local, regional and countywide levels.
- (2) Work with Baltimore County Public Schools to maximize the use of school-based arts facilities.
- (3) Help protect sites of cultural and historical significance, and provide applicable interpretive facilities, displays and programs.

- (4) Participate in special initiatives such as the historical trail efforts that are underway in preparation for the 200th anniversary of the War of 1812 and the Battle of North Point.

Facility design standards and specifications change, requiring that the County adapt, whether for the sake of meeting new safety or environmental requirements, or for the purpose of providing better facilities.

Policy: Evaluate facility design standards as necessary to better meet recreational demands, enhance facility safety and functionality, and ensure that parks and facilities are sustainable, attractive community enhancements.

Actions:

- (1) Continue to investigate and implement methods for rectifying problems with the de-vegetation of athletic fields, whether through the replacement with synthetic field surfaces or other means.
- (2) Perform regular evaluations of facility specifications and make any necessary updates or modifications.
- (3) Revisit the design of recreation and community centers and make modifications, where necessary, to enhance functionality, maximize recreational and community use, and meet LEED (Leadership in Energy and Environmental Design) standards.
- (4) Design parks and facilities to be compatible with and visually benefit the surrounding community.
- (5) Revise park design practices to meet current environmental regulations, including the new State requirements related to stormwater management.

Partnerships have served as a vital means for providing quality parks and recreation services throughout the County, and have formed the cornerstone upon which the Department of Recreation



and Parks was built. Two of the most long-standing partnerships—with the citizen volunteer-based recreation and parks councils, and with Baltimore County Public Schools—are essential to providing recreation programs and many of the recreational facilities at which programs take place.

Policy: Participate in various partnerships to maximize resources and efforts for the benefit of Baltimore County citizens.

Actions:

- (1) Partner with the volunteer-based recreation and parks councils to provide quality recreational opportunities.
- (2) Utilize the Board of Recreation and Parks as an integral link between the citizens of Baltimore County, the recreation and parks councils, the County Council, and Department of Recreation and Parks.
- (3) Work with Baltimore County Public Schools to maximize the effectiveness of the joint-use agreement for school recreation centers.
- (4) Work with other Baltimore County agencies such as the Office of Community Conservation, the Department of

Environmental Protection and Resource Management, the Office of Planning, and the Police to combine resources and meet public needs. The Police Athletic League (PAL) program is a particularly important effort, providing recreational opportunities that complement the traditional programs of local recreation councils while providing invaluable mentoring experiences to participating youths.

- (5) Participate in cooperative efforts with the State of Maryland, neighboring jurisdictions, and other recreation and parks agencies throughout the State and country.
- (6) Work and collaborate with non-profit, civic and community organizations, especially in cases where such organizations are in a position to support and supplement the County’s missions. Explore additional opportunities for groups and citizens to provide volunteer services.

Technology has revolutionized government services, including parks and recreation. Various technological tools, from computerized mapping systems to maintenance equipment that uses volcanic ash to eradicate graffiti, have streamlined and enhanced business processes.

Policy: Expand the use of technology to enhance agency operations, and to better meet the needs of the public.

Actions:

- (1) Seek further opportunities for using the Internet to better serve County citizens and to make the public aware of recreational opportunities and the park system.
- (2) Utilize technological resources to streamline and improve upon various agency operations. Procure modern technological resources that would enhance operations and allow the agency to better serve the public with sustainable technologies.

ECONOMIC VITALITY

A healthy, vibrant economy is important to maintaining Baltimore County's quality of life: a rich variety of family-supporting jobs and tax revenue to pay for schools, roads and other public services.



A healthy, vibrant economy is important to maintaining Baltimore County's quality of life: a rich variety of family-supporting jobs and tax revenue to pay for schools, roads and other public services. This economic strength cannot be taken for granted. The County must ensure that the ingredients for future economic health be in place. This Master Plan lays the policy groundwork for achieving this long-term success.

FOUNDATION OF BALTIMORE'S ECONOMY

Baltimore County is the major economic engine in terms of jobs (515,000) in the region with the second-largest number of jobs of any Maryland jurisdiction. The County economy is highly diversified, not dependent on

any single industry or company. Among the sectors where the County is strong: financial services, defense, manufacturing, transportation, information technology and life sciences. The federal government also has a major presence in the County, as the national headquarters for both the Social Security Administration (SSA) and the Centers for Medicare and Medicaid (CMS) are located in Woodlawn. The County's inter-connected web of large, medium and small firms in traditional and high technology sectors, and the high quality of the local workforce, also fosters stability and resilience.

An important determinant of the County's economic health is the balance between export industries and local-serving industries. The difference between the local-serving and export-oriented sectors is critical because they depend on distinct revenue bases and infuse wealth into the local economy in different ways.

Export Industries Play a Unique Role in Adding Wealth to the Area

Export businesses produce goods and services sold mainly outside the local area. As a result, they play a unique and irreplaceable role in determining the community's standard of living. Examples include manufacturers, Research and Development (R&D) firms, major financial services operations, health care facilities, corporate headquarters, agriculture, and state and federal government facilities. Businesses in these industries bring in money from outside the area because they sell their products and services to national or international markets. This outside money is pumped into the local economy through wages and business income, and creates the market for local-serving businesses.



Jobs created in export industries also tend to create more spin off jobs (i.e., have a greater multiplier effect), than do jobs in retail or services. The more inputs purchased locally and the more consumer expenditures at local shops, the higher the multiplier. For example, the table below highlights multipliers for four different sectors.

Local-Serving Businesses are Central to the County's Quality of Life

Local-serving businesses are those whose products or services are primarily consumed in the County, such as restaurants, grocery stores, bookstores, medical offices, banks, dry cleaners, home furnishing stores, convenience stores, pharmacies, etc. They range from national retailers to local, family-owned businesses. Regardless of their size, these companies provide the



Employment Multipliers per 100 Jobs in Major Sectors				
	Manufacturing	Health Services	Retail Trade	Personal/ Business Services
Supplier jobs: materials	128.92	28.3	24.1	54.08
Supplier jobs: capital services	38.63	22	16.71	27.95
Responding employment	116.46	66.05	46.35	68.8
state + local government	6.78	1.6	1.29	2.88
TOTAL	290.78	117.94	88.45	153.71

goods and services that County residents need and want and provide employment to a large number of County citizens. Retailers and other local-serving businesses also have a special role in main street or mixed-use settings. Attractive storefronts and restaurants create an active street level that is critical to successful, pedestrian friendly developments or older downtowns. They contribute to a vibrant, vital and visually appealing walking experience, as well as providing the goods and services needed by nearby residents and office workers.

Fostering Economic Vitality in 2020 and Beyond

Together, export and local-serving businesses form the basis for a strong local economy. In short, residents follow good jobs and retail follows residents. The greater the County's success in retaining and attracting export businesses, the greater the spending power will be and demand for local-serving goods and services. As these businesses thrive, the County is able to offer an appealing quality of life to its residents. Employees in turn serve as customers for other businesses, circulating dollars back through the local economy. County businesses pay significant taxes that provide revenue to pay for schools, roads, parks and other public services.

Baltimore County's economy faces several challenges as we look to 2020 and beyond. The ongoing health of the County's economy, and the health of its residential communities, will depend on how these challenges are addressed.

The future economic health of the County depends heavily on retaining and growing companies that export goods and services outside the region.

Baltimore County is fortunate to have a well-diversified economy. The County is home to a large number of export employers in a wide range of sectors: financial services, manufacturing, transportation, information technology, life sciences and agriculture. Goods produced range from unmanned aerial vehicles, flu testing kits, and steel to computer games, flavored rum, titanium horseshoes and packaged food flavorings. Baltimore County is now the largest job center in the Baltimore region, offering an abundance of employment opportunities. The breadth and depth of the economy is a major reason for the County's AAA bond rating, which allows the County to borrow for schools and public projects at a much lower interest rate than most other jurisdictions in the nation.

Land use policy is a critical factor in growing and supporting new business opportunities. The ability to attract, retain and expand the employment based depends on having appropriately zoned land available to accommodate companies when they need to move or expand.

Between 1992 and 2008, the County's supply of employment zoned land, especially sites with ML, MH, OT and O3 zoning, decreased by more than 1,538 acres. Several hundred additional acres were effectively converted to non-employment classifications through residential and retail PUDs in these zones, and exclusively residential projects in OT zones.



Policy: *Identify areas with significant potential to accommodate future employment growth and develop and implement strategies to prepare areas for business attraction.*

Actions:

- (1) Continue to work with the State, property owners, and Amtrak to achieve a quality mixed-use transit oriented development at the GSA Depot in Middle River.
- (2) Seek additional ways to increase the economic spin off from the County’s institutions of higher education both as job creators and sources for cutting edge research.
- (3) Continue to pursue coordinated complementary high-density development at Metro Center at Owings Mills and Owings Mills Mall.
- (4) Encourage TOD, mixed-use and other redevelopment opportunities along the Red Line that support ridership, while minimizing negative impacts on existing businesses and properties.

- (5) Identify ways to provide incentives for higher value office/industrial development at older business parks.
- (6) Implement the recommendation of the interagency Pulaski Highway Study to attract spin-off development related to BRAC.
- (7) Intensify mixed-use development in designated growth areas, employment centers and Community Enhancement Areas.
- (8) Work with Severstal Steel or any subsequent owner at Sparrows Point regarding the future use of surplus land.
- (9) Support existing and prospective businesses in the Woodlawn area and initiate land use decisions that will capitalize on the expansion of the facilities for the Social Security Administration (SSA) and the Centers for Medicare and Medicaid Services (CMS). The SSA and CMS operations, and any expansion of them, are an economic engine in western Baltimore County, creating a demand for a wide range of businesses and services to accommodate the area.

Policy: *Maintain zoning appropriate for major employment on infrastructure-served land with good access.*

Actions:

- (1) Recommend that the County Council evaluate rezoning and PUD proposals that convert M or OT zoned land to residential or retail use to consider the long-term effects on the economy.
- (2) Ensure that adequate land and structures remain available to accommodate new and expanding primary employers not suited for mixed-use environments.
- (3) Consider ways to guide new employment opportunities to quality mixed-use development.
- (4) Preserve the County's limited deep-water access for industrial uses.
- (5) Consider amending the BCZR to limit the amount of residential development permitted in the OT zoning classification.

LAND USE BALANCE

A fiscally strong jurisdiction must maintain a healthy balance between residential and non-residential land uses. Different types of land use have variant effects on a county's finances. Some land uses contribute more in tax revenue than they consume in public services, such as schools, police and fire services. Some land uses consume more services than they pay for directly through property taxes. A balanced economy is needed to provide a healthy place to live, work and play. A strong employment sector: industrial, office, and commercial, provide jobs and tax revenue. A diverse choice of housing is essential to providing a qualified work force to fuel the employment sector.

Policy: *The County should maintain a healthy balance between residential and non-residential land uses inside the URDL.*

Actions:

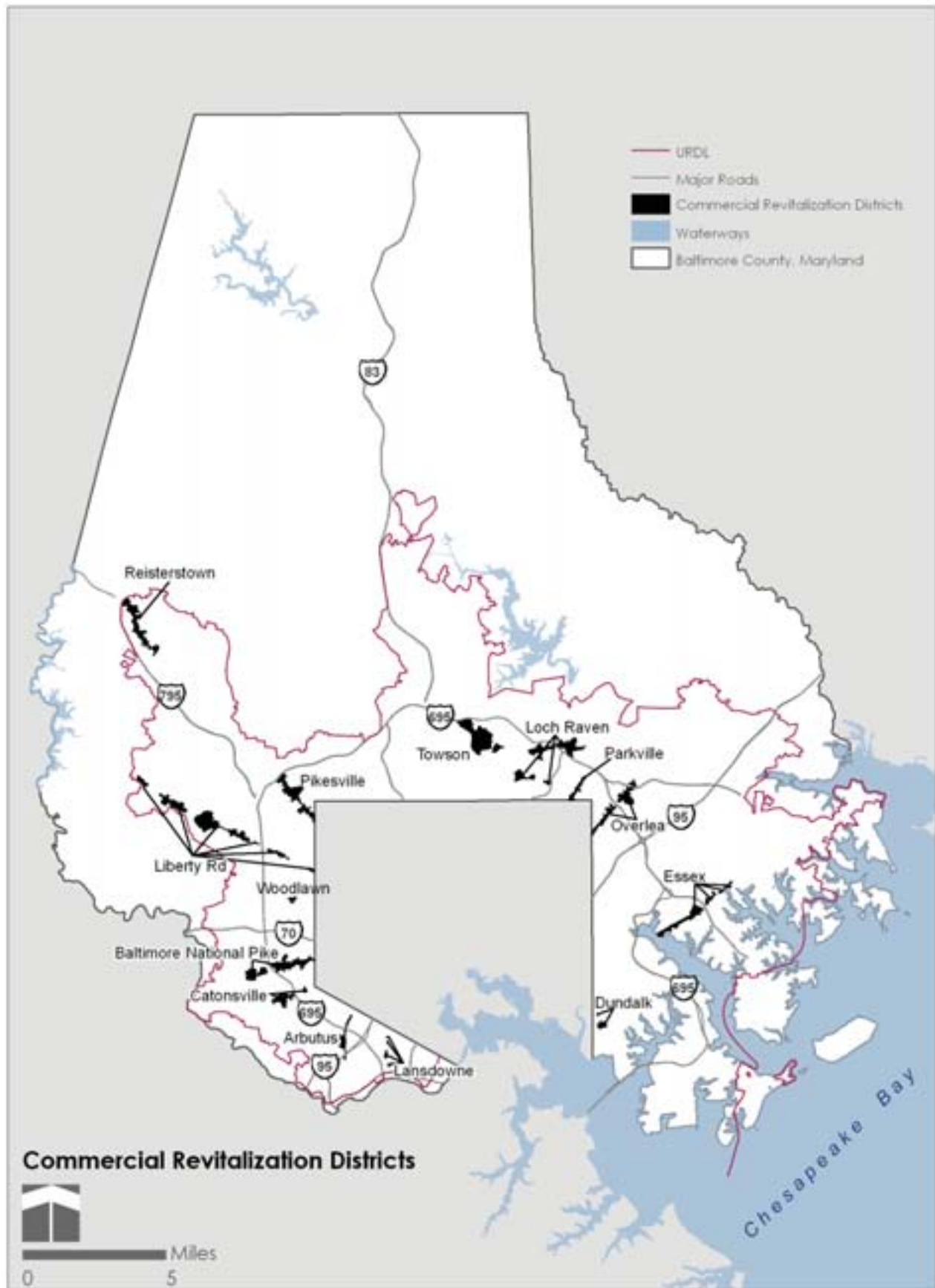
- (1) Consider encouraging zoning requests that promote mixed-use development.
- (2) Ensure that land use proposals contribute to a healthy balance of residential and non-residential uses and open space.
- (3) Work proactively to promote employment driven projects compatible with residential uses.
- (4) Direct mixed-use development to Community Enhancement Areas.

COMMERCIAL REVITALIZATION DISTRICTS

Baltimore County has 14 officially designated Commercial Revitalization Districts (CRDs). These areas were once the commercial hubs of the County's older beltway communities and offered a range of retail, service, and entertainment uses. However, beginning in the 1960s and 70s, changes



Map 35: Commercial Revitalization Districts





in demographics and retail shopping preferences fundamentally altered the role of these main street commercial centers. As people became more dependant upon the automobile, they moved farther out preferring the greater range of retail choices and convenient free parking over smaller mom and pop neighborhood shops along older commercial main streets. This trend continues. Most suburbanites patronize full service grocery stores, big and junior box retailers (e.g. Target, Wal-Mart, Pet Smart, Best Buy), chain specialty shops, and national restaurants.

To remain viable, the CRDs must differentiate themselves by capitalizing upon their downtown development patterns, strengthening the existing base of small businesses, and attracting new and different uses. Each district is unique with its own set of attributes and liabilities and revitalization efforts must be tailored to address these differences. Successful revitalization in smaller districts is built upon a series of small complementary successes and larger districts

may benefit from key redevelopment projects that restructure the local economy. Attaining a sufficient and balanced mix of quality uses is an important goal that should be accompanied with creating a safe, attractive, and walkable environment. Another goal is using creative marketing of the districts to businesses and customers.

The most successful downtowns have a mix of synergistic uses that support each other. Downtown housing and office uses have residents and employees that patronize retail shops, restaurants, and service uses such as hair salons, banks, and dry cleaners. Theaters and other entertainment uses are destinations that draw customers into the downtown, who then also patronize restaurants and bars before and after a movie or performance. Institutional uses, supply a high number of patrons and employees for retail and restaurants, and students for downtown housing.

When compared to newer town centers that are trying to replicate the character and qualities of real downtowns, original town centers often have unique challenges. Redevelopment costs can be higher with land assemblage and parking; surrounding household incomes and densities may be more diverse; multiple owners have different perspectives; and the infrastructure may be aging and outdated. Jurisdictions must have an extensive toolbox of incentives to retain and attract the mix of uses needed to keep a CRD healthy. The County has a range of incentives that can be tailored to individual project needs, including: low interest loans, tax credits, and specialized grants, key infrastructure improvements such as parking garages, sewer expansions, and road realignments and improvements, sale of publicly owned land, demolition of obsolete structures, permitting process assistance, flexible zoning, and liquor licensing.

Policy: Retain and attract quality retail, office, service, residential, entertainment, and institutional uses that create well balanced and economically vital mixed-use.

Actions:

- (1) Use targeted public investment to encourage private reinvestment.
- (2) Identify redevelopment/revitalization opportunities in the CRDs and establish a process to determine land use and development goals of the area.
- (3) Conduct specialized analyses of properties and redevelopment proposals.
- (4) Utilize the Consultant on Call Program to provide expedited professional studies on market feasibility.
- (5) Continue familiarization tours to provide education about the County's CRDs and community enhancement areas to upgrade and expand the types of uses, improve poorly managed properties and marginal businesses, and fill vacancies.
- (6) Promote the increased use of the Small Business Resource Center that provides free technical, financial, and marketing assistance.
- (7) Study the use of mixed-use codes in designated community enhancement areas.
- (8) Periodically review the range and scope of incentives to maximize their effectiveness.

The districts, like community enhancement areas, should be the “front door” to the residential neighborhoods, and help establish the overall image of a community. The appearance of the CRD is important to the business and residential communities, and is both a private and public responsibility. The government, primarily through streetscape programs, is generally responsible for the streets, sidewalks, medians, and sometimes alleys. Individual property owners are responsible for a building's façades, and any private parking lots. Improvements should focus on views from the public areas. A commercial center or corridor with attractive curb appeal and stable and desirable uses may encourage people to invest in the community.

Policy: Improve the appearance and walkability of the Districts.

Actions:

- (1) Continue to promote the Architect on Call Program that provides free professional design advice for business or property owners seeking to improve the exterior of their building and/or lot.
- (2) Promote the Building Investment Loan Program that provides zero percent loans for exterior and interior improvements through annual mailings to property and business owners, the business organizations, specialized advertising, and “word of mouth” examples.
- (3) Promote walkability and enhance the attractiveness of older village centers through implementation of streetscape programs managed by the Baltimore County Office of Community Conservation.
- (4) Develop streetscape design around a Complete Streets Program.
- (5) Continue beautification-landscaping partnerships with business organizations.
- (6) Enforce the County code and fund the Commercial Revitalization Action grants for programs to improve the physical appearance of the business environment.



Studies consistently show that when customers buy from an independent, locally owned business, over two thirds of the money spent stays in the community and is used for purchases from other local businesses. These businesses create more jobs locally, and often provide better wages and benefits than nationwide chains. Owners frequently live in the community where their business is located.

Policy: Market Commercial Districts to potential businesses and patrons.

Actions:

(1) Media campaigns including radio, television, print advertising and social media marketing will be developed and utilized during the winter holiday and spring shopping seasons.

(2) Continue to provide design support in promoting community events and districts through the use of Designer On Call, a resource that offers design services for

local initiatives involving the ReDiscover Your Neighborhood Downtown branding.

(3) Maximize partnership with the Baltimore County Revenue Authority to provide convenient parking opportunities.

(4) Promote the County's CRDs and CEAs at regional and national conferences.

(5) Update district profiles and county websites to attract businesses to the districts.

(6) Participate in statewide organizations and programs that promote the revitalization of downtowns across Maryland.

(7) Continue neighborhood promotional campaigns to encourage consumers to shop and eat in locally owned businesses.

TOURISM

Visitors to Baltimore County added \$1.97 billion to the local economy in 2008, according to a study by IHS Global Insight. The study reports that the County's tourism industry supported almost 20,000 jobs, \$545 million in wages, and contributed \$15 million in hotel, amusement and admission taxes.

Baltimore County's 219 miles of Chesapeake Bay waterfront offer unrealized potential to enhance the visitor experience and quality of life for County residents. Over the past decade, eastern Baltimore County has seen over \$600 million in public and private investment. County initiatives have eliminated many aging, blighted apartment complexes, replacing them with open space and hundreds of modern single family and townhomes. Many of the County's 90 marinas and yacht clubs have made significant improvements to their facilities, with waterfront restaurants and a water taxi service adding to eastern Baltimore County's amenities.

Policy: Increase visibility and access to visitor destinations in Baltimore County.

Actions:

(1) Explore methods to unify the waterfront as a regional destination.

(2) Further develop the County's network of bike and walking trails to connect parks, waterfront amenities, and nature centers with



**Baltimore County Agriculture
Maryland Agricultural Statistics (2006)**

Source: Agriculture in Maryland Summary for 2007, MDA

Crop Products	62,160,000 ⁽¹⁾
Nurseries & Greenhouses	124,000,000 ⁽²⁾
Equine	121,800,000 ⁽²⁾
Vegetables	6,398,000 ⁽¹⁾

Total Value Agricultural Sales (2006)

Sources: (1) Agriculture in Maryland Summary for 2007, MDA (2) Baltimore County, MD

Number of Farms	784
Average Farm Size	91 acres
Total Farmland	71,227 acres
Total Cropland	48,525 acres

visitor attractions and local communities

(3) Create wayfinding signage to major visitor sites.

(4) Support agriculture-related tourist activities such as Shawan Downs, the Maryland State Fair in Timonium, wineries, horse farms, and farmers markets.

Policy: Enhance existing visitor destinations in Baltimore County.

Actions:

(1) Enhance quality and improve access to major War of 1812 heritage sites to maximize economic impact of Maryland’s Star Spangled Banner bicentennial celebration.

(2) Maximize potential of unique museums and galleries throughout the county.

Policy: Improve and expand the visitor experience in Baltimore County.

Actions:

(1) Adopt a “Complete Streets” program to improve aesthetics and safety along local access roads, for use when improvements are being considered.

(2) Expand capacity for county to host additional conferences, large meetings, sports events and cultural activities

SUSTAINABLE AGRICULTURAL INDUSTRY

The policy to foster a sustainable agricultural industry has gained a new level of significance with the success of preserving over 50,000 acres of rural land. The County’s agricultural industry is diverse and robust with an annual economic production estimated to be \$300 million. There is an opportunity now with the land preservation accomplishments and momentum to build an even stronger and more *sustainable* agricultural economy. Without diminishing the support for commodity production, the mainstay of the county’s agricultural industry, there clearly is an opportunity for increasing local food production.



The benefits of local food production are enormous and include energy conservation, sustainability, food security, and the potential for green jobs for the young people of our County.

The majority of land in agricultural production is in grain and livestock production. Large farms must survive on large volumes and low profits per item: to do this they must be efficient and able to get their products to competitive markets. The County can address the local issues of transportation, right-to-farm laws, and local tax benefits to support these operations.

The horse industry is one of the largest economic agricultural industries in the County. Nationally, the thoroughbred horse industry is very strong, with sales and breeding fees up. These increases are typically linked to the quality of the track facilities, promotion, and wagering handles (purses). However, Maryland's

thoroughbred industry is at a crossroads. The County should support State efforts to improve racing facilities and the overall health of the industry.

The County has significant nursery and greenhouse production. Several of its growers are nationally recognized for the quality of their plant production. This industry is constantly changing in order to be successful. Laws, regulations and policies need to be constantly reviewed to promote the success of this industry while protecting the rural character of the surrounding communities.

The County, like the State, is seeing a strong interest in consumers who desire both local agricultural production and an experience relating to agricultural production. Operations such as wineries, pumpkin festivals, community supported agriculture, and direct market business operations are all part of the emerging agricultural economy. As with the nursery and greenhouse production, zoning laws, county regulations, and health department regulations need to be reviewed to remove unattainable burdens from these industries while still protecting public health and community character.

Policy: Foster a sustainable agricultural industry.

Actions:

- (1) Continue to offer loans and economic support for sustainable agricultural operations.
- (2) Consult the Rural Baltimore County Agricultural Profitability Study and Action Plan" (2009), and implement appropriate actions such as mentoring programs for new farmers and agricultural tourism activities on farms.
- (3) Review County Zoning and Development regulations to provide for farm production and processing.
- (4) Support the Baltimore County Center for Maryland Agriculture, which will promote a sustainable agricultural industry by providing educational and recreational opportunities for



the public, and encouraging “agro-tourism” The Center will also serve as an “incubator” for new ideas to help sustain agriculture in many aspects, including protective measures such as “best management practices”.

(5) Facilitate discussions with the agricultural community and surrounding neighbors regarding the new agricultural economies (i.e. sell what you grow, farm markets) and potential impacts on quality of life.

(6) Permit ancillary activities that allow farmers to sell products grown on the farm directly to customers, and promote certain farms as a destination stop for tourists and visitors.

(7) Ensure that County regulations provide flexibility in agricultural operations and enable them to adapt to changing economic conditions.



(8) Work with the Maryland Department of Agriculture (MDA), the University of Maryland Extension (UME), and the County Department of Economic Development to assist farm businesses in marketing to new local, national, and international consumers.

(9) Support Farm Bureau educational activities such as the “Agriculture in the Classroom” program at Hereford Middle and High Schools, and a new mobile agricultural classroom.

(10) Support the Farm Bureau program that identifies agricultural products produced in the County, which assists in the marketing of locally produced goods.

(11) Establish a program to assist young farmers in accessing capital to purchase farmland.

(12) Continue to foster and monitor the relationship between large-scale producers and landowners that lease land.

(13) Actively seek to solicit new agricultural operations.

(14) Encourage sustainable farming practices.

SUSTAINABLE ENVIRONMENT

Environmental sustainability means using natural resources wisely to meet current needs without degrading the supply and quality of those resources for the future.



The goal of a sustainable environment supports Baltimore County's vision for community vibrancy and economic vitality. Environmental sustainability means using natural resources wisely to meet current needs without degrading the supply and quality of those resources for the future. Natural resources and air quality are essential to economic growth, environmental protection, energy conservation, and quality of life. Natural resources, especially forests and wetlands that comprise the green infrastructure, provide valuable ecosystem services including cleaning air and water. Sustainability also assures habitat protection for terrestrial and aquatic wildlife and genetic diversity.

Baltimore County’s environmental mission is to protect and perpetuate the natural resources of the County and to protect environmental health. Over the past 20 years, the County’s Department of Environmental Protection and Resource Management (DEPRM) has established and implemented programs to protect critical natural resources, restore ecosystem functions, and educate citizens about good stewardship. While the County’s environmental programs are nationally recognized, the pollution from sprawl development and unmanaged agricultural activities, as well as the continued loss of forests, requires significant changes to land use practices under new federal and State programs to restore the health of the Chesapeake Bay. *Master Plan 2020* builds upon past successes and recommends new policies to address emerging environmental challenges such as climate change.

Overall, both the biggest challenge and the most important reason for the County to serve as a catalyst for good resource management is the fact that 85% of the land area and resources in Baltimore County, depended upon and enjoyed by all, are privately owned. DEPRM uses an integrated watershed management framework to accomplish its mission, including land preservation, resource protection/regulation, restoration, facility maintenance, monitoring, planning and research, and citizen education and participation.

Nature-Friendly Community

“Baltimore County, Maryland, has one of the most ambitious and successful land management and environmental protection programs in the country. An impressive combination of tools and strategies – land use regulations, land acquisition, and urban growth boundary, education, partnerships with private land trusts, and infill development initiatives – has been employed to preserve thousands of acres throughout the county and protect critical wildlife habitat....Baltimore County is in many ways a model for local governments everywhere when it comes to protecting nature and biodiversity.” (Source: Duerksen and Snyder, 2005. Nature-Friendly Communities: Habitat Protection and Land Use Planning, p.152).

Climate Change

Citizens in Baltimore County and elsewhere are debating the implications of a changing climate as it relates to human activities. Of particular interest is whether human-produced greenhouse gases are causing long-term global warming. Baltimore County, as part of the global community, should reduce and mitigate negative impacts of human activities on the environment.

County government operations, private businesses, and the daily routines of citizens have great potential to increase atmospheric pollution through release of harmful gases and thermal pollution. One concern about a changing climate is the relative increase in sea level. While the rate and extent of sea level rise are under continuing study, it is estimated that the mean high tide in the coastal areas of the County may increase from three to five feet in the next century. Overall, the retention and planting of forests and trees is considered the single most effective measure for mitigating the negative impact of climate change.

Citizens can make adaptations to actions that might contribute to climate change, and mitigate impacts that are unavoidable or more difficult to prevent. This represents also good stewardship of limited energy and financial resources. Human activities that potentially affect the degree of climate change are mostly attributed to the production, use, and conservation of energy. Most of current energy in Maryland derives from coal and other fossil fuels that increase harmful atmospheric gases. Walking or riding a bike instead of driving, turning off lights and other electrical appliances when not in use, changing light bulbs from fluorescents to LED’s, and similar actions are beneficial to the environmental health and natural resources. Energy conservation and other climate change adaptation and mitigation actions will lead to significant changes in current economic structure and community function. Over the long term, they will enhance sustainability.

Policy: Continue to adapt to, and mitigate impacts of climate change on the environment.

Actions:

(1) Implement the recommendations of the County's Sustainability Network for County operations, energy conservation, protection of natural resources, and communities in order to reduce emissions of greenhouse gases and energy consumption.

(2) Develop appropriate indicators for sustainability actions and commitments in order to summarize sustainability conditions and trends and to provide a basis for evaluation of progress.

Environmental Justice

The development of environmental justice in the United States dates to almost three decades ago when communities began to form organized protests against traditional planning efforts to site polluting factories and toxic waste dumps in less affluent and often minority neighborhoods. Local victories empowered local protesters to coalesce into a national movement. In 1994, President Clinton signed an Executive Order focusing the federal government effort on protecting or improving the quality of the environment and human health conditions for all communities.

The federal government definition of environmental justice is applicable to all levels of state and local government planning. Environmental justice calls for the fair treatment of all minority, indigenous, and low-income populations to ensure that no individual racial, ethnic, or socioeconomic group will bear an unequal burden due to the negative effects of pollution or other environmental hazards. Environmental justice also promotes equal access to public information and equal rights to participate in the development, implementation, and enforcement of environmental laws.

The Phase I Action Plan of the Baltimore Watershed Agreement between Baltimore County and Baltimore City specifically calls for consideration of environmental justice issues in the course of watershed management planning.

Policy: Incorporate environmental justice considerations when developing Small Watershed

Action Plans to address water quality protection and restoration.

Actions:

(1) Review environmental justice indicators developed nationwide and develop a set of indicators for the watershed management planning process.

(2) Include the environmental justice indicators in the Small Watershed Action Plans for prioritizing water quality improvement projects.

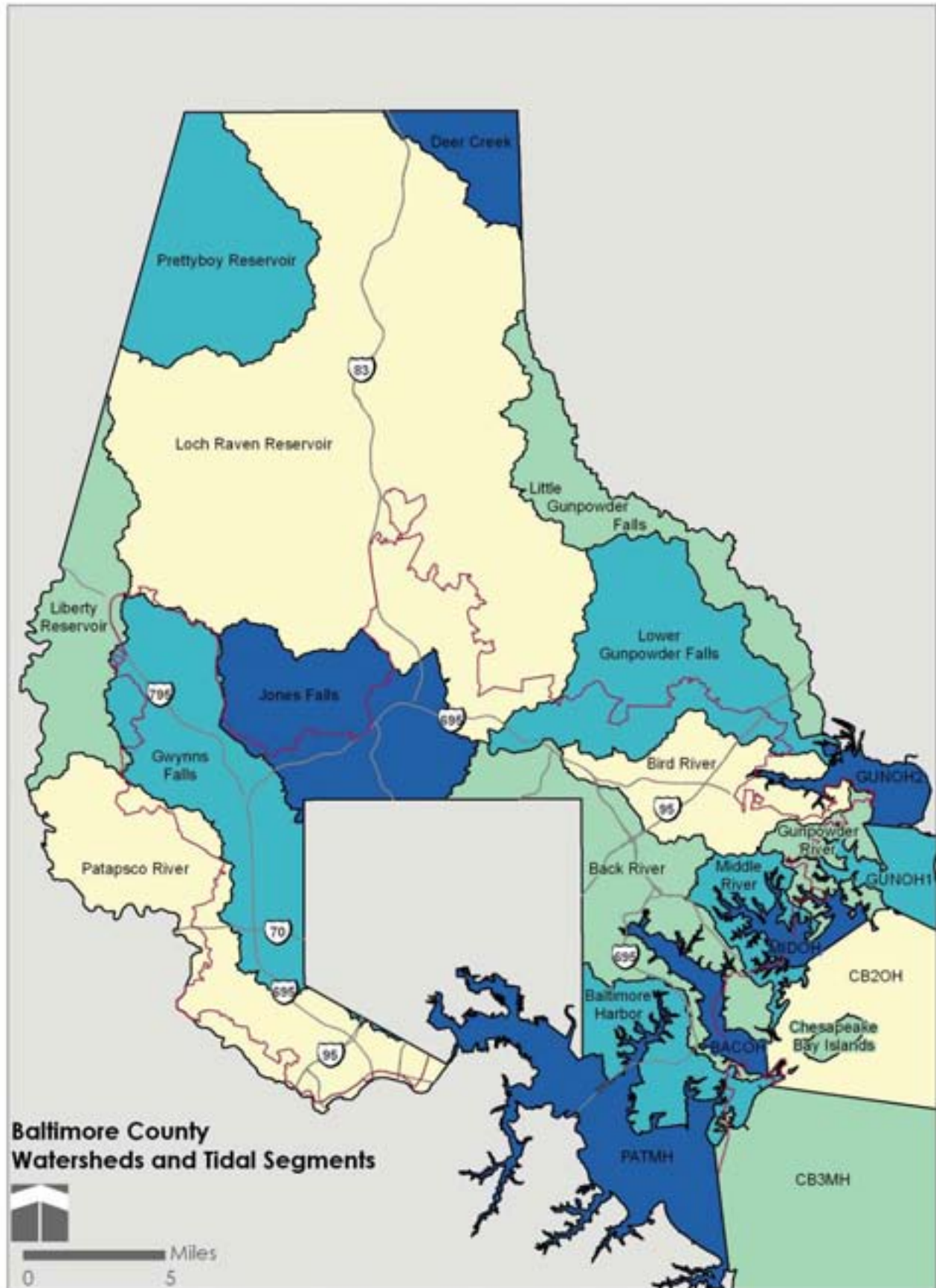
WATER RESOURCES

The water resources of Baltimore County include over 2,100 miles of streams, groundwater resources, three drinking water reservoirs, non-tidal and tidal wetlands, and tidal waters. All of these water resources are interconnected through the hydrologic cycle driven by precipitation in the form of rain and snow. These water resources are also interconnected with surrounding jurisdictions and through tidal exchange with the Chesapeake Bay.

Precipitation falling on the land drains to streams, either as surface flow or through groundwater flow. The land surface that drains to a particular stream is called a watershed or a basin. The Chesapeake Bay is a large basin with a total drainage area in excess of 64,000 square miles.



Map 36: Watersheds and Tidal Segments



Water Use Classification of County Waterways

In order to protect multiple water uses, the State of Maryland has designated four Use Classes and associated water quality standards. If the water is a source for a public drinking water supply, a “P” follows the Use Class.

The four Use Classes (and subcategories for Use II) are:

Use I

Water contact recreation and protection of non-tidal warm water aquatic life.

Use II

Support of estuarine and marine aquatic life and shell fish harvesting (not all subcategories apply to each tidal water segment); Shellfish harvesting; Seasonal migratory fish spawning and nursery (Chesapeake Bay only); Seasonal shallow-water submerged aquatic vegetation (Chesapeake Bay only); Open-water fish and shellfish (Chesapeake Bay only); Seasonal deep-water fish and shellfish (Chesapeake Bay only); Seasonal deep-channel refuge use (Chesapeake Bay only)

Use III

Non-tidal cold water – usually considered natural trout waters

Use IV

Recreational trout waters – waters that are stocked with trout



substance in any watershed or tidal segment, the State must determine how much of the substance must be reduced through modeling. This is referred to as a Total Maximum Daily Load (TMDL), or the maximum amount of a particular pollutant in a waterway that can be naturally assimilated while maintaining water quality standards

These waters support aquatic communities and provide for human uses such as agricultural irrigation and livestock watering, drinking water, industrial uses, fishing and boating, and receiving areas for treated wastewater. Having adequate clean water to support all of these uses is crucial to continued ecological and human health now and for the future, and for providing for the continued quality of life for citizens and the economic vitality of Baltimore County.

Waters in Baltimore County are of high quality in general. Some water resources are degraded by improper human activities. The waters that do not meet or exceed water quality standards are placed on an impaired waters list (Sec. 303(d) of the federal Clean Water Act) by the State of Maryland. These listings are based on 8-digit watersheds and tidal water segments, with each impairing substance listed separately. Regulations and policies require protection of high quality water resources and improvement of degraded water resources. High quality waters are protected through the permitting requirements associated with Tier II, defined as waters with a better than the average aquatic biological community. Tier II waters meet the anti-degradation requirements of the federal Clean Water Act. For each impairing

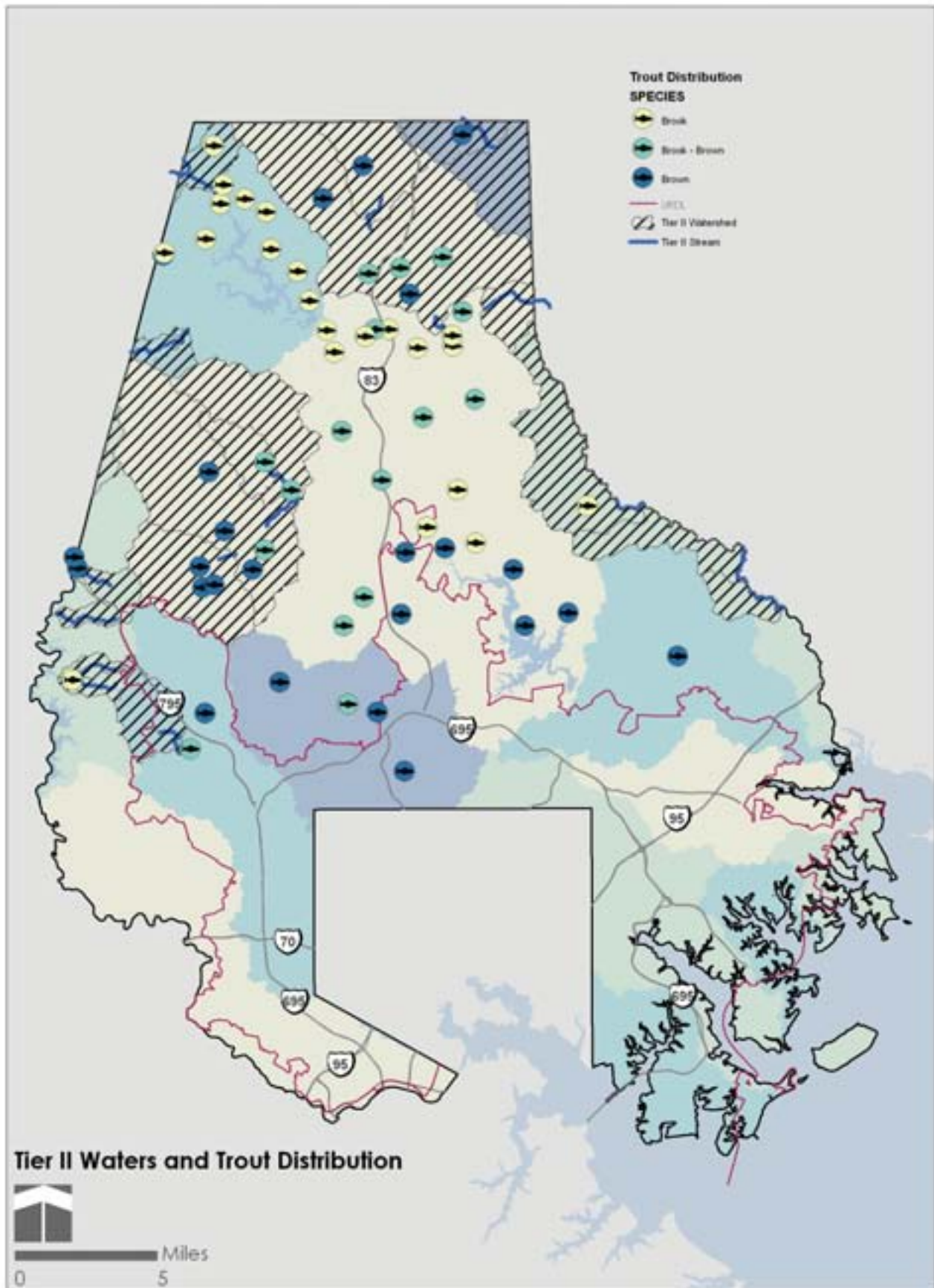
The principal regulatory requirement to address pollution impacts in urban areas is to implement the National Pollutant Discharge Elimination System - Municipal Separate Storm Sewer System (NPDES-MS4) permit. This permit requires the County to control the water quality that is discharged from its storm drain system, by implementing stormwater management, sediment control, education, monitoring, watershed management planning, and restoration programs. These programs are intended to control pollution from new development and restore

Tier II Waters and Trout

Tier II waters are identified and rated on the basis of aquatic community sampling by Maryland Department of Natural Resources. When both the fish and the bottom-dwelling invertebrate community have a rating of “good” the reach of stream represented by the sampling is identified as Tier II waters. Baltimore County has 33 miles of Tier II stream segments at 20 different sites, mainly in rural areas. The drainage area to these sites represents 23% of the County. These stream segments must be protected from degradation.

Trout are also indicative of higher quality water. Baltimore County’s streams support a fairly good population of both brook and brown trout. Over 61 sites located on various streams have trout present. The trout are more wide spread than the Tier II waters, indicating that additional Baltimore County streams are still supporting aquatic natural resources.

Map 37: Tier II Waters and Trout Distribution



Total Maximum Daily Load (TMDL)

Baltimore County watersheds and tidal segments are impaired by a variety of substances, including nutrients, sediment, bacteria, trash, and various toxic substances, as well as biological impairments. The amount of each pollutant that needs to be reduced from each source in order to meet water quality standards is then determined. The model also indicates a cap for each pollutant based on the assimilative capacity of the water body. Any increase in a load from a new source must be offset to maintain the water quality standards. For each TMDL, the County is required to prepare an Implementation Plan with measurable implementation milestones and a projected timeline for meeting water quality standards.

The Chesapeake Bay is impaired by nitrogen, phosphorus, and sediment. The U.S. Environmental Protection Agency is developing TMDLs for nitrogen, phosphorus, and sediment to improve Bay water quality.

degradation caused by development that occurred prior to the current environmental protection requirements. Approximately 80% of the urban land was developed prior to environmental controls. Future permits will require preparing Implementation Plans for approved TMDLs and meeting water quality improvement and restoration milestones.

The Water Resources Element is an analysis of the adequacy of drinking water and wastewater treatment to support future population growth, and the ability to maintain and improve water quality within the County's receiving waters. The WRE analysis indicates that redevelopment will result in the greatest protection of high quality aquatic resources and reduction of pollution. The WRE is adopted as part of *Master Plan 2020*.

Watersheds

Baltimore County contains 14 major watersheds, which are identified on the basis of local stream systems and drinking water reservoirs. Seven of them are part of the Gunpowder River basin, six are in the Patapsco River basin, and one flows to the Susquehanna River basin. Watersheds are a useful framework for resource management. Individual resource elements including streams and forests are linked through ecosystem processes that operate to maintain the stability of the system.

Land use activities within watersheds affect the water quality of streams and downstream water bodies. Clearing forests increases stormwater runoff to streams, causing an increase in the amount of sediments, nutrients, and toxins and the erosion of stream channels. Changes in sediment and nutrient levels may degrade stream habitat quality. Land preservation programs that place environmentally sensitive land in permanent easements help protect watersheds and their interrelated systems.

The County's watershed program consists of characterizing and prioritizing watersheds, preparing management plans, including Small Watershed Action Plans (SWAPs), and evaluating resource systems and functions at varying scales. Assessments of pollutant loads, stream stability, and forest community structure provide the framework for the implementation of capital projects, facility maintenance, education programs, and cooperative citizen actions.

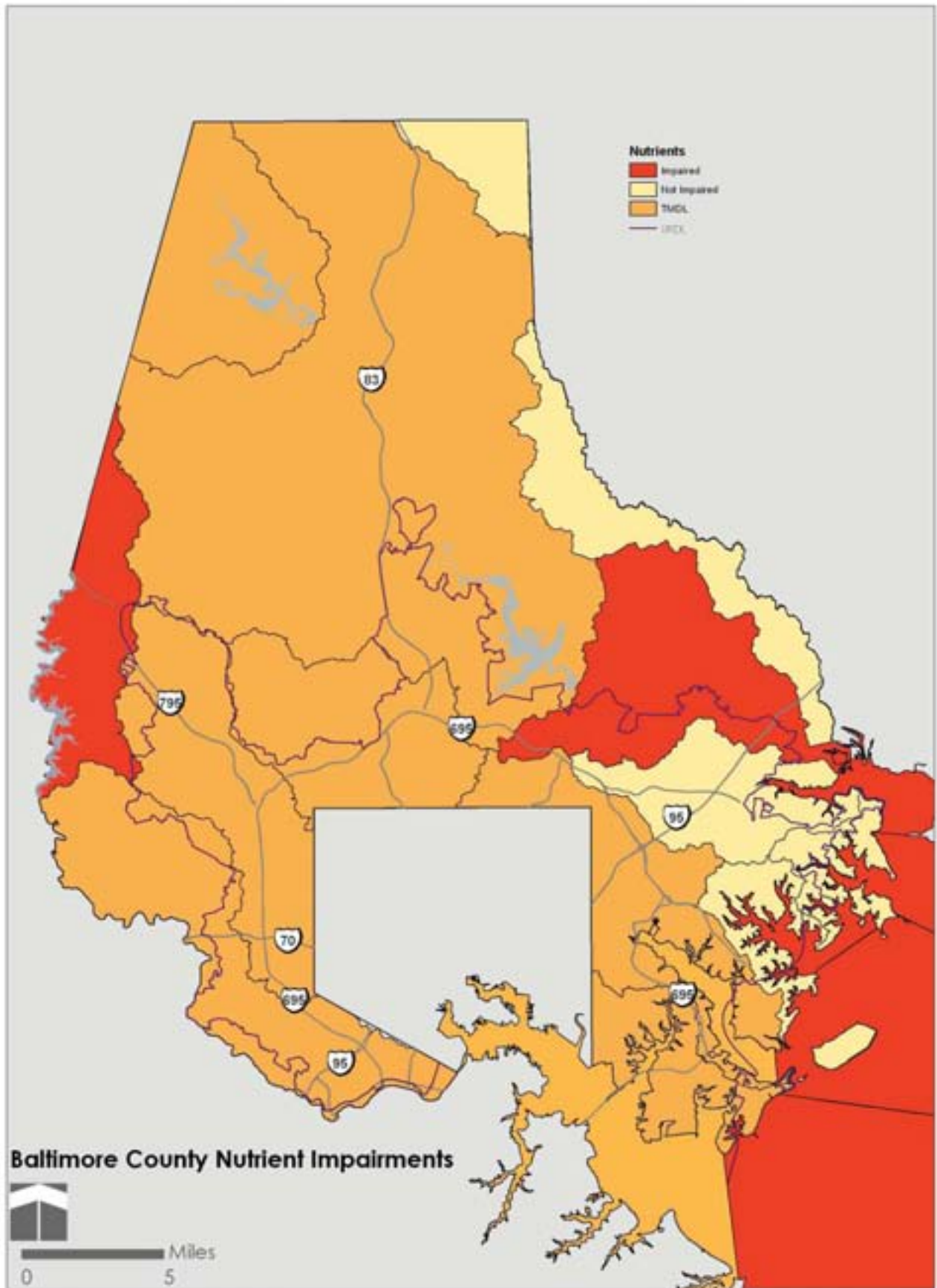
Policy: Promote redevelopment and revitalization inside the URDL to reduce pollutant loads and protect natural resources.

Actions:

- (1) Assure that the countywide redevelopment strategy accommodates population growth, provides maximum pollutant reduction, protects high quality waters, promotes economic vitality, and maintains a high quality of life for Baltimore County residents.



Map 38: Nutrient Impairments



(2) Include environmental policies and goals in community plans for the preservation and enhancement of functional open spaces such as greenways and wildlife habitat; the reduction of water, air, and toxic pollution and solid wastes; and the promotion of neighborhood environmental stewardship.

(3) Facilitate the redevelopment of underutilized industrial properties.

(4) Direct redevelopment efforts along the waterfront into historically disturbed, uncontrolled buffer areas in order to maximize water quality protection.

Policy: Assure protection of Tier II waters and those with known trout resources.

Actions:

(1) Investigate the development of overlay zones for Tier II waters and those with known trout resources and evaluate the need for additional protection through development regulations.

(2) Examine the feasibility of an offset program to achieve a no net increase in pollutant loads from new development.

(3) Continue to protect water quality, streams, wetlands, floodplains, and forests from impacts of new development and redevelopment.

(4) Implement projects to restore wetlands, reestablish forests, plant stream and shoreline buffers, and stabilize stream channels in impacted watersheds.

(5) Continue to implement the 2006 Baltimore Watershed Agreement with the City of Baltimore for improved and coordinated efforts for public health, trash, stormwater management, community greening, and redevelopment.



Streams and Non-Tidal Wetlands

Baltimore County contains more than 2,100 miles of non-tidal streams and rivers, including some of the highest quality recreational fishery resources in the eastern United States and more than 1,000 miles of streams that drain to the three drinking water reservoirs. A stream system consists of a stream and its associated floodplain, wetlands, and springs. Wetland and riparian vegetation play an essential role in the natural functioning of a stream system, including maintaining base flow, regulating water temperature, controlling pollution, and providing habitat. Pollutants discharged from point and non-point sources degrade stream water quality. These sources include urban runoff (non-point sources, particularly from impervious surfaces), pollutants discharged directly to streams (point sources), and agricultural operations (non-point source). Urban non-point source types of pollution vary and include nutrients, sediments, metals, pesticides, oil and grease, salts, and other particulate and dissolved matter.

Point-source pollution, generated from wastewater treatment plants, industries, and other sources with a direct, piped discharge, is regulated by the State. Over the past several decades, channelization, encroachment of development on floodplains, draining and filling of wetlands, removal of riparian vegetation, and development or clearing of steep slopes and erodible soils has been detrimental to streams.

In 1987, DEPRM initiated a capital environmental restoration program to assess and identify water quality problems and implement design and construction of watershed restoration projects. The program is based on the County's 14 major watersheds, providing a comprehensive framework for protection and restoration of water resources. DEPRM has been recognized nationally for its stream restoration program and, with the completion of numerous projects, has made significant progress



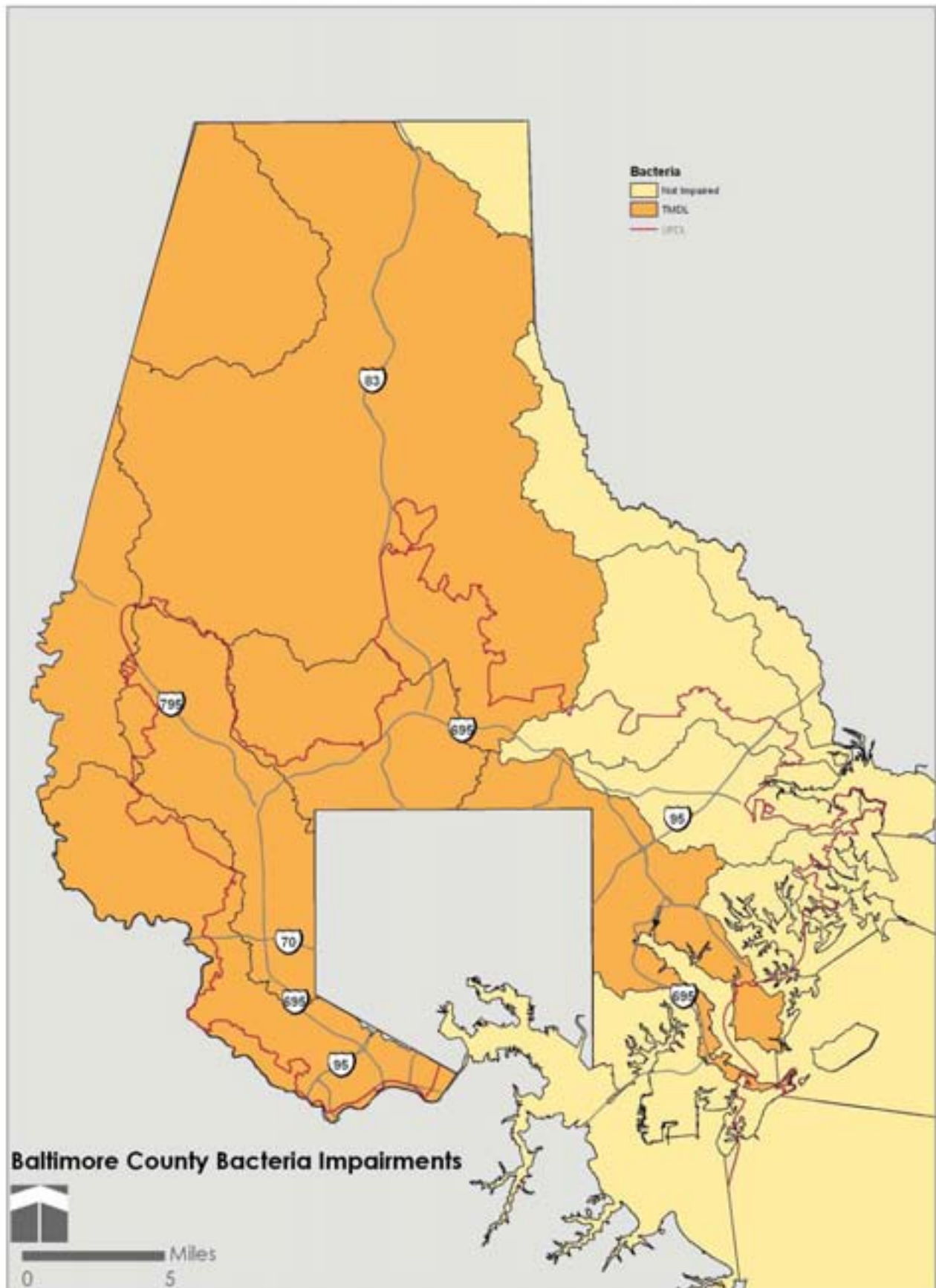
Stream Restoration

The U.S. EPA Mid-Atlantic Integrated Assessment program (MAIA) produced a document to share knowledge among state and local governments, regional offices, and non-governmental organizations. The document highlights DEPRM's stream restoration accomplishments. DEPRM's program incorporates project planning and design, communication and coordination with property owners, construction, and post-restoration follow-up. The program integrates state-of-the art techniques with an environmentally sensitive approach to stabilizing streams and reducing sediment loads, in turn enhancing stream morphology, ecological function, water quality, and aquatic habitat. Baltimore County responds to degraded urban streams with an adaptive natural channel design (NCD) approach that relies on the principles of fluvial geomorphology to evaluate stream flow, channel dimension, and bed and bank materials to optimize water and sediment movement and minimize erosive forces.

toward its objectives for watershed restoration. In the early 1990's Baltimore County developed regulations to protect water quality, streams, wetlands, floodplains, forests, and steep or highly erodible slopes from land development impacts. The County faces a challenge common to most areas experiencing urban growth: how to restore, protect, and enhance its waterways.

Physical changes to stream systems can be worse than pollutant runoff, point source discharges, or storm water management impacts. Since 1990, DEPRM has developed expertise in the restoration of destabilized stream channels. Reconstruction of channels applies the concepts of natural channel design (NCD) using natural materials (boulders and vegetation) in conjunction with the reshaping of the stream channels. When properly constructed, these restored streams are a cost-effective and attractive means to sustain physical stability, function, and habitat. Since the early 1990's, DEPRM has also maintained a physical, chemical, and biological stream monitoring program to determine ambient water quality and trends over time, assist in targeting restoration efforts, assess the effectiveness of restoration, and track progress in meeting TMDL pollutant load reduction requirements. The monitoring measures the abundance and diversity of aquatic life as indicators of stream quality and chemical constituents. Summary data from the biological monitoring indicate that there is fairly widespread impairment of aquatic organisms, even if only moderate, for most of the County's streams.

Map 39: Bacteria Impairments



Improvements to stream quality, in both water quality and habitat, will require a range of controls that best address specific types of pollution sources.

Policy: Continue to protect, enhance, and restore degraded waterways to meet water quality standards and permit requirements.

Actions:

- (1) Continue to enforce development regulations for the protection of water quality, streams, wetlands, and floodplains.
- (2) Continue to prepare and implement Small Watershed Action Plans (SWAPs) and participate in studies to identify needs and opportunities for stream restoration, wetland creation and restoration, and stormwater management.
- (3) Continue to design and construct stream restoration projects using an adaptive natural channel design (NCD) approach.
- (4) Incorporate stream protection policies in community plans.
- (5) Continue to implement biological, chemical, and geomorphological stream monitoring programs in order to measure the long-term trends in stream quality.
- (6) Identify opportunities for the creation of wetlands as mitigation for County capital projects and other land development impacts.
- (7) Continue environmental education programs for schools, businesses, and homeowners for the reduction of water pollution and toxic and solid wastes.
- (8) Continue to implement environmental inspection and maintenance programs such as storm drain inlet cleaning and maintenance of stormwater management facilities.
- (9) Continue to identify and convert appropriate publicly owned stormwater

management facilities to provide for increased water quality function.

(10) Continue to retrofit older communities to provide for stormwater treatment for improved water quality to the receiving waters.

(11) Continue to support watershed associations and citizens in stream clean-ups, stream and watershed surveys, and other restoration projects.

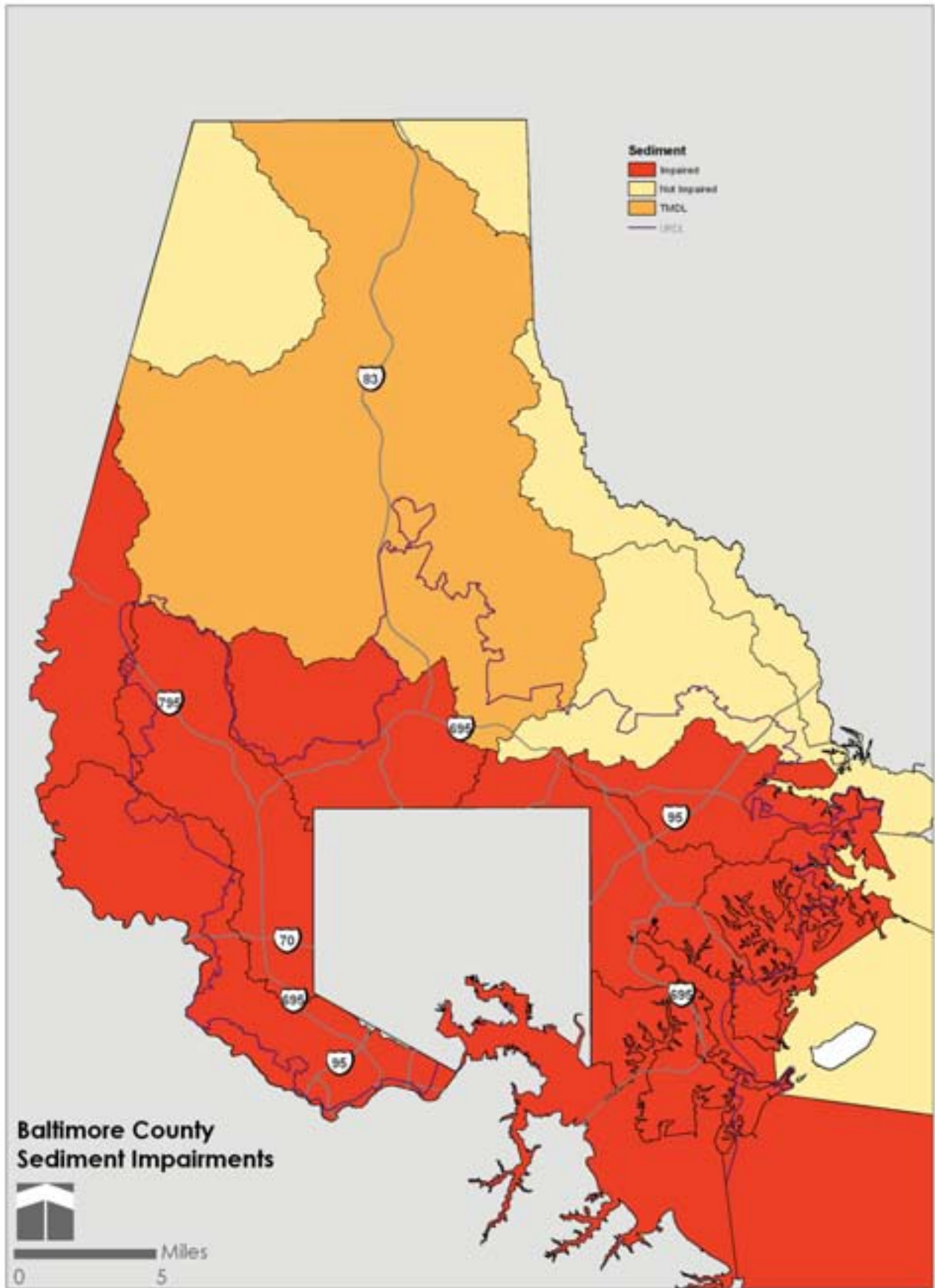
(12) Identify impediments to, and opportunities for tree plantings along streams on private properties, and work to plant more trees on private lands.

Stormwater Management and Sediment Control

The hydrologic cycle is a descriptive model for the movement of precipitation from the atmosphere to the earth's surface and then to receiving waters and back to the atmosphere. In natural areas, precipitation that reaches the ground infiltrates into the soil, replenishing groundwater aquifers and discharging to streams. In urban areas, precipitation that falls onto impervious surfaces runs off the surface much more rapidly. Unless properly controlled, stormwater runoff can result in stream channel erosion and the degradation of in-stream habitat and the aquatic biological community. Stormwater runoff also results in an increase of pollutants washed downstream. During the land development process, the soil at construction sites is the most vulnerable to erosion in streams and other surface waters. Soil erosion from construction activity may exceed 100 to 400 times that obtained from an adjacent undeveloped land or woodland in an equivalent period of time.

About 80% of Baltimore County was developed prior to the advent of stormwater management regulations, which damaged many waterways. In 1968, Baltimore County enacted Maryland's first local sediment control ordinance. Since the mid 1970's, Baltimore County has been a statewide leader in recognizing the impact of stormwater runoff generated as a result of land development. Stormwater management requirements have evolved over time. Initial

Map 40: Sediment Impairments



stormwater management focused on volume and peak discharge control to reduce physical impacts on streams. Beginning in the late 1980's through the early 1990's, water quality treatment was added as a means to address the increased pollutant loads associated with urban development. As stream science and understanding of stream dynamics evolved, it was recognized that further peak discharge control was necessary to protect stream channels from erosion during storm flow.

In the early 2000's, control of small storms was required, along with methods to disperse the flow from a development site instead of concentrating the flow. The Maryland Stormwater Act of 2007 further refined stormwater management by requiring Environmental Site Design (ESD) where practicable. ESD attempts to reduce stormwater runoff from a site by reducing impervious cover, retaining natural vegetation, and dispersing the runoff throughout the site to allow greater infiltration of precipitation. As Baltimore County's older urban and suburban areas are redeveloped, state-of-the-art stormwater practices will be constructed and water quality will improve.

Policy: Protect and improve water quality through the application of stormwater control measures for new development and redevelopment projects.

Actions:

- (1) Continue to implement state-of-the-art stormwater management techniques, including ESD as feasible, for new and redevelopment

projects.

- (2) Provide flexibility for redevelopment to implement innovative solutions to stormwater management.

- (3) Ensure the sustainability of stormwater practices including long-term function and maintenance.

Policy: Inspect and enforce compliance with the Baltimore County Code, permits, plans and State specifications as related to erosion and sediment control and grading.

Actions:

- (1) Continue to inspect and enforce erosion and sediment control implementation on all active projects for compliance with approved plans.

- (2) Continue to investigate complaints pertaining to erosion, sediment control, grading, and surface drainage problems associated with new construction.

- (3) Continue to provide responsible personnel training and certification of individuals that oversee installation and maintenance of project controls.

- (4) Continue to work in cooperation with the Baltimore County Soil Conservation District to require minimum standards for Soil Conservation and Water Quality Management Plans for conservation easements.

Best Management Practices (BMPs) for Agriculture

Best Management Practices (BMPs) that prevent soil erosion and protect water quality provide long-term benefits for maintaining the productive quality of farmland. Farmers are assisted in their efforts to apply BMPs by the Baltimore County Soil Conservation District, University of Maryland Extension (UME), the Maryland Department of Agriculture, the U.S. Department of Agriculture's Natural Resources Conservation Service, and the U.S. Farm Services Agency. Farmers and landowners participate in



On-site Sewage Disposal Systems (OSDS)

The proper siting, design, and construction of OSDS is critical to protecting ground water supplies and public health.

Overall, there are relatively few problem areas for OSDS in Baltimore County. Should community health threats be documented in areas that are accessible to the Metropolitan District, extension of public water or sewerage is provided on a long-term financing basis. In areas that are not accessible to public water and sewer, problems with private water and sewage disposal are more difficult to correct. Some rural communities have limitations due to poor or marginal soil conditions, small property sizes, requirements for stormwater management, and zoning issues, which may impede corrections to failing OSDS.

Increasing concerns with water quality and nutrient loading along with advances in technology have resulted in a relatively large increase in usage of non-conventional OSDS since 2000.

*Continued operation and maintenance is considered critical to ensure that these systems operate effectively. As these types of systems continue to proliferate, inspection and enforcement will become more critical. An evaluation of OSDS problem areas and management solutions is presented in the 1999 study, *Water and Sewer Service in Rural Baltimore County Maryland*, available at: <http://www.baltimorecountymd.gov/Agencies/environment/groundwatermgmt/educational.html>)*

*Other than the Chesapeake Bay Critical Area, the use of nitrogen removal technology on OSDS in Baltimore County does not appear to be cost effective for reducing nitrogen loads to the Chesapeake Bay, especially in reservoir watersheds where nitrogen loads are reduced by 89% or better due to the treatment effects of the reservoirs themselves. A detailed discussion of nitrogen loading from OSDS is presented in the WRE, Chapter 4, *Wastewater Assessment for Private OSDS* (Appendix A).*

In 2008, DEPRM started to collect information about the locations of wells and OSDS in the County using Global Positioning System (GPS) units. From this data, a detailed GIS data layer is being created to enable rapid assessment of local and regional water quality and well yield issues. In the event of an emergency (i.e. chemical spill, flood, or other natural disaster), accurate assessment and timely response are both expected by the public and critical for the protection of public health.

stewardship programs that help protect local streams, drinking water reservoirs, and the Chesapeake Bay. However, in order to make greater progress in protecting and restoring water quality, landowners need to increase stewardship actions.

Policy: Work with landowners and service agencies to implement Best Management Practices for agriculture.

Actions:

- (1) Require landowners who participate in land preservation programs to implement soil conservation and water quality plans.
- (2) By 2011, investigate developing a BMP implementation monitoring system with the Baltimore County Soil Conservation District.
- (3) Continue to provide support to the farm agencies including UME.
- (4) Provide information on research for new technologies to assist landowners with the implementation of BMPs.
- (5) Investigate setting minimum water quality standards for plans written for farms in County land preservation programs, in conjunction with cost-share programs to offset the expenses incurred by landowners.
- (6) Investigate innovative strategies, approaches, and incentives to encourage landowners to protect resources and overcome disincentives.

Groundwater

In Baltimore County, favorable geological conditions and plentiful precipitation combine to provide a valuable supply of quality groundwater that is used for agricultural, residential, commercial, and industrial uses. Since the establishment of the URDL in 1967 and the adoption of the *1980 Guideplan* in 1972, deliberate zoning, regulation, and policy have been put into place to implement the vision of a compact urban

area served by public utilities and a rural area with low density development served by individual wells and on-site sewage disposal systems (OSDS). Given this vision, it is imperative that the County takes the necessary precautions to ensure that development in the rural areas has safe and sustainable ground water supplies.

About 10% of the County's population currently resides in the rural areas outside the URDL and relies on groundwater as the primary source of drinking water. Approximately 30,000 domestic wells are in use in the County, including 9 community well supplies and approximately 270 transient and non-transient non-community water supplies (businesses and institutions). Groundwater is also important to the agricultural community.

In general, there are no significant concerns with regard to the adequacy or quality of ground water supplies in Baltimore County. The current regulations and standards for drinking water wells and OSDS are considered effective in protecting public health while ensuring that there is adequate supply for current and future demands. The Water Resource Element (Appendix A) documents the adequacy and quality of the ground water supplies in the County. To better ensure sustainable ground water supplies, a well reserve area could be incorporated for lots served by individual domestic wells. The well reserve area would ensure that lots have a pre-approved area that meets setback requirements, should there be a need to drill a well in the future.

Contamination from petroleum products and solvents usually involves specific point sources such as underground storage tanks, OSDS, or dumpsites. Promulgation of federal and State regulations has resulted in storage tank upgrades, and more stringent monitoring and reporting requirements for all auto service stations. Educational outreach about potential sources of contamination and the importance of removing out-of-service underground fuel tanks should continue to be a focus of the County.

In 2005, naturally occurring radium was detected at levels of concern in certain aquifers (the Baltimore & Setters Gneiss Formations). Educational outreach

about radium and other potential radionuclides in local aquifers should continue to be a focus of Baltimore County. Groundwater quality is also affected by development-related contaminants such as chlorides from road de-icing compounds. Further analysis and evaluation should be performed to develop improved regulations and practices, along with education, training programs, and partnerships to ensure a better balance between public safety on roadways and water quality.

Policy: Continue to manage and protect ground water supplies, particularly in areas where citizens, businesses, industry and agriculture rely solely on wells.

Actions:

- (1) Review development proposals and permits to assure the proper siting, design, and construction of drinking water wells and OSDS in accordance with the *Code of Maryland Regulations* and *Code of Baltimore County Regulations*.
- (2) Continue to implement the 1993 *Ground Water Management and Protection Strategy*.
- (3) Continue to inspect all residential underground storage tank removals to ensure that any detected contamination is investigated and remediated, as necessary.
- (4) Continue to collect and maintain the



location and construction information for new and existing wells and OSDS.

(5) Continue to educate homeowners concerning the proper management and care of individual well and septic systems, potential contamination from underground storage tanks, and potential radionuclides in aquifers.

(6) Continue to inspect all non-conventional OSDS periodically to ensure proper functioning.

(7) Assess the need to incorporate the use of “well reserve areas” for newly developed lots utilizing individual water supplies.

(8) Evaluate the need to establish well setback restrictions from roads to protect against road salt contamination.

Drinking Water Reservoirs

The Prettyboy, Liberty, and Loch Raven Reservoirs supply drinking water for 1.8 million people in the Baltimore region, including the 90% of Baltimore County residents within the URDL who rely on public water. The reservoirs and more than 17,200 acres of adjacent, mostly-forested land are owned and maintained by the City of Baltimore. Sixty-two percent of the reservoir watersheds are located within Baltimore County, and the remaining area is located in parts of three adjacent counties. This is the largest public drinking water utility in Maryland, with one-third of the State’s citizens dependent on the reservoirs in Baltimore County. Careful management of the entire watershed area for the three reservoirs is important for maintaining their water quality.

The City’s water quality monitoring program indicates that the reservoirs are adversely impacted by nutrient over-enrichment, including phosphorus from sewage treatment plants, agriculture, and urban development. The reservoirs are also experiencing increasing levels of chlorides and sodium from road de-icing as the mileage of roadways in the watersheds increases. Currently, the finished water supplied by the City contains 20 mg/l of sodium, the lower limit

recommended for individuals on sodium-restricted diets. Several Total Maximum Daily Loads (TMDLs) for nutrients and other water pollutants have been established for the reservoir watersheds.

Maintaining the good quality of reservoir water has been a cooperative regional effort for several decades. Baltimore County policies for the protection of the reservoirs were first adopted in 1972 in *GuidePlan 1980*. The 1978 regional water quality management plan recommended the creation of an inter-jurisdictional program to address nutrient and sediment pollution in the reservoir watersheds. In 1979, the first Reservoir Watershed Management Agreement was signed and later expanded in 1984 to include an Action Strategy and technical and policy committees to guide implementation. The Agreement was re-affirmed in 1990 and 2003, and followed by an updated Agreement and Action Strategy in 2005. The cooperative Reservoir Watershed Management program is coordinated through the Baltimore Metropolitan Council (BMC).

Forest is the most protective land cover for water quality. The adoption of the Urban-Rural Demarcation Line and the Resource Conservation (R.C.) zones have served as the primary management tools for reservoir protection in Baltimore County. R.C. zones cover more than 169,000 acres or 92.6% of the reservoir watersheds. Despite the protective zoning, more than 12,000 residentially assessed parcels have been improved in the reservoir watersheds on more than 31,000 acres. The County’s quadrennial Comprehensive Zoning Map Process has helped to reduce the potential for future development in the R.C. zones. With the creation of the R.C.6, R.C.7, and R.C.8 zones since the year 2000, more than 67,000 acres of higher density R.C.-zoned land have been further protected. With expanding requirements for meeting water quality standards and concern over new threats to water quality including sodium and chlorides from development, it is critical that the County’s commitment to applying its planning and zoning tools be maintained. This will help prevent pollution that would endanger public health or necessitate expensive water treatment measures.

Policy: Continue cooperative efforts to protect the quantity and quality of source water in the County’s three reservoir watersheds.

Actions:

- (1) Continue to participate in the regional Reservoir Watershed Management Program, including implementation of commitments in the 2005 Action Strategy.
- (2) Continue policy commitments to retain protective Resource Conservation zoning and to restrict creation of new development zoning in the reservoir watersheds.
- (3) Continue to implement non-point source pollution control practices for development and agricultural operations, stream restoration projects, and infrastructure maintenance in the reservoir watersheds.
- (4) Continue to establish riparian forest buffers and expand other forest cover in the reservoir watersheds in cooperation with private landowners, other agencies, and watershed organizations.
- (5) Continue to implement water quality monitoring programs in order to determine conditions and trends for reservoir quality and to assist in the implementation and evaluation of management programs.
- (6) Explore options to meet the need for road de-icing for public safety while reducing impacts on reservoir water quality.
- (7) Continue to prepare and implement Small Watershed Action Plans to address TMDLs for phosphorus, sediment, and bacteria.

THE CHESAPEAKE BAY, WATERWAYS, AND WATERFRONT AREAS

Baltimore County contains about 219 miles of Chesapeake Bay shoreline. The Bay and its tidal

Submerged Aquatic Vegetation (SAV)

SAV, commonly referred to as Bay grasses, is a critical indicator of water quality and provide essential ecosystem functions that improve the health of the County’s tidal waterways, as well as the Chesapeake Bay. SAV can function as a natural protection against sedimentation and erosion and the harmful impacts of pollutants including phosphorus and nitrogen. Additionally, SAV provides important food and habitat for waterfowl and aquatic species. SAVs are imperative to the overall vitality of the Chesapeake Bay and, Bay-wide, have been declining since the 1950’s due to degradation of water quality. In Baltimore County, SAV coverage has increased over 25% since 2000 due to improved regulatory programs and aggressive restoration efforts.

DEPRM monitors the location, density, and species diversity of SAV beds in 30 of the County waterways every spring and summer, and has developed an extensive database to determine trends and overall waterway conditions. The County implements projects to improve water quality and promote healthy conditions for the growth of these important Bay grasses by treating excessive upland runoff before it enters the waterways, reducing shoreline erosion and channelizing boat traffic.

tributaries – the Patapsco, Back, Middle, and Gunpowder Rivers – are a unique natural resource. The intertidal zone, land on which the tide advances and retreats, is essential for providing protection and food for waterfowl and aquatic life. These tidal waters also support Submerged Aquatic Vegetation (SAV) and are the spawning grounds for migratory fish species. Its health is fundamental to restoring the Chesapeake Bay, yet this area is threatened as a result of erosion and increasing human activities.

The Chesapeake Bay

Most of the County’s Chesapeake Bay shoreline is privately owned. This has limited Bay access to the individual lot owners in many places, and has impacted several stretches of shoreline with piers, bulkheads, and other structures. Baltimore County encourages the use of community piers as an alternative to private piers. Land development proposals are reviewed for compliance with the Chesapeake Bay Critical Area (CBCA) and redevelopment regulations. The County’s program was enacted in 1988, following the passage of the Maryland Chesapeake Bay Critical Area Act in 1984. Several updates to State and local Critical

Protecting the Chesapeake Bay

Maintaining water quality is a high priority for waterfront residents, businesses and visitors. Baltimore County has established a strong, comprehensive water quality program.

It includes initiatives to convert and retrofit stormwater management systems, restore streams, dredge waterways, stabilize the shoreline, establish vegetated buffers, and develop and implement comprehensive watershed plans. In addition, the Chesapeake Bay Critical Area law helps to protect water quality and sensitive waterfront areas by regulating development within close proximity of tidal water and tidal wetlands. The County, as part of the State of Maryland's commitment to protect the Chesapeake Bay from further environmental degradation, enforces this legislation.



Area programs to improve regulatory efficiency and effectiveness have been made over the last two decades. This program generally encompasses all of the land within 1,000 feet of tidal waters and the majority of the southeastern peninsulas. Tidal and non-tidal wetlands, shorelines, and streams are required to protect and establish naturally vegetated buffers, which filter the sediments and nutrients in runoff. A Buffer Management Program, adopted by the County for waterfront properties with historically disturbed buffers, allows for the continuation of maintenance activities and limited improvements within the buffer.

Sensitive undeveloped areas are also protected through Resource Conservation (R.C.) zoning, additional environmental regulations, and by maintaining the URDL. Zoning densities have been reduced on properties that are undeveloped consistent with the Critical Area law. Efforts to permanently preserve these lands that are important to the health of the Chesapeake Bay have also included the designation of much of the Coastal Area as a Maryland Rural Legacy Area. The County has built upon early State efforts in this area to permanently preserve over 1,000 acres of sensitive land.

Since the 1960s, the largest concentration of known septic system failures occurred in the Bowleys Quarters and Back River Neck peninsulas. Beginning in the mid-1980s the County began to address these problems comprehensively by extending public sewerage to these areas. As of 2010, over 90% of the estimated 3,000 failing septic systems in those areas have been connected to the public sewerage system.

In addition, the County is systematically evaluating all existing septic systems located within the Chesapeake Bay Critical Area to determine whether public sewerage or on-site sewage disposal upgrades will most effectively reduce nitrogen from these sources.

The Waterways

Baltimore County continues to implement the Waterway Improvement Program, an initiative to enhance and restore the quality of its water resources. The Program includes stream restoration, shoreline enhancement, water quality retrofits, and waterway dredging. The dredging program provides for the maintenance of existing boat channels in creeks and boat access “spurs” from these channels to individual waterfront properties. As part of the program, Baltimore County implements controls to reduce future runoff of sediment and nutrients to the dredged waterways. The County also maintains navigation aids in dredged waterways, providing safe navigation by directing boaters to deeper waters and allowing for restoration of shallow areas. These efforts improve water clarity, which is the key limiting factor for SAV growth. The Waterway Improvement Program also includes shore erosion control and restoration projects. This has stabilized thousands of feet of steep eroding shoreline with vegetated beaches and structural protection, such as offshore gapped breakwaters to control erosive wave energy. With the use of natural vegetation for stabilization, the County is introducing citizens to alternative shoreline protection approaches. These techniques are self-maintaining and therefore are a viable long-term solution.

In May of 2002, DEPRM implemented the “Clean Shores” Program, with the goal to improve the water quality, aesthetics, and navigational safety of tidal waters. Controlling the sources of debris in the waterways includes community education, enforcement of no-dumping laws, maintenance programs, and the installation of debris collection devices. From May to October each year, Baltimore County crews survey the tidal creeks and rivers and remove hazards to navigation and waterway debris from the shorelines and shallow waters. This Program has increased community awareness and encouraged community involvement in waterway clean-ups. Marking storm drains to warn citizens not to dump or litter is another effort to protect the Bay by bringing awareness to citizens.

The Waterfront Areas

The *Eastern Baltimore County Revitalization Strategy* (adopted as a master plan amendment in 1996) defines a vision for the waterfront areas that includes conserving and enhancing the existing waterfront communities, while attracting upscale housing development; creating economic opportunities, including tourism; and enhancing public access to the water. This vision requires balancing the use of the waterfront as a natural amenity, a recreational resource, a source of economic opportunity, and a place where people live.

Many of the permanent homes along the water were originally built as summer cottages on 50-foot wide



Living Shorelines

Living shorelines projects provide erosion control and ecosystem benefits utilizing green techniques as an environmentally friendly alternative to traditional armored shorelines such as bulkheads and revetments. Living shorelines generally consist of planted beach areas that stabilize the shoreline and create vegetative buffers to filter runoff and pollutants, while providing wildlife habitat. Living shorelines can also include the strategic placement of offshore gapped sills and breakwaters that reduce erosive wave energy while still allowing natural coastal processes to function. Baltimore County has implemented living shoreline projects in numerous waterways in an effort to protect County resources and enhance water quality.

lots. The addition of new housing on larger sites improves the diversity of the housing stock and helps to revitalize the waterfront communities. The addition of new housing could be accomplished through the consolidation and redevelopment of lots in existing neighborhoods or through the development of larger lot subdivisions where it is feasible. Although sites available for new development are limited, the CBCA regulations include a mechanism called “growth allocation” that allows for density increases on a limited amount of land in the Critical Area. To implement growth allocation, the County has established a committee consisting of representatives from various County departments to evaluate petitions for site design excellence and environmental sensitivity.

Baltimore County’s waterfront includes 26 County waterfront parks and two State waterfront parks. There are numerous recreational and business opportunities related to the Chesapeake Bay, such as boating, sail boarding, swimming, water skiing, fishing, crabbing, and bird-watching. Healthy beaches for swimming and aquatic populations are essential to Bay-related recreational and economic activities. Recreational boating contributes over \$200 million a year to the County’s economy. Baltimore County recognizes the importance of boating and is committed to providing a safe and clean environment.

Policy: Continue to implement water quality improvement measures in and along the waterfront, and continue to enforce water quality, forest, and habitat protection components of the State-mandated Critical Area law.

Actions:

- (1) Continue to implement the dredging component of the Waterway Improvement Program by maintaining channels and aids to navigation, while monitoring and protecting submerged aquatic vegetation.
- (2) Continue efforts to protect shorelines from erosion and improve the water quality and habitat value of tidal wetlands. Use living shoreline measures, where physically feasible, for shoreline stabilization, and enhance tidal wetlands.
- (3) Continue to implement the Clean Shore Program to improve the water quality, aesthetics, and navigational safety of the tidal waterways and increase community participation in waterway clean-ups.
- (4) Explore beneficial uses of dredge material disposal including shoreline stabilization projects and tidal marsh creation.
- (5) Maintain land use and development standards essential for the protection of the Chesapeake Bay's biological integrity.
- (6) Create effective opportunities for recreation, tourism, and rural legacy.
- (7) Design and plan projects to promote public access to the water and encourage public access to the water on private waterfront development projects, where appropriate.
- (8) Consider steering redevelopment efforts along the waterfront into historically disturbed buffer areas in order to maximize water quality protection and improvement.

(9) Consider steering growth allocations involving conversions to Intensely Developed Areas into priority funding areas.

(10) Educate and provide technical assistance for waterfront property owners about the benefits of living shorelines and promote appropriate behaviors to improve water quality.

(11) Evaluate existing private septic systems in the Critical Area for upgrades and connection to the public sewerage system.

(12) Encourage the implementation of clean marina best management practices.

(13) Continue to provide easement programs that provide financial benefits and flexibility of use to farmland owners to permanently preserve their farms and forests.

LAND RESOURCES

The land resources of Baltimore County, which include its minerals, soil, and biota, provide the foundation for economic and community activities. They are also an integral part of natural ecosystem processes, and how land resources are used not only affects terrestrial ecosystems, but also the quality of water and air.

Baltimore County's goals for land preservation are to permanently preserve at least 80,000 acres of land to protect agriculture and natural resources for future generations, recognize and promote sustainable agriculture as a vital economic, commercial and industrial activity, manage development to protect agricultural lands and prevent conflicts between agricultural operations and incompatible uses, and ensure the proper management of agricultural lands to protect water quality and natural resources.

Land preservation goals are achieved through the use of several comprehensive growth management measures: the URDL, zoning classifications, land use regulations, the purchase and donation of permanent conservation easements, and the implementation of recommended actions of the Master Plan.

Agricultural Priority Preservation Areas

The protection of land for agriculture has been a key component of rural growth management in the County for over 40 years. Significant public funds have been invested in the permanent protection of cropland, pasture and woodland to maintain and foster a viable agricultural industry. This forward-looking effort by the County has become more important with the national attention on issues such as energy conservation, sustainability, and national security. Promotion of local farms can improve the quality and security of the local food supply and play a role in solving other environmental problems.

The 1989 Master Plan first designated “Agricultural Preservation Area” boundaries (now called Agricultural Priority Preservation Areas, or APPA’s). These areas have been reconfirmed in subsequent plans. APPA’s are based on their capability for agricultural production and the existence of agricultural operations and preserved lands.

From 1980 through 2009, more than 55,200 acres have been preserved, including 21,675 acres under the Maryland Agricultural Land Preservation Foundation Program, 4,351 acres under the Baltimore County program, 25,250 acres under the Maryland Environmental Trust, private land trusts, and Rural Legacy programs, and 3,929 acres in R.C.4 cluster conservancy areas. This cumulative preservation achievement represents about 24% of the total land

area outside the URDL. Based on a 2006 study by The Conservation Fund, an additional 50,300 undeveloped, unprotected acres met agricultural program criteria. The protection of an additional 30,800 acres will be needed to meet the County’s ultimate preservation goal, and the County must seek adequate funding, explore innovative purchase techniques, refine programs, and increase the acreage of donated easements. Based on preservation of 2,100 acres and loss or conversion of 870 acres per year, it is projected that the 80,000-acre goal will be met by the year 2022.

Policy: Permanently preserve at least 80,000 acres of agricultural and natural resource lands through Conservation Easements and other similar legal instruments.

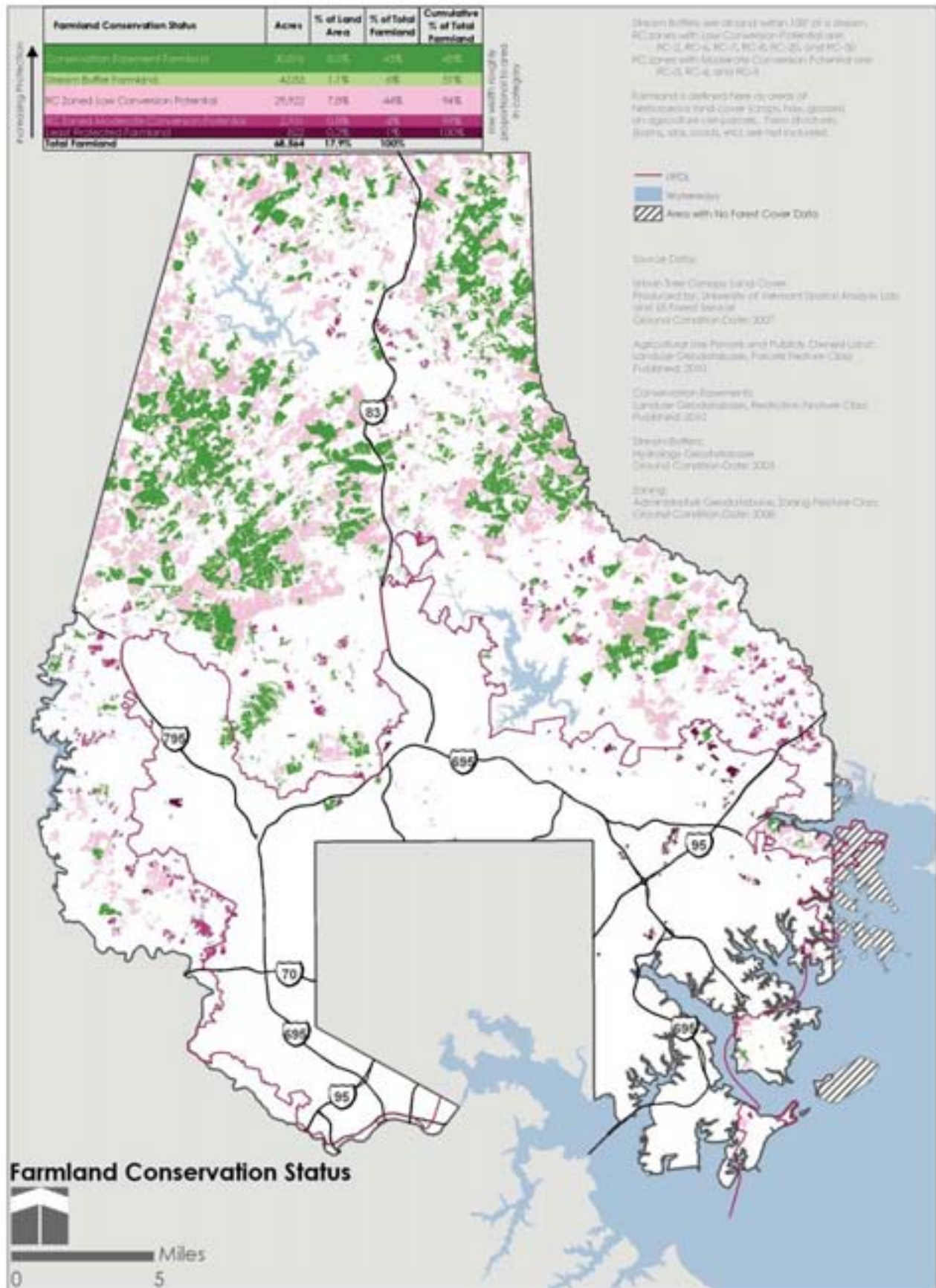
Actions:

- (1) Continue to seek and encourage the donation and sale of easements through the various land preservation programs.
- (2) Conduct landowner outreach and public education to increase awareness of these conservation programs and garner interest in land protection.
- (3) Identify and preserve parcels large enough to support normal agricultural and forestry activities.
- (4) Fairly compensate farmers for loss of development rights.
- (5) Monitor the Agricultural Priority Preservation Areas to ensure that at least 80% of the remaining undeveloped land is either under easement or temporarily protected by restrictive zoning (such as RC 2).
- (6) Work with state and local partners to monitor and steward existing conservation easements to ensure compliance with agreements to protect the County’s investments in agricultural land preservation.

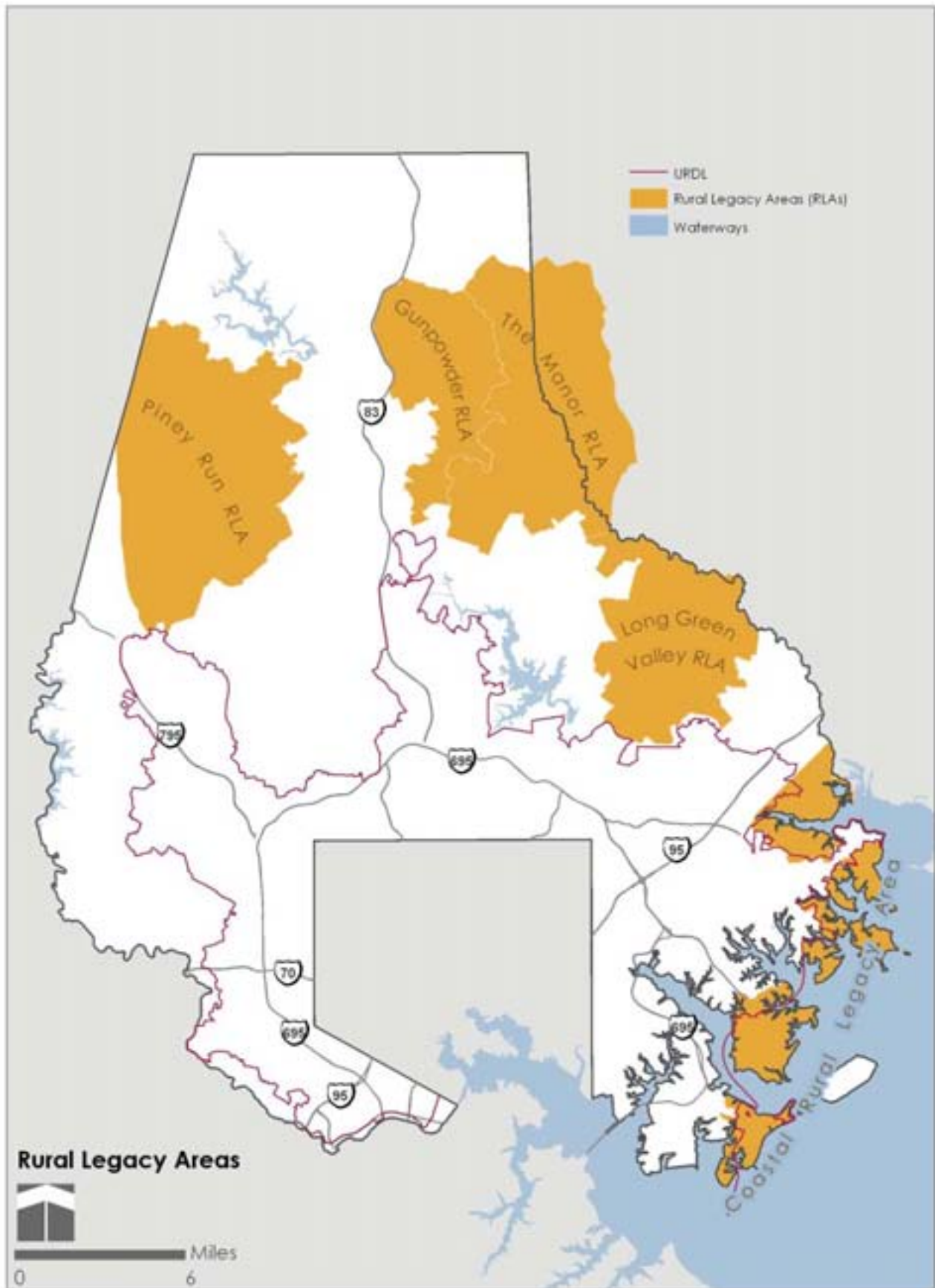
Land Preservation Progress

The United States Department of Agriculture states, “Agricultural land preservation constitutes sensible resource management for sustainable agriculture”. Baltimore County agrees, and further defines land preservation as an effective management tool for protecting and preserving natural and cultural resources. The County’s land preservation efforts are among the most successful in the nation. This success is in part due to the strategy of protecting land in the short term through restrictive resource zoning, and conserving land for the long term through preservation easements. Perpetual easements are the only way that preservation of the rural landscapes can be guaranteed. Fair compensation to landowners is provided to maintain the land in private ownership. Additionally, preserved privately owned lands stay on the tax roll.

Map 41: Farmland Conservation Status



Map 42: Rural Legacy Areas



(7) Continue to seek adequate funding to acquire easements on at least 2500 acres per year.

(8) As part of any update to this section of the Master Plan the County will:

- Determine progress towards meeting the goals of the MALPF;
- Evaluate any shortcomings in the County's ability to achieve the goals of MALPF;
- Determine and implement actions to correct identified shortcomings.

Rural Legacy Program

In 1997, the Maryland General Assembly adopted the Rural Legacy Program to address the continuing loss of natural resources and productive agricultural lands to development. The goals of the Program are to protect and maintain rural character, permanently preserve land through easement programs, and limit new residential growth in these areas. The Rural Legacy Program enables local jurisdictions and private organizations, such as Land Trusts, to apply for designation of significant areas as "Rural Legacy Areas." The County and its Land Trusts have received designation and funding for five Rural Legacy Areas: Coastal, Piney Run, Gunpowder, Long Green, and Manor (Map 41).

Policy: Manage growth within the designated Rural Legacy Areas and seek permanent preservation of undeveloped properties through easement programs.

Actions:

- (1) Work with local land trusts to monitor goals and accomplishments of Rural Legacy Areas.
- (2) Work with local land trusts to integrate comprehensive resource protection elements in Rural Legacy areas, including forest buffers, Chesapeake Bay shorelines, forest habitat, endangered species, and planning measures that reduce sprawl.

The Rural Legacy Program

The Piney Run Rural Legacy Area is among the most successful Rural Legacy Areas in the State of Maryland. The Rural Legacy area seeks to provide protection of the source water for the metropolitan drinking water supply through good land stewardship while also seeking to maintain the agricultural industry in the County. Over 17,000 acres of land have been protected through all preservation programs within the 32,320-acre Rural Legacy Areas. Of greatest significance is that through the use of the complimentary preservation programs and the targeting of Rural Legacy, a block of over 12,000 contiguous acres has been preserved. This is one of the largest blocks of land protected in this manner on the East Coast.

(3) Continue financial partnership with the State for preserving properties within Rural Legacy areas.

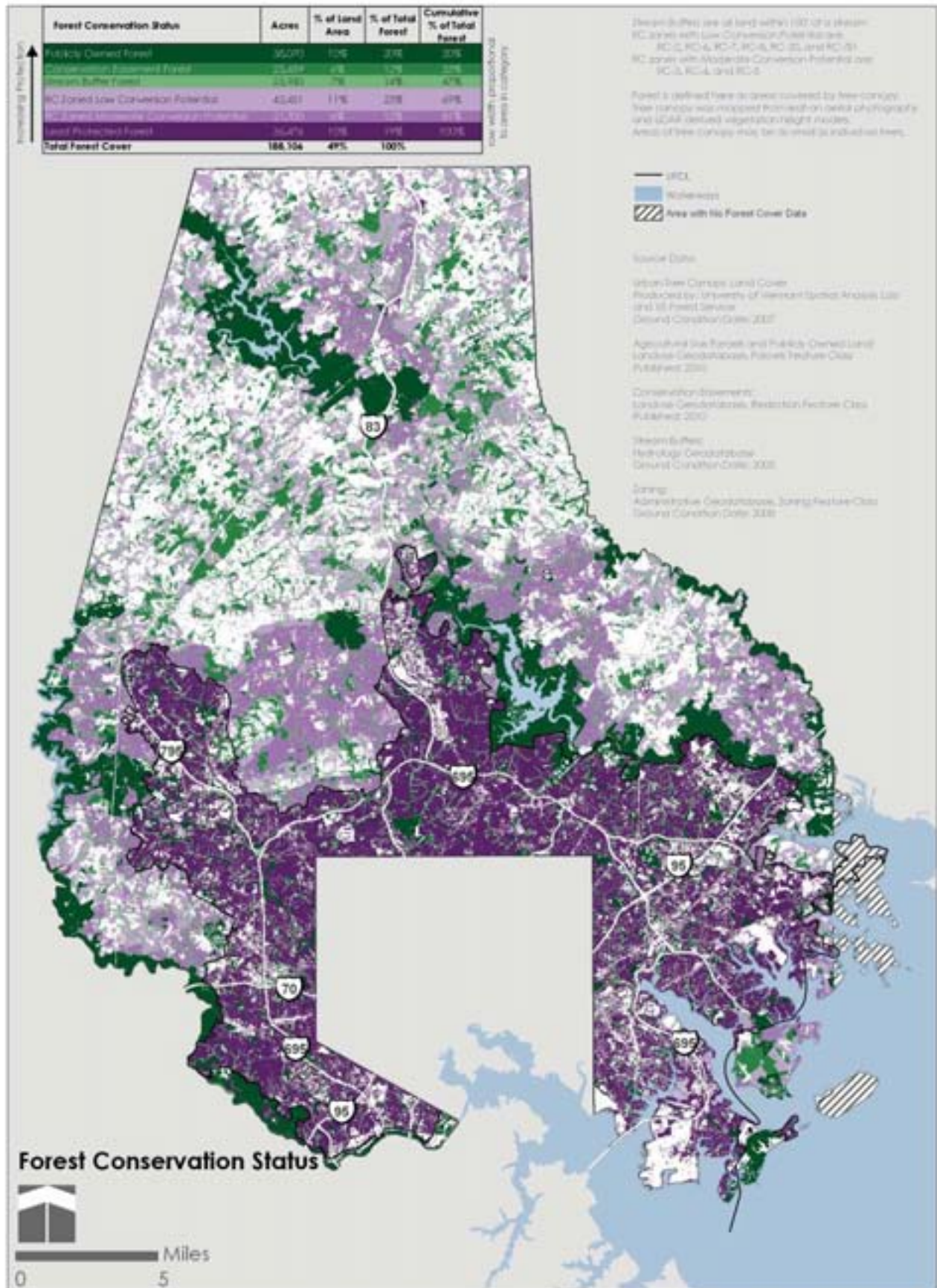
(4) Encourage donation of conservation easements to supplement purchased easements.

Forest Resources

Forests covered almost all of Baltimore County at the time of European settlement. Today, forests, agricultural lands, and developed areas each cover about 130,000 acres or one third of the County's land area. The largest forest blocks, totaling 30,800 acres, are public parks and reservoir reservations owned by the State of Maryland, the City of Baltimore, and Baltimore County. The County is placing its public forests under management plans that prioritize forest health and the protection of water quality, habitat, biological diversity, and the maintenance of forest-dependent recreation. Approximately 75% of the forests in the County are held in private ownership.

Historically, the greatest forest loss in the County occurred before the early 1900's, and there was a net increase in forest cover of about 17,000 acres from 1914 to 1997. Forest losses in recent decades have occurred as a result of land development. As a result of historical clearing, the forests in Baltimore County are fragmented into thousands of patches, most of which are smaller than 100 acres. Small patch size increases the forest's vulnerability to the many stresses imposed by the surrounding non-forested landscape, including temperature extremes, drying winds, air and

Map 43: Forest Conservation Status



Montreal Process Criteria & Indicators (MPC&I)

The MPC&I measure the ecological and economic sustainability of forest resources. These measures have been adopted by the U.S. and eleven other nations that collectively comprise 60% of the world's forests. Baltimore County uses the Criteria as goals. They include (1) Conservation of Biological Diversity, (2) Maintenance of the Productive Capacity of Forest Ecosystems, (3) Maintenance of Forest Ecosystem Health and Vitality, (4) Conservation and Maintenance of Soil and Water Resources, (5) Maintenance of Forest Contribution to Global Carbon Cycles, (6) Maintenance and Enhancement of Long-term Multiple Socioeconomic Benefits to Meet the Needs of Societies, and (7) Legal, Institutional, and Economic Framework for Forest Conservation and Sustainable Management. As a framework for sustainable forest management, the MPC&I have guided Baltimore County's efforts for forest assessment and program implementation. In addition to preparation of forest health assessments and management plans for forested County lands, an assessment of the urban tree canopy within the URDL was completed, and GIS analyses and typologies were developed (see the Forest Conservation typology under Sensitive Areas Protection). An estimate of the carbon dynamics of forestlands in the County was also completed. Programs to increase forest cover have been developed, including the Growing Home Campaign and rural reforestation projects with landowners. A case study of the development of the County's Forest Sustainability Program is available through The Conservation Fund (<http://www.baltimorecountymd.gov/agencies/environment/workgroup/index.html>). The County's Forest Sustainability Strategy and the State of Our Forests – 2007 report are also available. Information about the MPC&I is available from the national Roundtable on Sustainable Forests (<http://www.sustainableforests.net>).

water pollutants, and invasive species. The forests are also vulnerable due to a number of diseases and pests, and the lack of natural regeneration as a result of browsing by high populations of deer. These stressors can degrade forest health and reduce the forest's capacity to regulate critical watershed functions.

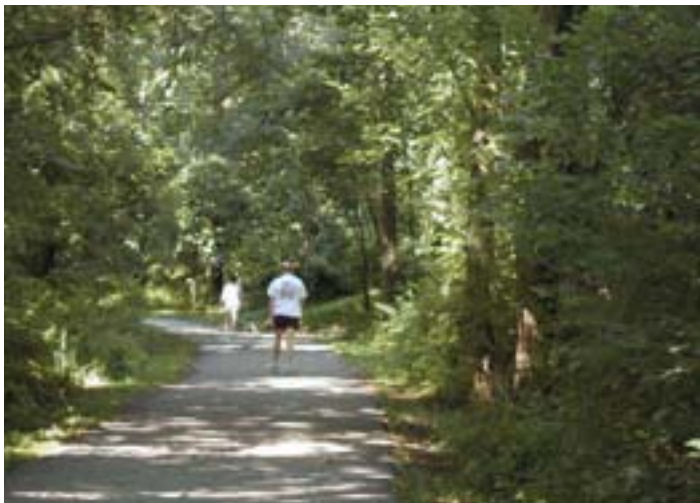
The multi-layered structure of the forest tree canopy and lower vegetation breaks the force of falling rain on forest soils, protects soil structure and the infiltration capacity of the forest floor. This function alone slows surface runoff, reduces erosion and soil loss, replenishes soil nutrients, and cleanses precipitation of pollutants as it moves slowly through the soil to adjacent streams. When forests become fragmented and degraded, flooding occurs more frequently, rushing streams threaten streambed stability, eroding

soils and excess nutrients foul stream waters, and the efficiency of the forest ecosystem to regulate watershed function for the health of both the human and wildlife communities is greatly impaired.

In addition to water management, other forest functions include the sustainability of habitat for the diverse plant and animal communities associated with the eastern deciduous forest, as well as a valuable industry of timber and other forest products. Forests also clean air and reduce the effects of greenhouse gases such as carbon dioxide through the sequestration and storage of atmospheric carbon. In urban areas, trees and neighborhood woods shade and cool buildings, thereby reducing energy demands and costs. Forests and trees improve public health, provide recreational opportunities, and enhance urban living.

To protect forest resources, the Chesapeake Bay Critical Area Act (1984) was enacted to regulate forest harvesting to protect the full range of forest ecological functions. Outside the Critical Area, forest conversion to development is subject to the County's Forest Conservation Act (1992), passed pursuant to requirements of the Maryland Forest Conservation Act, the nation's first statewide forest protection measure. Through these laws, developers are required to preserve or reestablish forests on development sites, utilize approved forest retention banks, or provide mitigation through off-site plantings or through the payment of fees to the County. The Critical Area Act is a no net loss measure, whereas outside the Critical Area, only forest losses exceeding allowable thresholds are required to be mitigated. From 1993 through 2006, more than 6,500 acres (65%) of forests on development sites were protected through the Forest Conservation Act (FCA). Another 3,200 acres (32%) of forests were cleared, averaging about 245 acres per year. Additional losses were incurred from activities exempt from the FCA regulations. Non-development timber harvests average about 700 acres per year but have declined since 2000. These harvest areas generally remain to regenerate.

In 2003, Baltimore County was invited by the U.S. Department of Agriculture - Forest Service to participate as one of three counties in the U.S. in the "Linking Communities to the Montreal



Process Criteria and Indicators (MPCI)” project. The MPCI are science-based measures of the ecological and economic sustainability of forest resources. This initiative led to the development of a Forest Sustainability Program within DEPRM that has included the preparation of a countywide Forest Sustainability Strategy in cooperation with a stakeholder steering committee. In addition to establishing a sustainability framework for forest management, a number of forest assessment and implementation projects have been completed. The County’s forest sustainability efforts are recognized nationally.

Policy: Continue to assure the sustainable management of public and private forest resources to provide ecosystem services and meet human needs.

Actions:

(1) Continue to protect forest resources pursuant to the Forest Conservation Act and

Chesapeake Bay Critical Area regulations, and continue to protect “forest buffers” as required by the County’s Regulations for the Protection of Water Quality, Streams, Wetlands, and Floodplains.

(2) Continue to implement the County’s Forest Sustainability Program and promote sustainable forest management among agencies, forest landowners, and environmental organizations, guided by sound science and assessment of forest health.

(3) Implement actions and commitments for forest management in the Baltimore Watershed Agreement, the Reservoir Watershed Management Agreement Action Strategy, and the County’s Sustainability program.

(4) Adopt and implement a No Net Loss of Forest policy.

(5) Continue to prepare Forest Health Assessments and implement Forest Management Plans for large County-owned forested properties.

(6) Continue to increase forest cover and maintain forest health using mitigation fees from the Forest Conservation Act and the Chesapeake Bay Critical Area Act.

(7) Continue to support the program of the County Forest Conservancy District Board.

(8) Include reforestation elements in community plans and community conservation projects.

(9) Continue to promote and support programs for community reforestation, including the Tree-Mendous Maryland Program, the County’s Growing Home Campaign, Rural Residential Reforestation projects, and Big Trees program.

(10) Continue the protection of forestland in the Coastal Rural Legacy Area through easements or in-fee acquisition.

(11) Address forest pests, diseases, and other biotic stressors and continue cooperative projects for suppression of Gypsy moths and control of exotic invasive species.

(12) Promote and implement efforts for sustainable waste wood and woody biomass utilization.

(13) Continue collaboration with the USDA Forest Service, the Maryland Department of Natural Resources – Forest Service and other agencies and organizations for the collection and use of forest assessment data and research and the implementation of sustainable forest management practices.

(14) Continue to implement and improve deer management measures to better protect forest resources. Evaluate and address the impact that deer browsing has on priority forest determinations.

BIOLOGICAL DIVERSITY AND SENSITIVE AREAS

In Baltimore County, a diverse assemblage of natural areas including forests, wetlands, stream systems, and fields currently provide breeding and foraging habitats for at least 340 animal species. As of 2007, however, 89 species of plants and 30 species of animals were classified as threatened, endangered, or extirpated from the region by the Maryland Department of Natural Resources. The ability of these natural communities to maintain biological diversity is threatened by the degradation and loss of natural habitat.

Biological diversity strengthens the resilience of natural ecosystems to withstand degradation. Natural disturbances are distinct, random events with recovery periods between disturbances. Disturbances caused by human activities, however, result in permanent changes, leaving no chance for the ecosystem to recover. The removal of native vegetation, forest fragmentation, environmental pollution, and the introduction of exotic invasive plant and animal species all degrade natural habitats, thereby reducing or eliminating native habitat suitability.

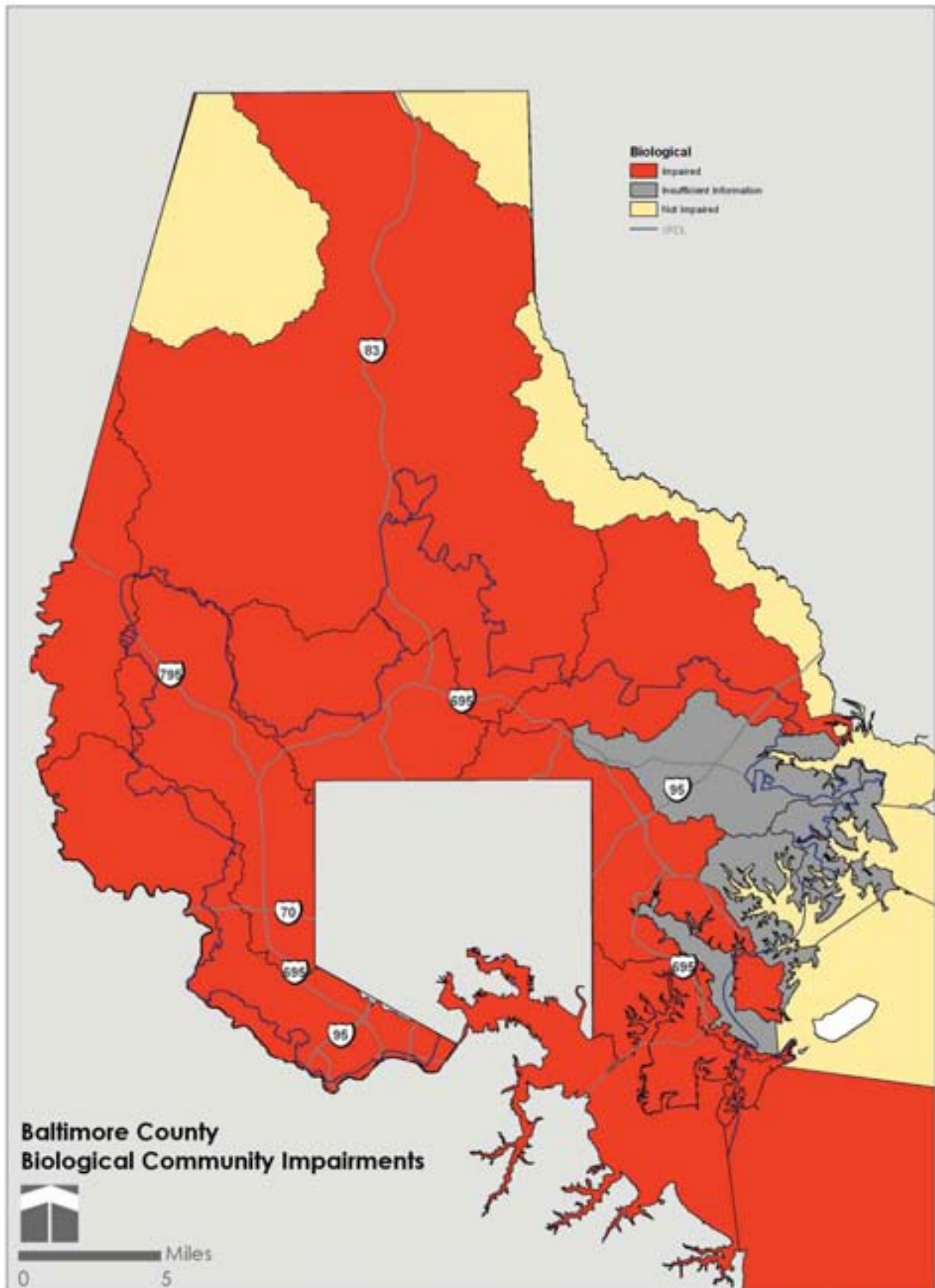
The maintenance of biological diversity is critical to the sustainability of both the human and wild communities.

Baltimore County is required under the Economic Growth, Resource Protection, and Planning Act of 1992 to incorporate a sensitive area protection element into its Master Plan. Sensitive areas are defined as streams and wetlands and their buffers, 100-year floodplains, habitats of threatened and endangered species, steep slopes, and agricultural and forest lands intended for resource protection or conservation. The intent of the Sensitive Areas element of comprehensive plans is to develop goals, objectives, principles, policies, and standards to protect sensitive areas from the adverse effects of development.

Baltimore County has made significant progress toward the protection of these resources through several local and State-mandated regulatory programs. In particular, the County's stream protection regulations, which have been a model by the Local Government Advisory Committee of the Chesapeake Bay Program, provide effective protection for stream channels and their 100-year floodplains, wetlands, and adjacent erodible soils and steep slopes. Outside of the Chesapeake Bay Critical Area, this comprehensive view of the "stream system" affords protection through sediment control, stormwater management, and forest conservation regulations. Within the Critical Area, these protection measures are supplemented by additional requirements to protect significant plant and wildlife habitats. Collectively, these measures ensure that adverse effects of development in unsuitable locations are avoided and that beneficial ecological functions of stream corridors for water quality, channel stability, and habitat are maintained and preserved.

DEPRM has also worked with the Maryland Department of Natural Resources to verify the presence of the limited number of threatened or endangered species and their habitats that exist in the County. Many of the habitats for these sensitive species are protected through public ownership of wildlands and other areas such as the Soldiers Delight Natural Environmental Area, and through the public drinking water reservoir reservations and large State-owned lands along the Patapsco River, Gunpowder Falls, and the Chesapeake Bay. Any threats to sensitive plant or animal spe-

Map 44: Biological Community Impairments



cies elsewhere from land development are addressed through regulatory protection of the stream systems, wetlands, and priority forest retention areas; and implementation of the Chesapeake Bay Critical Area Program.

The County's regulatory tools deal with immediate site-level threats to sensitive areas. In addition, the County's overall growth management framework provides an important mechanism for protection. The Urban-Rural Demarcation Line (URDL) restricts intensive urban development to only one third of the County's total land area, which generally surrounds the City of Baltimore. Outside of the URDL, a series of rural Resource Conservation (R.C.) zones has been in place since 1976 that provides protection for sensitive areas through restricted development densities and performance standards. As a result of the County's quadrennial Comprehensive Zoning Map process (CZMP), a significant acreage of R.C. zones have been further reduced in density $\frac{3}{4}$ especially beginning in 1996 $\frac{3}{4}$ providing enhanced protection. An additional mechanism is the County's land preservation programs that include the purchase of development rights on farmland, forests, and other sensitive lands.

The degree of protection for sensitive areas and other land resources in the County reflects a variety of tools, from public ownership to land conservation easements to low density zoning. Overall, more than 129,900 acres (69%) of the forest canopy in Baltimore County are under strong protection. An additional 64,800 acres of farmland (94%) are similarly protected.

Policy: Implement biological diversity protection measures for the County's diverse habitats and their dependent wildlife and the ecological processes that ensure healthy, productive, and sustainable ecosystems. Restore lost or degraded ecosystem functions, and foster environmental stewardship.

Actions:

(1) Develop a Biological Diversity Conservation Plan that includes measures to assess and protect the natural habitats of the County's listed rare, threatened and endangered species and sustainable acreages of forest, wetland, ri-

parian and early successional field habitats to maintain or improve biological diversity for current and future generations.

(2) Apply biological diversity conservation and improvement measures to the development plan review process, capital improvement projects, and forest restoration efforts.

(3) Work in cooperation with government agencies, non-profit organizations, and citizen groups to assess, protect, restore, and create a range of habitats.

(4) Maintain the extent of the URDL and Resource Conservation zoning to reduce the vulnerability of sensitive areas to conversion for development.

(5) Continue to implement multiple land preservation programs.

(6) Evaluate the vulnerability of high-value resource lands to conversion and recommend additional protection where appropriate.

(7) Utilize the Baltimore County Center for Maryland Agriculture to provide educational opportunities for good land stewardship.

(8) Support and promote the efforts of the Maryland Environmental Trust and local land trusts to protect sensitive lands.

MINERAL RESOURCES

Throughout its history, locally abundant and varied mineral resources have played an important role in Baltimore County's economic development. The County's geologic formations have provided recoverable reserves of clays, sands, and gravels throughout the County's Coastal Plain. Within the Piedmont physiographic province, the high-quality Cockeysville Marble was used for numerous building projects, innumerable row-house steps in Baltimore City, and renowned historic structures such as the Washington Monument in the District of Columbia. The Piedmont is also a source of other crystalline or hard rock re-

serves with great economic value, including iron ores, granites, gabbros, serpentines, and gneisses. While small mining operations were once prolific, competition from larger operations both inside and outside the County has reduced the number of active mining operations.

The primary issue regarding the mineral resources centers is that these resources are non-renewable and must be managed to remain accessible where economically recoverable to keep building construction costs competitive and to maintain self-sufficiency to the extent possible. For this reason, the State requires a Mineral Resources Element in each local comprehensive plan. In general, extraction of sand and gravel appears to be declining in Baltimore County, as evidenced by the closure of operations in the White Marsh area. Conversely, extraction operations at large hard rock quarries, such as at Cockeysville, appear stable and viable for the foreseeable future. Overall, there are no significant conflicts regarding the extraction of viable mineral resource reserves with areas planned for future development.

Policy: Recognize that mineral resources are an important and valuable element of the local economy. Develop appropriate land use policies to protect ongoing operations and prevent loss of these resources to other land uses.

Actions:

- (1) Restrict land development in undeveloped areas containing deposits of commercially valuable mineral resources.
- (2) Encourage a dialogue with the mineral resource industry to raise awareness of mineral resource-land use conflicts, and develop options for their resolution.
- (3) Permit mineral extraction activities in suitable areas pending environmental and community impact assessments.

(4) Design and improve road networks to handle the truck traffic from mining activities in areas presently or likely to be used for extraction of mineral resources.

(5) Assure that post-mining reclamation plans are compatible with surrounding land uses and comply with State Surface Mining Regulations.

IMPLEMENTATION

Baltimore County maintains its commitment to its neighborhoods by engaging multiple agencies to address issues, and continues to partner with the community to form working relationships that can achieve solutions.



Baltimore County’s envisioned future is expressed through Master Plan 2020. Prior master plans have addressed countywide trends and critical concerns in proactive and progressive ways that have shaped this county into an outstanding place to live, work and play. Although it is the express purpose of such plans to project 10 years into the planning horizon they are necessarily limited by the context and capabilities of the times in which they are produced.

Community plans are adopted under previous master plans to deliver specific responses to issues unique to the many distinct communities that define our county. The Baltimore County Office of Planning has identified and gained understanding of these communities through collaborative efforts engaging all facets within the commu-

nity. These efforts resulted in 39 Community and Local Area Plans being prepared since 1988. The plans address goals and provide guidance in a responsive and detailed fashion that augments the broader goals of the Master Plan. Both the urban and rural areas benefit from the direction and structure provided by community and local area plans. To the extent there are no conflicts with this Master Plan, existing community plans will be carried forward in Master Plan 2020.

Community plans are not static. The County and community periodically evaluate these plans to assess their effectiveness, accomplishments, and also to ensure that they remain appropriate to the goals that are important to the communities they serve. Because of the knowledge and experience gained through the creation of community plans and by the application of innovative approaches to community design, the County now has the ability to respond to challenges within communities with an even greater level of detail and expertise.

Baltimore County maintains its commitment to its neighborhoods by engaging multiple agencies to address issues, and continues to partner with the community to form working relationships that can achieve solutions. The County employs advanced community design processes including the Renaissance Redevelopment Pilot Program, UDATs, charrettes and community-visioning workshops to achieve project-based design. These collaborative approaches to redevelopment and revitalization make specific design recommendations, explain the community vision and provide knowledge to the citizenry to facilitate the realization of their plans.

Planned Unit Development

The Planned Unit Development (PUD) represents an alternative development approval process that increases and specifies benefits to the immediate community that the PUD will impact, in exchange for an enhanced plan. It is available to qualified sites inside the URDL. Under the PUD process, redevelopment can occur in forms not permitted by the standard application of the zoning and development regulations. The PUD process can streamline the review process for projects



that utilize a site efficiently, are compatible within the community and demonstrate a high degree of design, quality, materials and finish. The flexibility provided by the PUD process makes it an important tool to react to the changing market needs and conditions in the County, and this vital function should be maintained.

The Charrette Process

A Charrette is a comprehensive, community-driven approach to planning and revitalization. It is designed to revitalize existing communities or envision new ones with a sense of place; a well conceived architectural fabric, and a sense of identity. Five to seven days of on-site work are a prerequisite for a public workshop to be defined as a Charrette. The Community Design Team's Charrettes are usually six days long. During this time, residents, staff, elected officials, and participating agencies work with the Community Design Team to produce a well-illustrated plan for the revitalization and growth of their community. Working on-site in the community and allowing public access for hours each day encourages public participation and the community's direct involvement in the decision-



making process. This on-site work allows easy access to agencies, stakeholders, and information. Preparation for a Charrette begins months before the Charrette date.

Zoning and Development Regulations

The Baltimore County Zoning Regulations (BCZR) and Baltimore County Code (BCC) are the ordinances by which land use and development are implemented. The Comprehensive Manual of Development Policies (CMDP), Zoning Commissioners Policy Manual (ZCPM) clarify and support the BCZR and BCC. Development is also subject to the requirements of the Local Open Space Manual, Landscape Manual, Public Works Design Manual and Environmental Standards and Requirements Manual.

The use of any given parcel of ground within the County is generally determined by its zoning classification. Zoning classifications correspond to specific regulations within the BCZR that set uses, intensities, areas and setbacks. Through the Comprehensive Zoning Map Process, the Cycle Zoning Process and the Out of Cycle Zoning Process zoning classifications on individual properties are reassessed and either reclassified or left to stand. The Proposed Land Use Map provides general recommendations for future land use within the context of the goals of the Master Plan and aids in rezoning considerations required by the various aforementioned zoning processes.

Baltimore County's annual budget is established through two major funding sources, the General Operating Budget and the Capital Improvement Program (CIP). The costs of providing public services such as education and public safety are identified within the General Operating Budget, which is funded primarily through county property tax and income tax revenue. Expenditures for capital projects fall to the CIP. These funding requirements are generated by the construction and maintenance of the county's physical facilities and public infrastructure to include water and sewer lines, roads, storm drains, bridges, solid waste disposal, government buildings, park facilities and schools. Monies funding the CIP are primarily raised through county bond revenue.

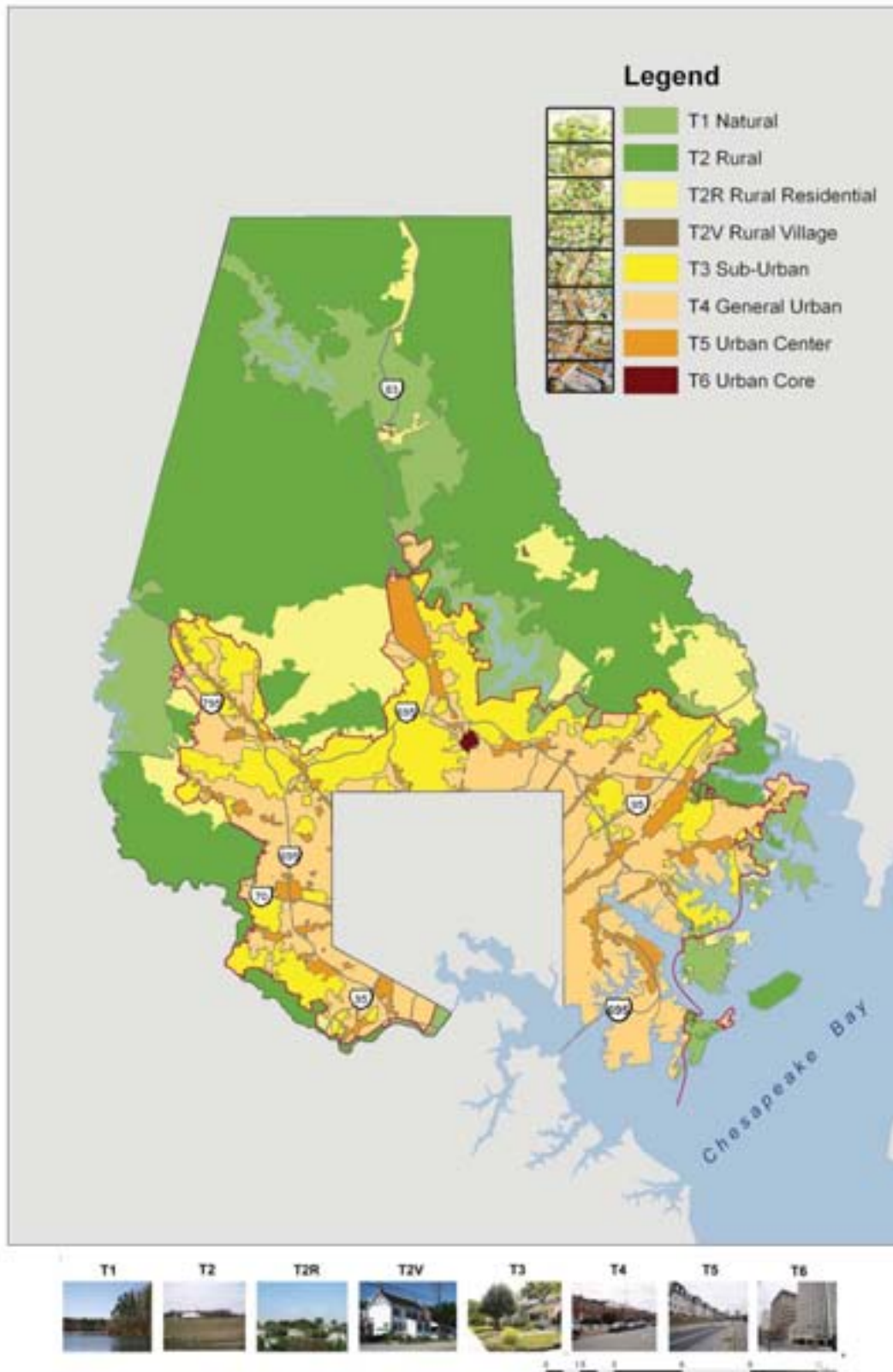
The CIP is an essential program by which to achieve the goals of the Master Plan 2020. How CIP resources are committed impacts significantly on redevelopment strategies committed to sustainable mixed-use communities. The capacity of the infrastructure is critical to accommodating redevelopment. CIP funding is largely targeted within the URDL/PFA.

Advanced technology permits detailed observation of the environment of this region that increases comprehensive understanding of the impacts of human activity on our natural resources. Guidance on the federal level was provided by President Obama in May of 2009. "Executive Order 13508 Chesapeake Bay Protection and Restoration" commits the broad authorities of the Federal Government toward restoring the Bay. In 2009, the Environmental Protection Agency (EPA) established an accountability framework to ensure the restoration of the Bay as required by Executive Order 13508. This accountability framework compels jurisdictions to develop and implement appropriate Watershed Implementation Plans, attain two-year milestones of progress and provide timely and complete information to an effective accountability system for monitoring pollutant reductions. The EPA framework contains potential federal actions in the event that a jurisdiction fails to meet expectations. In response, the State of Maryland has now brought into law measures that oblige Baltimore County to assess how development is allowed to proceed. The Annotated Code of Maryland, Article 66B as amended, sets forth twelve visions for land use. The County specifically responds to these visions in this Master Plan and must be diligent in making them a reality. More so than any preceding



Map 5 Proposed Land Use

Proposed Land Use Baltimore County Smart Coded



plan, the principal of sustainability is the foundation upon which the Master Plan 2020 is laid.

The challenges and opportunities presented to the County by this vital environmental renewal effort will require all stakeholders to approach how development is done in Baltimore County with a willingness to learn new concepts and techniques, jettison obsolete ordinances and coordinate across agencies, regulatory and jurisdictional lines to make real the visions and implement the goals. The combined effort of individuals and organizations ranging across the broad spectrum of public, business, institutional, state and local government is essential to the success of the Master Plan and the attainment of safe and sustainable communities.

Policy: Implement the goals of Master Plan 2020 to create compact, sustainable, socially attractive, vibrant, walkable, mixed-use communities.

Actions:

(1) Assemble a Master Plan Implementation Committee (MPIC) comprised of representatives of all agencies having involvement in development policy and process in Baltimore County. The MPIC is to develop strategies to carry out the policies and actions of the plan through interagency projects, public/private partnerships, etc., and provide to the Office of Planning a yearly Master Plan Implementation Status Report to be incorporated into the Baltimore County Annual Report to the Maryland Department of Planning. (Note: Refer to the location of the 12 visions and the county goals elsewhere in the plan.)

(2) Require each county agency having involvement in development policy and processes perform a thorough review of all regulations, policies and procedures under their purview. These regulations and guidelines should be amended in ways that would facilitate the goals of Master Plan 2020 and realize the twelve visions in the Annotated Code of Maryland, Article 66B.

(3) Evaluate potential revisions to the Baltimore County Zoning Regulations (BCZR) and the Baltimore County Code (BCC) to promote sustainable development within the CEAs, including consideration of new methods of encouraging such development within these areas.

(4) Revise the BCZR and the BCC to include new methods of encouraging development in the CEAs, specifically including the sustainability goals for development outlined in Master Plan 2020.

(5) Study the application of “mixed-use” zoning overlays within the CEAs to promote types of development consistent with the aims of Master Plan 2020.

(6) Implement ways to streamline the concept to permit approval process for preferable types of development in keeping with Master Plan 2020.

Policy: Enhance community planning and refine community plans through the application of innovative collaborative processes that involve all members and interests within the community.

Actions:

(1) Employ the use of Charrettes and Community Visioning Workshops to address issues in the community and produce design guidelines offering specific solutions.

(2) Study the feasibility of zoning overlays that recognize the unique characters of geography, pattern and history of older established communities and would allow regulatory relief without the onerous variance petitioning process.

Policy: Utilize the Capital Improvement Program as an effective tool for the implementation of the Master Plan 2020.

Action:

- (1) Perform a thorough review of the CIP to ascertain that funding is in line with the goals set forth in Master Plan 2020.
- (2) Support TIFs and other innovative funding opportunities in CEA designated areas to stimulate mixed use, walkable, transit oriented development.

Policy: Implementation of the Master Plan must be tracked and its progress measured to provide feedback to governments and citizens, as well as accurate information for the annual report on the progress of the county in putting the plan into practice.

Action:

- (1) Establish planning office procedures of community indicators and performance measures that track agency actions and results in implementing the goals and policies of Master Plan 2020.
- (2) The Office of Planning and the Master Plan Implementation Committee will hold semi-annual stakeholder forums to review actions and results of plan implementation and suggest ways of advancing the plan.

Quality-of-life benefits from living in walkable communities, coupled with impending environmental mandates to improve water quality, will mutually reinforce the need for Baltimore County to accommodate most of its future growth in higher-density, mixed-use areas. A number of important issues will affect the amount and quality of higher-density, mixed-use development in Community Enhancement Areas (CEAs) in Baltimore County:

Zoning

In many ways this is the easiest element to achieve because it can be done now through PUDs. However, the existing PUD law’s Countywide eligibility and lack of specific public benefit requirements diminishes its usefulness for fostering concentrated mixed-use in defined areas. Consideration should be given to other methods of creating incentives for development of high-density, mixed-use projects.

Critical Mass

There needs to be enough of a critical mass of development in an area to create a truly walkable node; isolated projects that combine one or two uses (such as an office or apartment building with retail on the first floor, surrounded by auto-related uses) may be worthwhile and technically qualify as “mixed-use,” but are not sufficient to create a pedestrian-oriented concentration of activity. Achieving critical mass is likely to occur if incentives, infrastructure and policy combine to produce clusters of mixed-use projects in relatively concentrated areas. If too large an area is targeted for receptivity to mixed-use, the result may be a few discreet “mixed-use” projects, but not a pedestrian-oriented focal area.

Assembled parcels of land

In greenfield areas, a small number of property owners typically control large pieces of land. In the White Marsh Growth Area, in fact, one entity controlled almost the entire core area. In CEAs, often even a small area will have numerous owners. For example, the 4-acre site for the proposed Towson Circle III project required the developer to assemble several properties from numerous owners.

Infrastructure Capacity

Infrastructure – particularly sewer capacity – is a critical determinant of where and how much compact development can occur in Baltimore County. Levels of sewer deficiency exist throughout the county. Given the time required to plan, permit, design and construct significant additional sewer capacity, it may not be practical to wait until a developer comes forward with

a proposed project to start the process. The County's current policy of requiring a developer to incrementally add sewer capacity when his specific project will exceed available limits is not conducive to achieving high-quality concentrations of mixed-use development. It is also inefficient from a financial standpoint because it fails to take advantage of economies of scale.

Structured Parking

In all but the highest density, most transit accessible locations throughout the U.S., retailers, apartment and condo owners, and office tenants still demand on-site parking. Excellent transit access reduces the need, but adequate parking is still required. Structured parking consumes much less land area than surface parking, creates less impervious surface, and is much more conducive to a cohesive, walkable downtown experience. However, the cost of structured parking is significantly higher.

Because Baltimore County residents are generally accustomed to free surface parking, their willingness to pay even part of the true cost of structured parking (whether directly through parking fees or indirectly through higher residential or office rents) will need to be tested. One way to cover costs not paid for by users would be through public subsidy. In the major pedestrian-oriented mixed-used projects pursued in the County, public subsidy for structured parking has been a central part of the deal. For example, the Metro Center at Owings Mills project includes County and State contributions toward the cost of two large garages. The Towson Circle III project includes public subsidy for the 700-space garage to be constructed there.

Developer Financial Feasibility

According to the National Association of Industrial and Office Park Research Foundation, mixed-use development poses some challenges for the private developer:

Equity requirements can be higher for the mixed-use project than for a single use development of equal size. The mixed-use development may require a

longer development period with phasing over longer periods. This may make it more difficult to finance a mixed-use development than a single use development of equal size. Investors providing initial equity understand mixed-use development as an investment opportunity. Initial planning costs can be larger for a mixed-use development than for a single-use project of equivalent size. Sites for mixed-use development require the ability to serve different property markets. In light of these issues, developers in Baltimore County may be wary of taking on significant mixed-use projects, if they are also expected to bear the full cost of sewer extensions and structured parking.

Transportation Access

Transportation access (both roads and public transit) must be sufficient to enable all uses within the development to function properly. Connectivity to adjacent neighborhoods is important to those communities and to the CEA.

Environmental Impacts and Permits

Environmental permits and approvals need to be obtainable in a reasonable period of time. Costs and approvals for redeveloping "brownfields" properties may need to be considered as well.

Institutional Capacity

Successful higher density mixed-use redevelopment often requires a larger and more sustained involvement on the part of local government than does traditional, single-use greenfield development. There is a need for close coordination between and among multiple professional disciplines (planning, transportation, public works, budget, economic development, law, PDM) within County government on developing and reviewing plans, negotiating public-private agreements, and presenting a unified County position. Coordination with state and federal government agencies, public and private investments, identification and coordination of resources from different levels of government, utilization of incentives and tools such as tax increment financing that require expertise, and sustained involvement over months is essential for successful redevelopment. As the experience doing this kind of

development increases for all parties, projects will be accomplished more quickly. Strategies for incorporating community involvement may be broader and more sustained than the one or two formal Community Input Meetings currently required under the Development Review process.

Coordination of participation by multiple property owners often requires a designated staff project manager with responsibility for moving the project forward and coordinating County involvement.

Policy: To bring about quality, higher-density, mixed-use development that is truly walkable, the County should take proactive steps in targeted areas to “set the table” for such development.

Actions:

(1) Investigate how PUD legislation can be utilized to make it a more effective tool to promote high-quality, higher-density, mixed-use development.

(2) Consider working with communities to identify activity centers that have potential for walkable, higher-density development. Then implement land use, infrastructure and financing plans to attract the type of development envisioned.

(3) Identify the major capacity improvements that have a strategic importance to an entire CEA and put the planning, approval and construction process in motion. Just as was done with the Growth Areas 25 years ago, CEAs may need to “set the table” for development by providing the basic water and sewer capacity in strategically-targeted corridors or nodes. The added complexity of retrofitting sewer in the types of already-developed areas targeted for CEA (as opposed to extending a line to a greenfields area such as Owings Mills or White Marsh) underscores the need for strategic planning of sewer capacity.

(4) Successful pedestrian-oriented development in the CEAs will require a strategy for

achieving the optimal amount of structured parking. Review zoning regulations for parking in order to create “Park Once Zones” where people park and then walk to shop, work or live at multiple destinations.

(5) Given the cross-disciplinary nature of transit-oriented development, government agencies and departments are encouraged to work together to assure TOD implementation.

(6) Study the feasibility of establishing a Baltimore County Redevelopment Authority charged with the oversight of all redevelopment projects and ensuring that the sustainability goals of the Master Plan 2020 are achieved in a collaborative and fiducially responsible way.

GLOSSARY AND APPENDICES

Glossary

**Appendix A
Water Resources Element
Executive Summary**

**Appendix B
Adopted Community Plans**

**Appendix C
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**Appendix D
Sustainable Redevelopment
Studies for Community
Enhancement Areas**

GLOSSARY

Adequate Public Facilities Ordinance (APFO)

– Defined by the Baltimore County Code, the intent of the APFO is to provide a predictable planning environment for the provision of adequate infrastructure, roads, public school facilities, and recreational space, by requiring residential and nonresidential projects to pass certain tests as a condition of development approval.

Affordability – Based on standards set by mortgage lenders, the U.S. Department of Housing and Urban Development (HUD) construe that no more than 30% of household income ought to be allocated to housing Principal, Interest, Taxes and Insurance (PITI). Normally, pricing calculations that describe workforce housing use 30% of household income as the maximum threshold of affordability.

Area Household Median Income (AHMI) – This is the median household income of a metropolitan statistical area (MSA), a geographic unit defined by the federal Office of Management and Budget. The U.S. Department of Housing and Urban development (HUD) utilizes AHMI to identify the number of low to moderate-income households for applications of federal housing programs.

Base Realignment and Closure (BRAC) – The Congress established the 2005 BRAC Commission to ensure the integrity of the base closure and realignment process in military installations throughout the nation. Maryland is one of a few states to expand from BRAC at various military installations including the Aberdeen Proving Ground, Andrews Air Force Base, Fort Detrick, Fort George G. Meade, and National Naval Medical Center.

Biomass – A renewable energy source; biological material obtained from living organisms.

Capital Improvement Program (CIP) – The CIP is the County plan specifying when major land acquisition and construction projects for schools, parks, roads, sewers and other public facilities will occur, and how they will be financed.

Charrette – A comprehensive, holistic approach to planning and development with active community participation. It is designed to revitalize existing communities or envision new communities with a sense of place and a well-conceived architectural fabric.

Chesapeake Bay Critical Area Act – The Chesapeake Bay Critical Area data set contains polygons and lines representing the Chesapeake Bay Critical Area. The Chesapeake Bay Critical Area is defined as the area within 1000 feet of the mean high tide line as defined by 1972 aerial photography acquired by the Maryland Department of Natural Resources. The critical area has three designations: resource conservation area (RCA), the intensely developed area (IDA) and the limited development area (LDA). The IDA and LDA definitions were given to land that was already developed prior to the critical area being defined in 1984. Properties that are developed within the critical area are subject to special regulations as stated in the Baltimore County Code.

Commercial Revitalization Districts (CRD)

– The Commercial Revitalization Districts are legal boundaries based on parcel and zoning lines. Businesses in the districts are eligible for loans and other assistance to encourage investment in these established communities. The Baltimore County Council designated 14 Commercial Revitalization Districts: Arbutus, Baltimore National Pike, Catonsville, Dundalk, Essex, Lansdowne, Liberty Road, Loch Raven, Overlea-Fullerton, Parkville, Pikesville, Reisterstown, Towson and Woodlawn-Security.

Community Conservation Areas (CCA) – A Community Conservation Area is one of ten (10) land management areas that were established in the *Baltimore County Master Plan 1989-2000*, a legacy of the preceding 1972, 1975, and 1979 Plans, to direct development in growth areas, enhance community conservation areas, improve the quality of development, and preserve farmland and resources. CCAs generally consist of low to moderate density suburban residential neighborhoods served by public

water and sewer facilities. CCAs also include a significant amount of commercial development, located primarily along commercial corridors.

Community Enhancement Area (CEA) – A Community Enhancement Area is a new locale designated in this *Master Plan 2020* suitable for compact, mixed-use, walkable, transit-oriented development with a sustainable design and construction of residential and non-residential structures within the Urban-Rural Demarcation Line (URDL).

Consolidated Plan – In compliance with federal requirements for receiving funds from the U.S. Department of Housing and Urban Development (HUD), the Consolidated Plan is a five-year strategy that proposes how Baltimore County will use local, state, and federal resources, as well as funds from the Community Development Block Grant program (CDBG), HOME Investment Partnerships program (HOME), Emergency Shelter Grant program (ESG), to create decent housing, expand economic opportunity, and ensure a suitable living environment for low to moderate-income persons and communities.

Councilmanic Districts – The councilmanic district is a graphical representation of the authoritative enrolled bill, Baltimore County Bill 47-01. The appropriate district number identifies each councilmanic district. The Baltimore County Board of Elections validated the data.

Ecosystem – An ecological community together with its environment, functioning as a unit.

Geocode – The spatial references that are required are X and Y coordinates in a documented geographic or projected coordinate system. Transforming this sort of reference into a simple X and Y is a process known as Address Matching, or Geocoding.

Geology – The geology data set contains a representation of the Maryland Department of Natural Resources, Maryland Geological Survey's Geology Map of Baltimore County, Maryland published in

1976. The geology map depicts major geologic formations. Point features normally on the geology map are not included in this data set.

Green Infrastructure – Defined by the American Planning Association, green infrastructure is a system of elements including greenways, trails, parks, farms, forests, and wildlife habitat that have long complemented “gray” infrastructure framing the built environment. When interconnected, these green elements form a network of natural areas and other open spaces that conserves natural ecosystems, sustains clean air and water, and provides an array of benefits to humans and wildlife.

Greenfield – Greenfields include previously undeveloped land, restored land, agricultural properties, and parks. These lands have high ecological, social, and community values.

Greenways – Greenways are classified as either a “recreational greenway” or an “environmental greenway.” The County greenway system was adopted in the Baltimore County Master Plan 2010.

HOME program – A program sponsored by HUD that helps expand the supply of decent affordable housing for very low, low, and moderate-income families through grants to state and local jurisdictions.

Housing Tenure – Defined by the U.S. Census Bureau, this term refers to the distinction between owner-occupied and renter-occupied housing units.

Intensely Developed Areas (IDA) – An area where existing development is very concentrated, so that little of the natural environment remains. It is one of the Chesapeake Bay Critical Area's three designations: resource conservation area (RCA), the intensely developed area (IDA) and the limited development area (LDA).

Land Preservation – The land preservation data set contains the boundaries of properties that have had a permanent or temporary conservation easement placed on the property. An easement is an agreement

between a landowner and a government body or land trust that prevents development of the property. The data set also contains properties that have shown interest in participating in a preservation program at some time. Conservation programs include the Maryland Agricultural Land Preservation Foundation, the Baltimore County Land Preservation Program, the Rural Legacy Program and the Maryland Environmental Trust.

Leadership in Energy and Environment Design (LEED) Certified – A voluntary, consensus-based national standard for developing high performance, sustainable buildings.

Metropolitan Planning Organization (MPO) – A federally mandated and federally funded transportation policy-making organization that is made up of representatives from local government and governmental transportation authorities. In 1962, the Congress passed legislation that required the formation of an MPO for any urbanized area with a population greater than 50,000 to ensure that existing and future expenditures for transportation projects and programs are based on a continuing, cooperative, and comprehensive (“3-C”) planning process.

Mixed-Income Housing – A mixed-income housing development can be defined as a development that is comprised of housing units with differing levels of affordability, typically with some market-rate housing and some housing that is available to low-income occupants below market-rate. The “mix” of affordable and market-rate units that comprise mixed-income developments differ from community to community, and can depend, in part, on the local housing market and marketability of the units themselves.

Multimodal – A combination of two or more modes of transportation that moves goods and services by air, road, rail, bike, or walking.

National Pollutant Discharge Elimination System (NPDES) – Under the Clean Water Act, the EPA regulates various chemical pollutants. The discharge of regulated chemicals into surface waters is

controlled by the NPDES, which requires dischargers to obtain federal permits for their discharge. The permits, which can be issued by the EPA or by state government agencies, regulates the amount of specific pollutants that a business or municipality can discharge. The NPDES regulates both process water (used in some fashion) and stormwater discharge to the sanitary sewer system, surface waters or groundwater.

New Urbanism – An urban design movement that promotes walkable, mixed-use neighborhood development, sustainable communities and healthier living conditions (Congress for New Urbanism).

Overlay Zone – A specific geographic area upon which additional land use requirements are applied on top of the underlying zoning code in order to promote a specified goal.

Priority Funding Area (PFA) – The 1997 Priority Funding Areas Act capitalizes on the influence of State expenditures on economic growth and development. This legislation directs State spending to Priority Funding Areas. Priority Funding Areas are existing communities and places where local governments want State investment to support future growth.

Radionuclide – An atom with an unstable nucleus. The atom releases energy (in the form of radiation) by a process of decay called radioactivity.

Redevelopment – The term goes beyond the redevelopment efforts that are carried out under statutory schemes to encompass a broad range of public activities intended to stimulate reinvestment. Government-initiated redevelopment activities serve a valid public purpose when the public agency can demonstrate through an adopted plan or other public process that existing conditions make it impractical or impossible for market forces to act in the public’s best interest.

Regional Planning District (RPD) – Defined and delineated by the Baltimore Metropolitan Council, Regional Planning Districts are a somewhat

larger district level of geographic detail used in transportation planning to summarize demographic characteristics and travel data for an identifiable area. RPDs follow census geography boundaries and contain one or more census tracts, a geography defined by the U.S. Census Bureau for statistical reporting purposes.

Revitalization – Revitalization reverses the downturn of a commercial area, supports the stabilization of faltering neighborhoods, and rejuvenates the sense of place and pride for constituents. Commercial revitalization is designed to increase tenant occupancy in office and retail space and to reduce building obsolescence by encouraging investment in older commercial space or conversion to mixed use. Neighborhood revitalization can be achieved through funding and technical assistance. State and local governments, non-profit organizations, community groups, and businesses work together to enhance existing neighborhood resources, support economic development, provide public services, and improve quality of life for citizens.

Settlement Expense Loan Program (SELP) – A program that provides loans of up to \$10,000 to assist with settlement costs for families whose income is at or below 80% of the area household median income (AHMI).

Smart Growth – Defined by the American Planning Association (APA), smart growth means using comprehensive planning to guide, design, develop, revitalize and build communities for all that have a unique sense of community and place; preserve and enhance valuable natural and cultural resources; equitably distribute the costs and benefits of development; expand the range of transportation, employment and housing choices in a fiscally responsible manner; value long-range, regional considerations of sustainability over short term incremental geographically isolated actions; and promotes public health and healthy communities. Compact, transit accessible, pedestrian-oriented, mixed-use development patterns and land reuse epitomize the application of the principles of smart

growth.

Sustainable Development – Sustainable development has been defined as that which “meets the needs of the present in a responsible manner without compromising the ability of current and future generations to meet their own needs” (United Nations General Assembly (1987) [*Report of the World Commission on Environment and Development: Our Common Future*](#)). Most experts agree there are three intertwined elements to the sustainability concept: *Community (or Social Equity)*, *Economy and Environment*. To achieve a truly sustainable society, all three principles are included, with any competing interests among them being reconciled. Furthermore, our evolving world requires periodic monitoring, adaptation, and likewise modifications of these elements to maintain sustainability.

Tax Increment Financing (TIF) – Defined by the American Planning Association (APA), the Tax Increment Financing is one of the most popular economic development tools for cash-strapped municipalities widely used within the city and in the surrounding region. TIF districts harness future property tax revenues to pay for current expenditures, enabling the municipal planning function at a time when other resources have dried up.

Total Maximum Daily Loads (TMDL’s) – A regulatory term that describes the maximum amount of pollutant a body of water can receive while still meeting water quality standards.

Transit Oriented Development (TOD) – Defined by the U.S. Department of Housing and Urban Development (HUD), Transit Oriented Development is compact, mixed-use development near transit facilities that promotes sustainable communities by providing people of all ages and incomes with improved access to transportation and housing choices, and reduced transportation costs that lessen the negative impacts of automobile travel on the environment and the economy.

Tree-Mendous Maryland Program – An environmental gift to have native trees planted in

honor or memory of family and friends, to celebrate holidays, birthdays, and to observe other special occasions. Your gift of trees is actually three gifts - one to someone you care for, one to future generations, and one to the environment. TREE-MENDOUS MARYLAND will arrange for the trees to be planted in Maryland in the county in which the recipient of the certificate lives.

Urban Design Assistance Team (UDAT) – A team of design and planning professionals that works with communities on a focused vision for their community. Issues including open space, community identity, connectivity, and architectural standards are addressed from a design perspective in a workshop setting.

Vehicles Miles Traveled (VMT) – The total miles traveled on roads and highways by motor vehicles within a given time period and geographic area.

Watersheds (Major) – The watershed data set contains areas of land that contribute runoff and groundwater into a specific stream system. This data set shows the Baltimore County portion of the State-defined Maryland "8-digit" watersheds. There are 14 major watersheds in Baltimore County. The data was interpreted from Baltimore County's 1954 topographic maps and was delineated at a 1:2400 scale.

Watersheds (Sub) – The sub-watershed data set contains areas of land that contribute runoff and groundwater to a specific stream. A collection of sub-watersheds makes up a watershed. This data set shows the named streams in Baltimore County. There are 191 sub-watersheds in Baltimore County. The data was interpreted from Baltimore County's 1954 topographic maps and was delineated at a 1:2400 scale.

Workforce Housing – The housing that is provided for the needs of people employed in jobs that the general population of the community relies upon to make the community economically viable. All workforce housing units are offered for sale or rent at an attainable housing cost to income-qualified households, with incomes between certain percentages

of the area household medium income (AHMI). The percentage varies depending on a jurisdiction's housing and community development policies.

APPENDIX A

WATER RESOURCES ELEMENT
EXECUTIVE SUMMARY

Developed in response to House Bill 1141, entitled *Land Use – Local Government Planning*, this Water Resources Element (WRE) will assist in protection and restoration of all water resources, including the Chesapeake Bay. The WRE is a thorough examination of all water resources in Baltimore County, Maryland. It includes public and private drinking water supplies, public and private wastewater disposal systems, and stormwater runoff from existing and proposed land uses. The intent of the analysis is to ensure safe and adequate supplies of drinking water, adequate facilities for wastewater disposal, protection of high quality natural resources, and a reduction *and cap* of pollutant loadings from point and non-point sources. Incorporated into the County’s land use plan - *Master Plan 2020*, the WRE will help guide the policies and actions to be implemented over the next decade and beyond.

Growth

The population growth rate in Baltimore County is projected to slow, however, there still is an anticipated increase in the number of residents. Planning is crucial for any growth: it must be managed to protect natural resources, and assist in the restoration of degraded water bodies. Furthermore, responsible growth must be *sustainable*: the County must meet present and future needs, while preserving the environment and resources for future generations.

Drinking Water and Wastewater Disposal

Drinking water and wastewater disposal are either public or private systems. The public Baltimore Metropolitan Water Supply serves properties located “inside” the “Urban Rural Demarcation Line” (URDL), closest to Baltimore City. In a few growth-restricted areas, water and sewer is supplied due to public health issues related directly to preserving the quality of the Chesapeake Bay. The water system is supplied by 3 reservoirs located in Baltimore County,

supplemented by the Susquehanna River. The public system providing wastewater treatment includes two large facilities and one smaller facility. Outside the URDL, there are private single homes, business well and septic systems, and multiple privately owned institutional, community and multi-use wastewater treatment facilities. For the most part in the rural areas, private water wells and on-site sewage disposal systems are utilized. These public and private water supplies were examined to ensure they continue to be properly protected, and have an adequate supply to serve future populations. Pollutants discharged from all wastewater treatment facilities: public, private, community and individual systems, were analyzed to affirm they do not exceed permitted levels, accounting for the anticipated increase in the number of users.

Stormwater Runoff

The major contributor to pollution of our water bodies is how land is developed and used. Decreasing the impervious surfaces from parking lots, driveways, houses and buildings will result in lower volumes of water runoff, less erosion of stream banks, and reduced nutrient-laden sediments and other contaminants. Encouraging the agricultural industry to use best management practices and appropriate use of chemicals on crops will also help protect our natural water resources. There is also considerable pollution from urban and suburban lawns. Homeowners and home lawn care companies should be educated about the proper application and use of fertilizers and pesticides. This Water Resources Element examines existing conditions of land uses, and determines current pollutant loadings. Based on projected population figures, and various proposed land use scenarios, future loadings are also calculated.

A Sustainable Plan

To meet the Total Maximum Daily Loads (TMDLs) required by state and federal regulations, the best

future land use plan was selected from six (6) scenarios analyzed. As discussed in Chapter 5 of the WRE, it is demonstrated the future growth pattern allowing for the lowest pollutant loadings is a mix of high density mixed-use, revitalization of older neighborhoods with single-family homes and townhouses, including conversion of existing development to parks. Policies and actions to enable implementation of this land use pattern, preserving and protecting our high quality waters and resources in our rural areas, are proposed in the Water Resources Element. These policies and actions are further strengthened and enhanced throughout *Master Plan 2020*. The plan is based on a *sustainability framework* that will allow for appropriate development *and* redevelopment, while ensuring a brighter future for our citizens, and a cleaner, healthier natural environment. Baltimore County is strongly committed to improving the health of our local water bodies and the Chesapeake Bay.

APPENDIX B

ADOPTED COMMUNITY PLANS

	Adoption
Master Plan 1989-2000	02/05/90
Hereford Community Plan	05/06/91
Woodlawn/Liberty Community Plan	05/17/91
Pikesville, Maryland Revitalization Plan	10/07/91
Catonsville Plan	10/07/91
Liberty Road Revitalization Area 1990 Action Plan Update	10/07/91
Essex CBD Revitalization Strategy	12/16/91
Philadelphia Road Corridor Study	01/21/92
Towson Community Plan	02/03/92
Loch Raven Village Community Conservation Plan	04/06/92
Patapsco Park and Open Space Concept Plan	04/20/92
Hanover Pike Corridor Study	04/19/93
Woodlawn/Liberty Community Plan	05/17/93
Honeygo Plan	07/05/94
Owings Mills Park and Open Space Concept Plan	05/15/95
Lutherville Community Conservation Plan	02/20/96
Greater Kingsville Area Community Plan	07/01/96
Essex-Middle River Community Conservation Plan	07/01/96
Eastern Baltimore County Revitalization Strategy	07/01/96
Honeygo Overlay Design Standards	03/17/97
Southwest Baltimore County Revitalization Strategy	12/15/97
Ralston Community Plan	10/05/98
Southeast Towson Community Plan	10/19/98
Hunt Valley/Timonium Master Plan	10/19/98
Patapsco/Granite Area Community Plan	12/21/98
Windlass Run/Bird River Road Area Community Plan	01/04/99
Sudbrook Park Community Plan	04/05/99
Greater Dundalk Edgemere Community Plan	03/20/00
Jacksonville Community Plan	07/03/00
Greenspring/East Pikesville Community Action Plan	08/07/00
Bowleys Quarters Community Action Plan 2000	02/20/01
South Perry Hall-White Marsh Area Plan	05/07/01
Riverdale Portion of the Middle River-Bird River Area Plan	07/02/01
Middle River-Bird River Area Plan	01/22/02
Wells-McComas Community Conservation Plan	03/18/02
Lochearn-Forest Garden-Haywood Heights Community Action Plan	05/06/02
Kenilworth Drive Corridor Plan	05/06/02
West Timonium Heights Commercial Corridor	05/20/02
Ruxton-Riderwood-Lake Roland Area Community Plan	08/05/02
Middle River Employment Center Area Plan Part One	09/03/02
Pikesville Revitalization Plan Update 2003	10/07/03
Turner Station Community Conservation Plan	12/15/03

East Joppa Road Community Corridor Plan	05/03/04
Towson Manor Village Enhancement Study	11/06/06
Eastern Baltimore County Pedestrian and Bicycle Access Plan	11/06/06
Liberty West Community Plan	12/18/06
Middle River Community Plan	09/04/07
Overlea Fullerton Community Plan	12/07/09
Lower Back River Neck Community Action Plan	05/03/10
Greater Hillendale Community Plan	05/03/10
Rosewood Institutional Educational Center	05/27/10
Carney-Cub Hill-Parkville Area Community Plan	05/03/10

Other Adopted Plans and Studies

Land Preservation, Parks and Recreation Plan	07/03/06
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APPENDIX C

MAP DATA SOURCES

Water Resources Element

11/15/10

Source: Baltimore County Department of Economic Development

Scale: 1:2400

Published: 2010

Commercial Revitalization Districts

Source: Baltimore County Department of Environmental Protection and Resource Management

Scale: 1:2400

Published: 2010

Bacteria Impairments

Biological Community Impairments

Conservation Easements

Nutrient Impairments

Rural Legacy Areas

Sediment Impairments

Tier II Streams

Tier II Watersheds

Trout Distribution

Watersheds and Tidal Segments

Source: Baltimore County Department of Public Works

Scale: 1:2400

Published: 2010

Metropolitan District

Sewage Treatment Facilities

Water Treatment Facilities

Source: Baltimore County Department of Recreation and Parks

Scale: 1:2400

Published: 2010

Greenways

Recreation and Park Sites

Source: Baltimore County Office of Planning

Scale: 1:2400

Published: 2010

Community Enhancement Areas

Growth Area – Sub Areas

Historic Districts

Historic Landmarks

Land Management Areas

Land Use
Priority Funding Areas
Proposed Land Use
Scenic Gateways
Scenic Routes
Scenic View
Transportation Projects
Transportation Studies
URDL
Zoning

Source: Baltimore County Office of Information Technology

Scale: 1:2400

Published: 2010

Baltimore County Outline
Facilities (Fire Stations, Health Centers, Libraries, Police Stations, Public Schools, Senior Centers)
Fire Station Service Areas
Major Roads
Police Precincts
Rail
Rail Stations

Published from 2005 Ground Conditions:

Waterways
Stream Buffers

Source: Baltimore Metropolitan Council with use of the 1990 and 2000 Decennial Census, Journey-to-Work Database.

Commuter Patterns

Source: The Faux Group, Inc

Scale: 1:2400

Published: 2010

Route 40 Proposed Plan

Source: Maryland Transit Administration

Published: 2002

Regional Rail System Plan Map

Source: TND Planning Group

Towson Conceptual Master Plan
Towson Focus Areas

Source: University of Vermont Spatial Analyst Lab and US Forest Service

Ground Condition Date: 2007

Urban Tree Canopy Land Cover

APPENDIX D

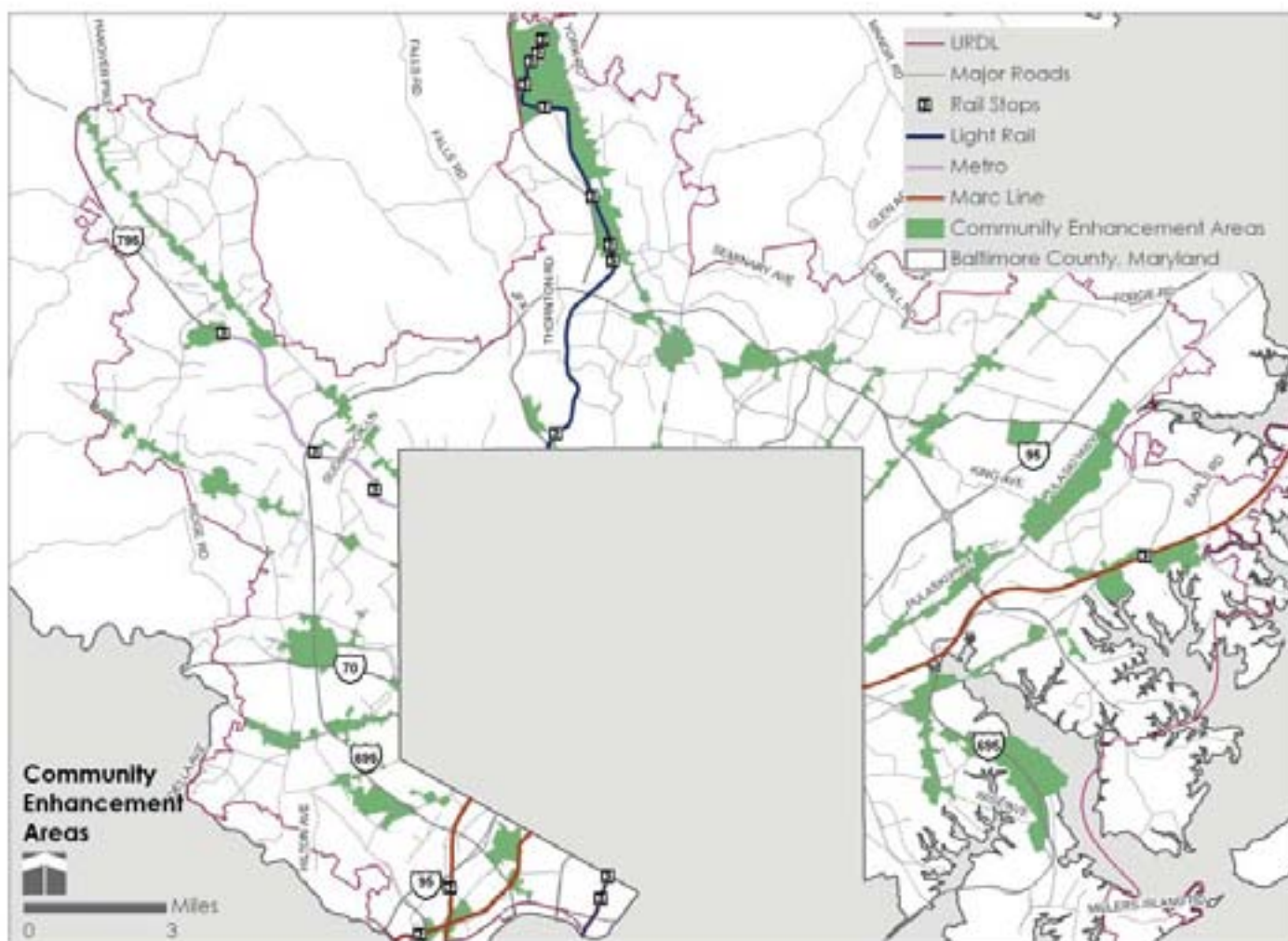
SUSTAINABLE REDEVELOPMENT STUDIES FOR
COMMUNITY ENHANCEMENT AREAS

Community Enhancement Areas (CEAs) are areas suitable for sustainable redevelopments that are compact, mixed-use, and walkable (Map 6). An area with mixed-use buildings containing retail and/or office use on the lower floors and residential units above attracts new investment, provides a vibrant atmosphere, and offers diversity of housing. Environmental Site Design and conversion of existing impervious surfaces to green spaces such as parks, greenways and public squares enhances the social and cultural life of the neighborhood and improves quality of stormwater runoff. These compact, mixed-use walkable communities have excellent, sustainable design, using the latest technologies in energy savings and environmental protection, and will focus on walkability and pedestrian access.

SITE SELECTION

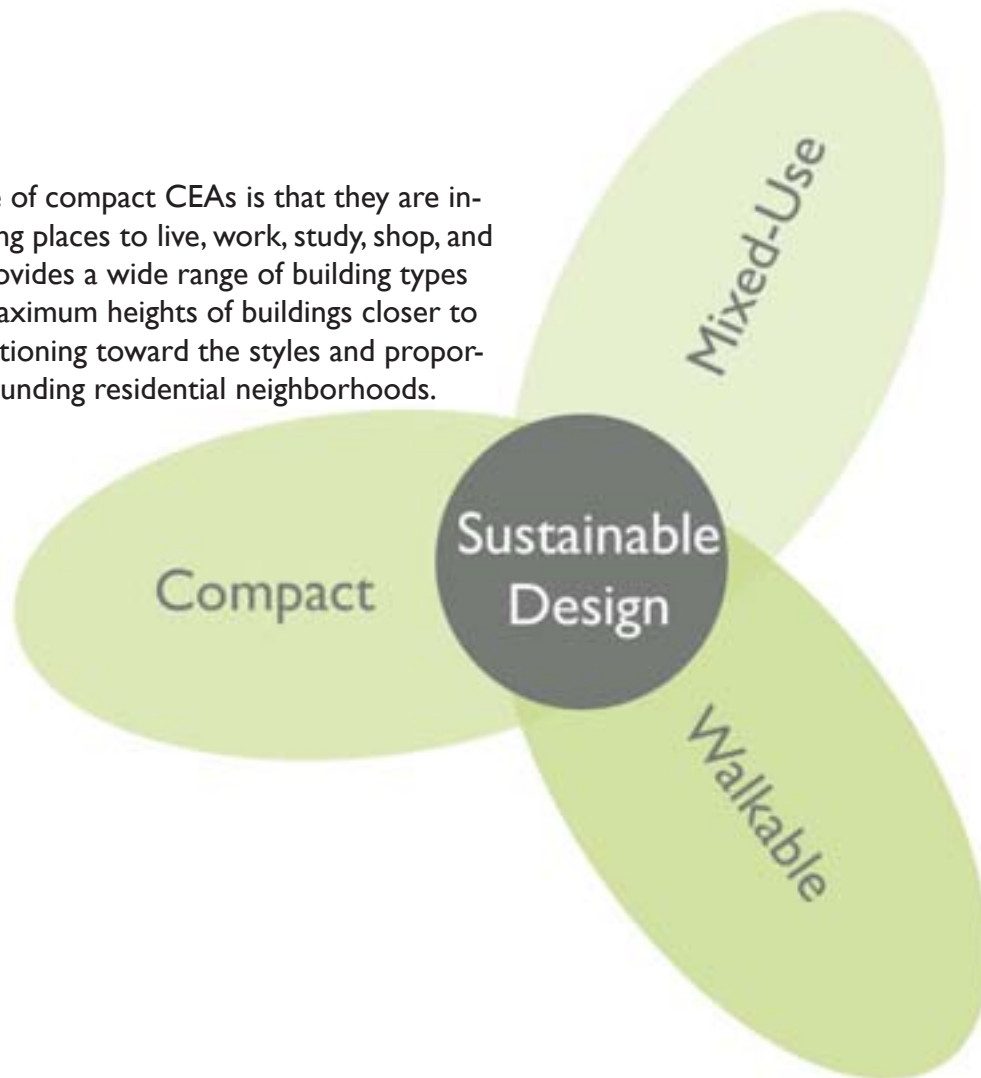
The ideal locations for CEAs are sites that exist within, or can extend traditional town centers. Other viable alternatives include underused or undervalued areas. Various sites in the County have been identified for redevelopment as sustainable communities. Criteria used to determine potential CEAs include the following: strong local support, good multi-modal access (especially near existing or proposed transit systems), potential for walkable and sustainable design, ability to complement adjacent land uses, existing adequate public services and facilities, and limited environmental constraints.

Although the areas identified may be suitable for redevelopment, the designation does not mean that CEAs will necessarily be established on these sites, and in these areas, development will occur in accordance with the current zoning. Furthermore, other tracts outside of these CEAs are still eligible for redevelopment opportunities. The design of a particular redevelopment proposal is very site-specific: that is, what may work on one parcel, or in a certain area, might be totally inappropriate for another site, or a different area in the County.



Mixed-use in a CEA refers to an area that contains a variety of different uses. Offices, retail, and other types of commercial businesses are combined with residences, institutional and government uses, and civic spaces in the same building and/or development complex. Plazas, squares, greens and playgrounds, are also merged in the project, with important functional interrelationships integrated by attractive and coherent physical design.

One major advantage of compact CEAs is that they are increasingly self-sustaining places to live, work, study, shop, and recreate. Design provides a wide range of building types and sizes, with the maximum heights of buildings closer to the main roads, transitioning toward the styles and proportions of the surrounding residential neighborhoods.

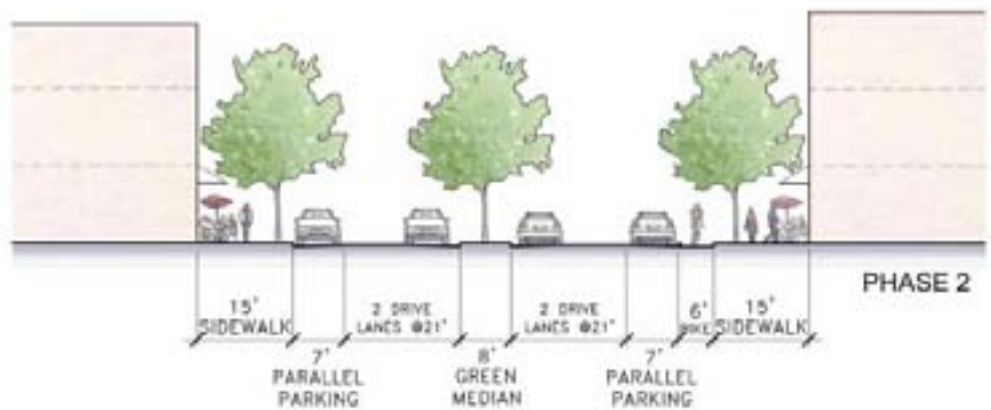
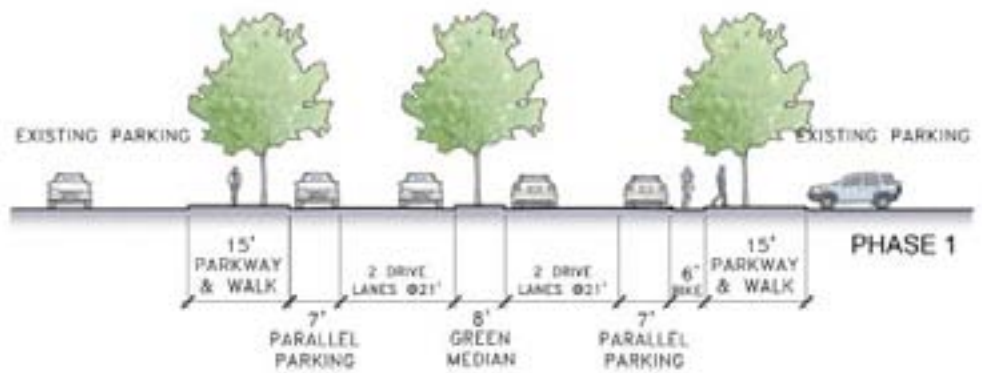
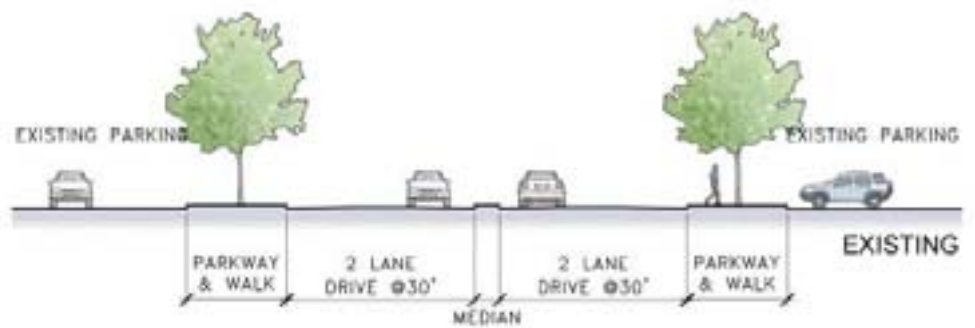


Redevelopment with more compact communities, increased road connectivity including shorter blocks and larger sidewalks, will allow residents to walk to work, school, shopping and other destinations. Walkable connections to the existing nearby communities help create a healthier, more vibrant, pedestrian-friendly place to live. It must be easy and inviting for residents to walk to their destinations.

EASTERN BOULEVARD



- T3.3 = 2-3 STORIES
- T2.0 = 1-2 STORIES
- SPECIAL DISTRICT



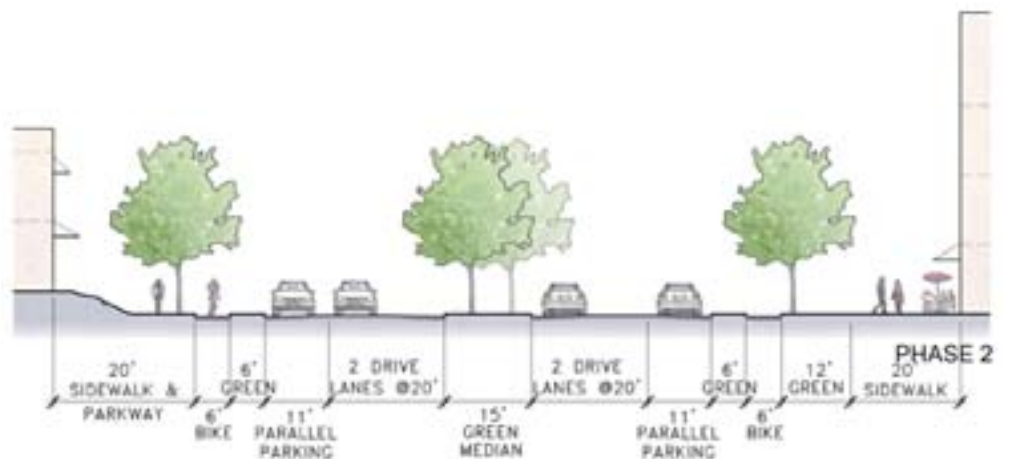
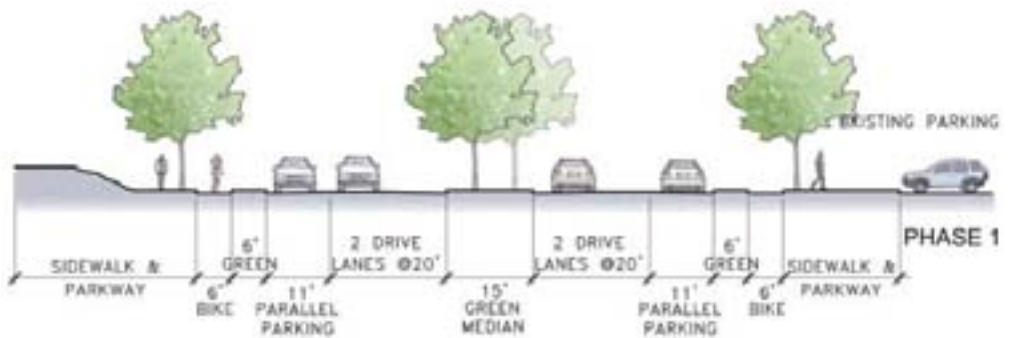
EASTERN BOULEVARD



MERRITT BOULEVARD



- T4.0 = 4-6 STORIES
- T3.3 = 2-3 STORIES
- T2.0 = 1-2 STORIES
- SPECIAL DISTRICT



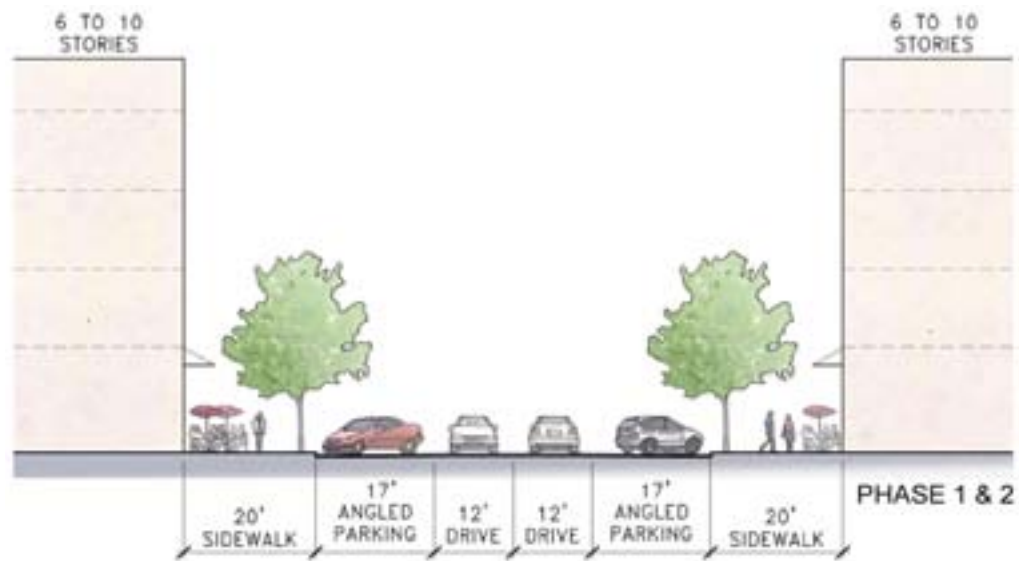
MERRITT BOULEVARD



SECURITY MALL



- T6.0 = 10+ STORIES
- T5.0 = 6-10 STORIES
- T4.0 = 4-6 STORIES



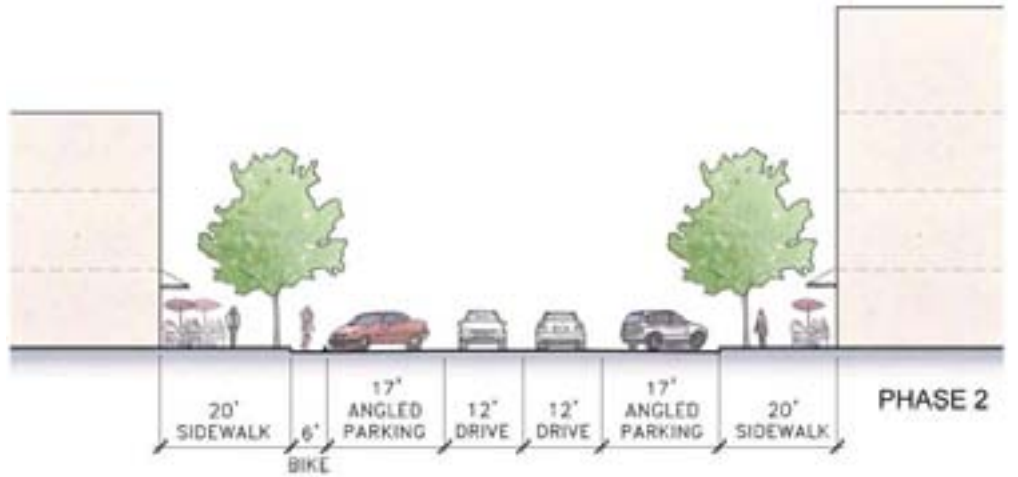
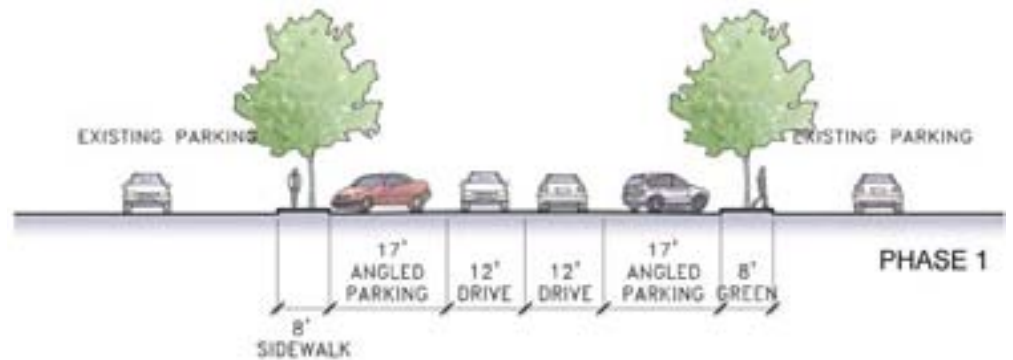
SECURITY MALL



RIDGELY SHOPPING CENTER



- T4.0 = 4-6 STORIES
- T3.4 = 3-4 STORIES
- T3.3 = 2-3 STORIES
- T2.0 = 1-2 STORIES
- SPECIAL DISTRICT



RIDGELY SHOPPING CENTER





Honorable James T. Smith, Jr.
Baltimore County Executive

Baltimore County Office of Planning
Arnold F. "Pat" Keller, III, AICP, Director
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