

Plan Maryland

A Sustainable Growth Plan for the 21st Century



Maryland Department of Planning



Smart, Green & Growing

PlanMaryland

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PlanMaryland

A sustainable growth plan for the 21st Century

This report was written and graphically designed by staff of the Maryland Department of Planning

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PlanMaryland

A Sustainable Growth Plan for the 21st Century

December 2011



Letter from the Secretary

Maryland needs a state growth strategy. Current trends are not sustainable, not cost-effective and imperil what makes our state strong. This plan is a framework for a collaborative process between the State and local governments, the development and environmental communities, the Sustainable Growth Commission and other stakeholders to address critical issues of environmental and fiscal sustainability.

PlanMaryland in no way seeks to overtake local comprehensive planning or zoning. The state long ago delegated zoning and planning authority to local jurisdictions; any such change could only be made by the General Assembly. But State government has never relinquished the responsibility to ensure a healthy environment and safe and clean water. PlanMaryland would provide a better focus for us to carry out that mission. While Maryland has incorporated smart growth efforts across its State agencies for many years, it never has had a game plan to link these programs.

More than 3,000 people discussed the concept and draft plans at meetings throughout the state. Thousands more followed the process at Plan.Maryland.gov and through social media. Hundreds of Marylanders provided valuable input during the six months of public comment period on earlier drafts. Their suggestions have resulted in a plan that's more concise with more measurable benchmarks and greater opportunity for local government input at the outset.

We respectfully submit the following executive policy plan to Governor O'Malley.

Richard Eberhart Hall, AICP
Secretary of Planning
Maryland Department of Planning



Letter from the Governor

Some challenges are so large we can only hope to tackle them together. Creating jobs and expanding opportunity is one of those challenges. Building a sustainable, long-term future for our State is another.

Over the last 40 years, our consumption of land has grown at three times the rate of our population growth. While it took three centuries to develop the first 650,000 acres in Maryland, it has only taken about 40 years to develop the next million acres of land. Since 1950, we've lost 873,000 acres of farmland – that's more than twice the area of Baltimore County – and we're projected to lose another 226,000 acres by 2035 if current trends continue. That is not sustainable.

PlanMaryland is our first strategic plan for long-term sustainability. It's a road map to better help us accommodate the 1 million additional residents Maryland is projected to have by 2035, while at the same time better protecting the Chesapeake Bay and saving more than 300,000 acres of farmland and forest. The plan will help us target our infrastructure investments so we can save an estimated \$1.5 billion a year during the next 20 years. And it will help us spur economic development, revitalization and job creation in our cities, towns and communities, which already have the public investment in facilities to support growth. Marylanders from all across the state have participated in shaping this plan and we'll need local governments to help make this work and fine tune it.

Growing smarter will help redirect us toward a more sustainable way forward. It will allow us to rebalance our relationship with nature, to reconnect our communities and reconnect with one another. We have the ability to change the future. Building a stronger future for our kids and our grandkids so they have the opportunity to enjoy the same quality of life that we've had is what this plan is about.

A handwritten signature in green ink that reads "Martin O'Malley". The signature is fluid and cursive, with a large initial "M" and "O".

Martin O'Malley, Governor

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What's This Plan About?

Experts from science, government, business, agriculture and the humanities came together in Baltimore in 1983 for a “Futures Conference.” It marked the 50th anniversary of the former Maryland State Planning Commission, the first such public planning body in the country. These very smart people were asked their predictions for the next 50 years.

We're a little more than halfway through those 50 years now. Some of their predictions were prophetic: a move to an information-based economy, concerns about upward mobility for the working class, the impact of manufacturing loss on Baltimore City, Western Maryland and the Eastern Shore. Other predictions, such as that an aging population would minimize rock music, were less on target. But even from that not-too-distant vantage, the forecasts of change in population, migration, racial and ethnic diversity, agribusiness and environmental impact were all easily outstripped. We're already 500,000 residents beyond their projection for 2033. We need to prepare Maryland to accommodate 1 million more people, and 600,000 more jobs projected during the next 20 years. We fail to plan for the remainder of those “next 50 years” and beyond not only at our peril, but at the peril of our children and their children.

PlanMaryland embodies these core principles: that government should consider the long-term consequences of its decisions; that the public approach to fiscal, environmental and energy policy should be sustainable; that today's leaders should not merely defer addressing difficult problems for the next generation; that State agencies and local governments should work together to accomplish common goals and objectives for growth, development and preservation.

PlanMaryland stems from everything that has come before it in state law and in the state's long and notable history of land and water-resource planning. It is rooted in more than 50 years of state planning law, and follows the direction affirmed by the Maryland General Assembly in recent years.

What PlanMaryland Is

It's a plan to:

Improve the way in which state agencies and local governments work together to accomplish common goals and objectives for growth, development and preservation.

Stimulate economic development and revitalization in towns, cities and other existing communities that have facilities to support growth.

Help accommodate a projected 1 million additional residents, 500,000 new households and 600,000 new jobs by the year 2035 without sacrificing our agricultural and natural resources.

Improve our existing and planned communities without sacrificing our agricultural and natural resources.

Save Maryland an estimated \$1.5 billion a year in infrastructure costs during the next 20 years through a smart-growth approach to land use.

Save 300,000 acres of farmland and forest over the next 25 years.



The road to PlanMaryland begins as far back as 1959, when the legislature created the Maryland Department of Planning and directed it to “prepare plans for the development of the State ... which shall be known as the State Development Plan.”¹ The Land Use Act of 1974 affirmed the Planning Department’s role in the plan and the process for it.² More recently, the State Development Plan in concept was invoked by the General Assembly in passing several major pieces of planning legislation. The laws that created the Task Force on the Future for Growth and Development in 2007 and the Sustainable Growth Commission in 2010 specifically directed those groups to help MDP complete a state plan. The 12 “State Planning Visions” that the legislature established in the Smart, Green & Growing Planning legislation of 2009 laid out the objectives that are the basis for the plan, such as furthering growth in existing population areas; encouraging community design that emphasizes mixed use and transit-oriented development.³ The law required local jurisdictions to reflect those “Visions” in their own comprehensive local planning, and required local zoning to align with local plans.

PlanMaryland is a framework to carry out the legislature’s “Visions.” At the outset, guidelines will be created for local governments to work with the Department of Planning in identifying “planning areas” for growth and preservation. State agencies will develop “implementation strategies” to better align their programs and policies to support the goals for those planning areas. The result is that collectively we’ll be working to stop undercutting the enormous public investment already being made in water and air quality protection, community reinvestment, energy conservation and greenhouse gas reduction.

Concern for the impact of development on the state’s quality of life and environment preceded even the 1959 law. In 1938, the Maryland Planning Commission, one of the first such bodies in the nation, expressed concerns about “miserable ‘string-town’ trends that are the result of lack of control. ... Up to 1900, we find a solid, slow growth within city limits, then a veritable explosion of population as the automobile brought decentralization and the urge to move to the country. Only the ‘country’ in this case has been a sad disillusionment for many.” That was written in 1938 by the group as chaired by Abel Wolman, a brilliant engineer and inventor known as the father

What PlanMaryland Is Not

It's not a:

Substitute for local comprehensive plans nor will it take away local planning and zoning authority.

Top-down approach to force compliance with a statewide land-use plan.

Silver bullet that will solve all of our problems, but it is a strategic plan to address issues such as community disinvestment, sprawl development and inefficient use of existing resources.

"One size fits all" approach. PlanMaryland recognizes that different areas of the state have different characteristics, problems, issues and opportunities.

Mandate to spend more. On the contrary, if PlanMaryland helps local governments implement their existing comprehensive plans, it will save money by avoiding expenditures for unnecessary infrastructure and other costs.

Conclusion. It's the beginning of a collaborative process between the State and local governments to address critical issues of environmental and fiscal sustainability.



of modern sanitary engineering. In the decades that followed, Maryland has had many nationally recognized smart growth successes at the State and local levels, from gains in bay restoration to agricultural preservation to neighborhood revitalization. But despite the foresight demonstrated by Wolman and many others since, symptoms of the problem of sprawling land use have continued.

The vigorous dialogue that PlanMaryland has raised is nothing new. The debate over the roles of state and local government, of government and the private sector, of urban and rural, in striking a balance for sustainable land use has been an energetic one for many decades now, and the stakes for Maryland have always been high. We must do a better job of protecting environmentally sensitive areas, such as wetlands, forests and productive farmland that have become fragmented and compromised by decades of sprawl. We want to promote growth in cities and towns where people can live, work, shop and play and be less car-dependent to do those things.

PlanMaryland is not a substitute for local comprehensive plans; it seeks to work with them. It will not remove local planning and zoning authority. It is a policy plan that works within existing statutory authority and does not create new laws or regulations. PlanMaryland does not supplant existing laws and regulations that State agencies must follow. Through the implementation of PlanMaryland, if State agencies identify the need to amend laws or regulations to more effectively achieve the desired public outcomes, those laws and regulations will be subject to the legislative process under the General Assembly. The Plan serves as a management and planning tool to improve the efficient use of State resources and better coordinate those resources with local government resources and decision-making.

There's a growing recognition of the need to take agencies out of their "silos" to focus on a common goal of making existing communities stronger, healthier, cleaner and safer. Goals for planning, development, conservation and sustainable quality of life are interdependent, not the work of several agencies occasionally coordinating. To the extent possible, State agencies will

PlanMaryland is about helping us achieve benchmarks that have already been developed with state and local input. They have been identified as vital to the State's future fiscal and environmental well-being. The integrated approach of PlanMaryland will aid our pursuit of them:

- **Achieve 90 percent new dwelling units in Priority Funding Areas between 2010 and 2030.**
- **Restore the health of the Chesapeake Bay by 2025.**
- **Double transit ridership by 2020.**
- **Reduce Maryland's greenhouse gas emissions by 25 percent by 2020.**



evaluate their programs to better align with “smart growth” goals. We have scores of such programs across various agencies now, but we’ve never had one playbook that aligns them in a larger strategy.

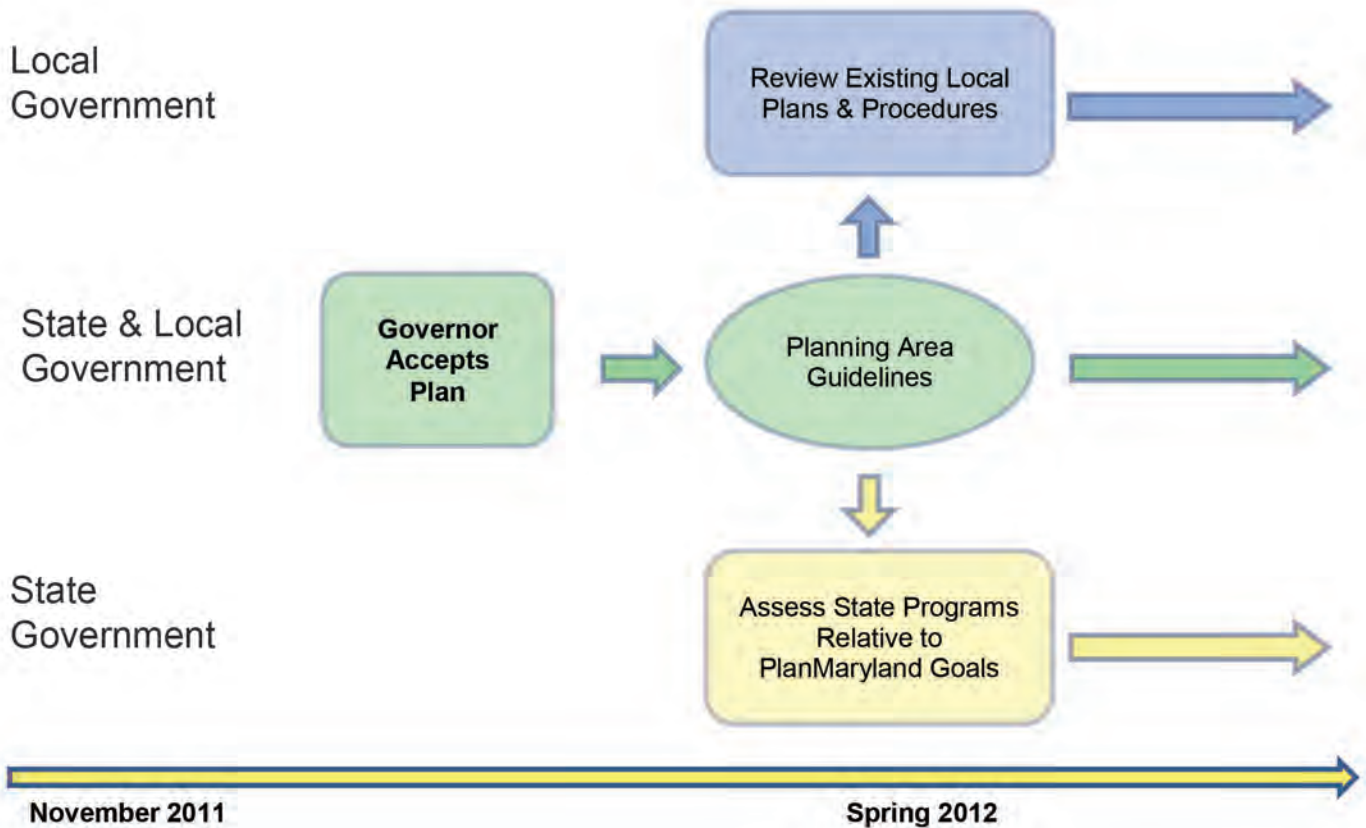
PlanMaryland seeks to make more efficient use of investment the public has already made in existing communities. PlanMaryland aims to improve a process of stimulating economic development and revitalization in towns, cities and other existing communities that have facilities to support growth. Impediments to creating desirable, compact development centers are directly related to the challenge to protect our resource lands: failure to do one has made it that much harder to do the other. This contributes to the deterioration of older communities and the escalation of public costs.

The plan is about achieving best practices in smart growth, protecting our environment, enhancing our communities and achieving the vision set forth by the legislature. It is about long-term prosperity for Maryland. We must make it easier for the development community to do the “right thing,” which will strengthen us economically and environmentally in the long run. A plan that produces better alternatives will provide more choices and less impact. PlanMaryland provides a different choice – and a way to a better future for Maryland.

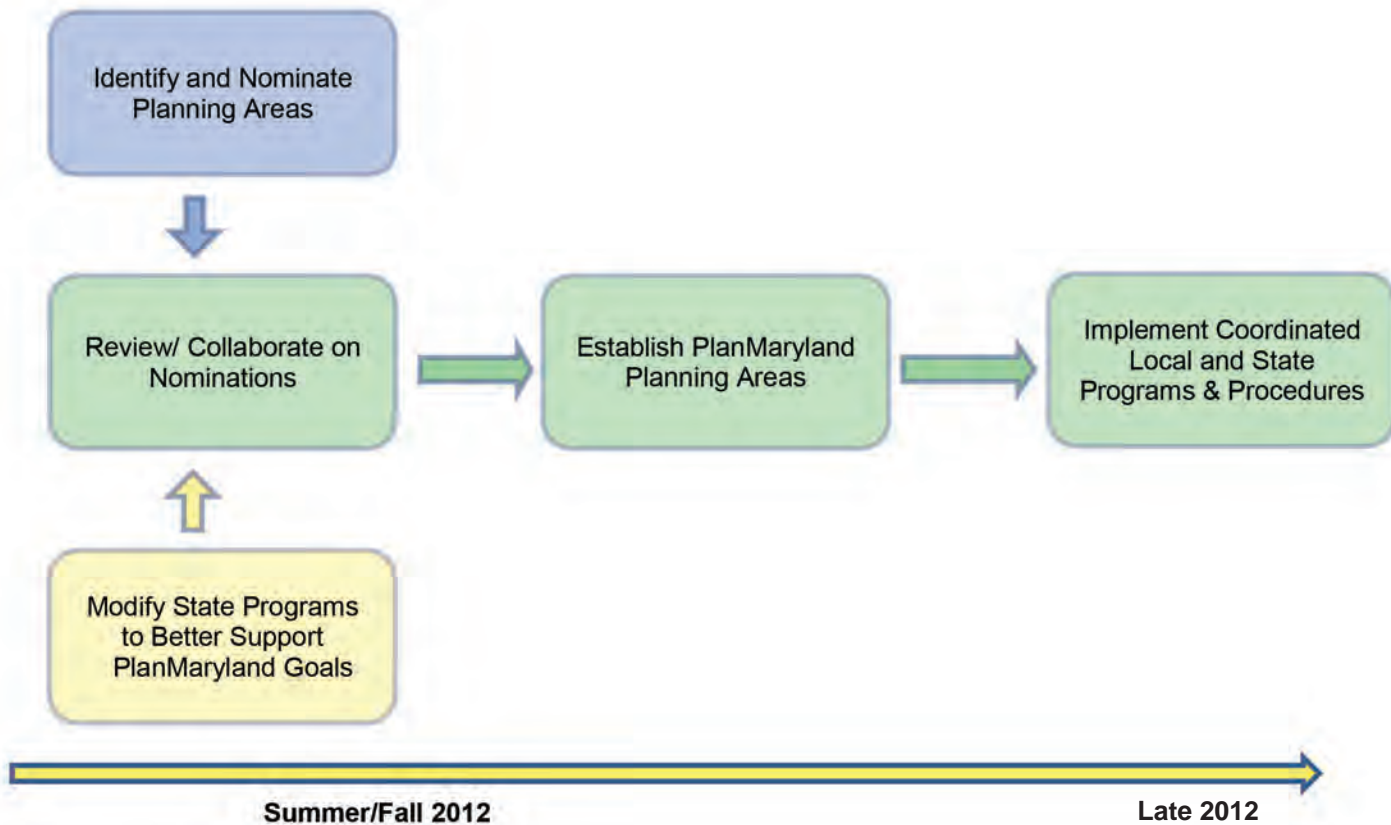
How Does PlanMaryland Work? After the Governor Accepts the Plan:

1. Draft Planning Area Guidelines will be distributed to all Counties and Municipalities for review and comment. The draft guidelines will describe the objectives for the planning areas. There will be a 120-day period to comment on the guidelines. MDP and other State staff will be available to explain the guidelines.
2. State agencies will review their own programs, with the aim of determining changes that could better achieve the Plan goals and objectives.
3. At the same time, Municipalities and Counties will review their existing comprehensive plans and regulations to see where and how they match up with the Planning Area Guidelines.

PlanMaryland Process & Responsibilities



4. Municipalities and Counties will identify their own Planning Areas and provide mapping of these areas to MDP for review; MDP will coordinate the review of local mapping and provide comments and feedback.
5. Planning Areas will be established through this local/state review and collaboration process.
6. Existing State programs, policies and resources will be directed, and local efforts are encouraged to be directed as appropriate, to these Planning Areas to better achieve the goals for growth and preservation.





2

Trends and Land-Use Implications

Increasingly, a series of large scale forces—continued population increases, rising energy costs, global climate change, the degradation of the Chesapeake Bay, an aging population, the globalization of the economy—have brought the increasingly dispersed development patterns of the last 60 years into sharper focus: Are they in the best interests of Maryland and its future residents?

The conditions and trends described on the following pages examine these patterns, and suggest some opportunities for the State and local governments to refocus resources and efforts to achieve desirable economic, social, and environmental outcomes.

Land-Use Trends

Many people view development by the individual projects happening around them. It is useful to view development on a statewide basis to see what the trends are and how they are affecting more than individual neighborhoods. Good information is important for good policy and too often a full picture of development trends is lacking.

Past Trends: Over the past 40 years, development in Maryland has trended towards larger lot sizes and spread out from core metropolitan and municipal areas at a rate that has outpaced growth in both population and housing units (See Figure 2-1).

More than 1.7 million acres of land has been developed, or 27 percent of the 6.2 million acres of land in the State. More than 60 percent of the developed land – roughly 1 million acres – was developed since 1973. In other words, it took three centuries to develop the first 650,000 acres of land in Maryland and 40 years to develop the next million.

As of 2010, 900,000 acres, or more than half of the 1.7 million acres of developed land in Maryland, consisted of low or very-low density development. (That would be defined as one-half acre to 20-acre lots per dwelling unit.) One-third of that amount, or more than 300,000 acres, was developed at very low density (5-20 acres), primarily in the form of single-family homes. Eighty-four percent of this type of development is located outside current Priority Funding Areas boundaries. Overall, less than half of all developed land is located inside the current PFA boundaries. That is down from 75 percent in 1973.

Developed Land in Maryland, 1973 and 2010

MDP
Maryland Department of Planning

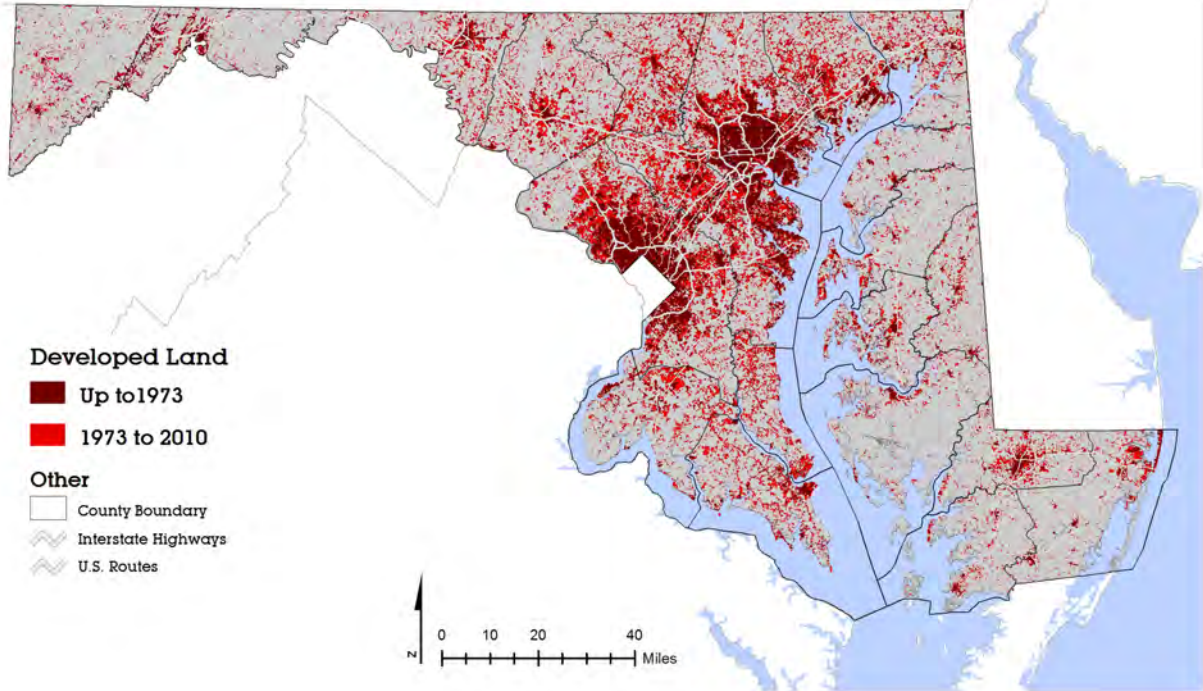


Figure 2-1: Developed Land in Maryland, 1973 and 2010

Source: Land Use/Land Cover Analysis, Maryland Department of Planning, 2011

Maryland has 23 counties and Baltimore City, each of which has its own distinct zoning. In addition, about 120 municipalities in Maryland have zoning responsibility. The Maryland Department of Planning has studied local zoning patterns and created a Generalized Zoning map to display all of the local zoning maps (generalized) at a state scale (See Figure 2-2). The map helps visualize how the various local zoning maps, when combined and expressed in terms of how well they foster development or protect resources, compare to one another. The analysis underscores the disparate public policies across jurisdictional boundaries.

If Trends Continue: By 2035, MDP's analysis estimates that an additional 404,000 acres of land will be developed, and Maryland will lose an additional 226,000 acres of farmland and 176,000 acres of forest. More than 87 percent of these acres will be converted to low or very-low density residential development.

Maryland Generalized Zoning

MDP
Maryland Department of Planning

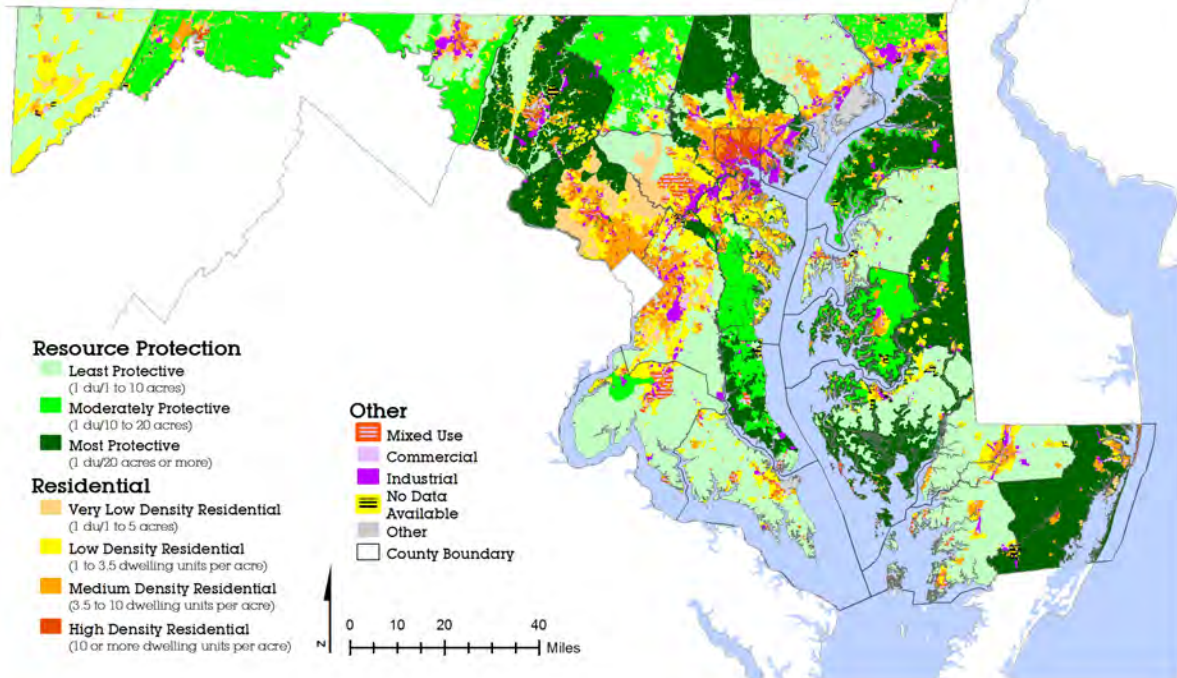


Figure 2-2: Maryland Generalized Zoning

Source: Maryland Department of Planning

Why This Matters: Past development patterns have already compromised land, air, natural and water resources in many parts of Maryland. Policies and strategies that target development, prioritize resource conservation and focus on sustainable quality of life in communities will help balance the competing demands made on the State's valuable but limited resources. Sprawl costs more to provide public services and greater pollution control measures.

Transportation Trends

The 2009 American Community Survey reports that Maryland residents have the second longest average commute time to work in the nation, at 31.3 minutes, 25 percent higher than the national average of 25.1 minutes. Overall, Marylanders spent over 708 million hours commuting in 2009, time valued at almost \$9 billion.¹ While Maryland has a higher percentage of workers traveling to their workplaces using public transit than the national average, this percentage has increased by only 1 percent in 20 years.

Past Trends: In 2010, Marylanders drove more than 56 billion vehicle miles, an average of over 10,000 miles per person. That was 40 percent more than in 1990, a rate that outpaces growth in both population (19 percent) and lane-miles (8 percent) during the same period.² Since 2001, MDOT has instituted programs that have helped to slow the pace of growth in traffic congestion in the State, but growth is still expected to continue (See Figure 2-2).³

If Trends Continue: By 2035, it is projected that total Vehicle Miles Traveled (VMT) will increase from 56 billion to almost 84 billion miles per year.⁴ If commute times increase in the future at the same rate they have increased since 1990, the average commute in Maryland will increase by about 19 percent, to 37.2 minutes by 2035. If commuting patterns continue according to current trends, 84 percent of all workers in Maryland will drive alone to work, while only 10 percent will take public transit. MDP estimates that more than 15,000 new miles of roads would be needed at a cost of \$110 billion to support these trends.

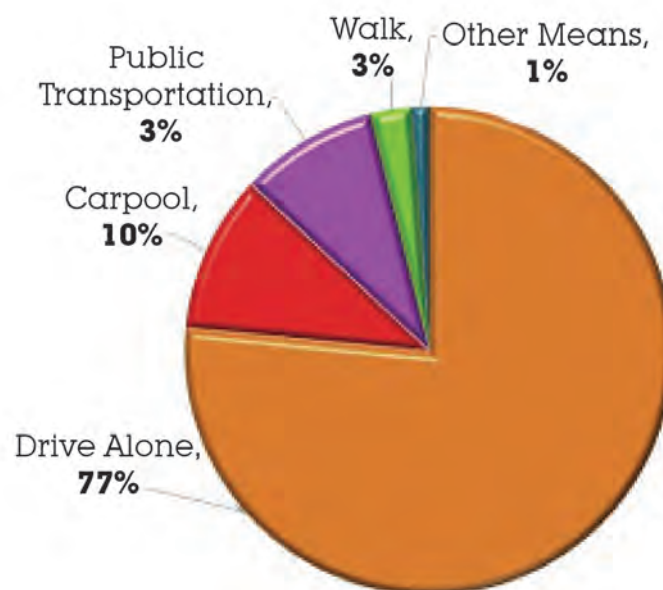


Figure 2-3: Mode of Commute to Work

Source: American Community Survey 2009

Why This Matters: Dispersed growth is harder and more expensive to serve by public transportation. The O'Malley-Brown Administration is moving forward with planning for the Purple Line light rail to connect population and employment centers in the Washington suburbs and for a Red Line on Baltimore's light rail system. But providing transit service to Maryland residents has become increasingly more challenging as population and jobs have become less geographically concentrated. Nearly three quarters of all work trips in Maryland take place by individual automobiles (See Figure 2-3). Though almost 80 percent of the State's population lives within a 10-minute drive of a commuter service such as the Maryland Transit Administration's MARC and commuter bus services, development patterns make it difficult to use transit to access non-work destinations, such as shopping and recreation.

Job growth and economic development are also negatively impacted by further strains on the State's highway and road network, both in the form of more traffic and competing budget demands that hamper investment in rail systems. Freight activity in Maryland is expected to double by 2030. This expected growth will add significant pressures to an already strained and aging rail network in Maryland. Chokepoints in the rail system affect passenger rail operations and limit shippers in choosing to move freight via rail instead of on trucks, as well as constrain multi-modal transportation operations that use Maryland's seaports.

Changes in transportation/land use strategies are necessary to make available more transportation options that support better health, more efficient freight movement, reduce greenhouse gas emissions, cut air pollution, support the creation of more compact communities, and provide Marylanders with desirable options on how they get from place to place. Land use decisions and housing policy programs at the local level need to more effectively consider infrastructure capacity and demand for travel. Leveraging Maryland's existing transportation assets and strategically investing in transportation projects that support land-use goals will provide a financially responsible path toward prosperity and sustainability.

Housing Trends

Since the late 1960s the average single-family home in Maryland has been built on a larger lot, from about one-third of an acre in the 1940s to about two-thirds of an acre today, while the number of people living in each housing unit has decreased. This has translated into more homes that house less people and consume more land. Maryland is forecast to add 491,000 housing units by 2035, and their location and form will have a powerful impact on future land use.

Past Trends: Residential development has generally expanded outward in three waves: first to close-in suburbs bordering Baltimore and Washington, then in the outer ring of suburbs lining the beltways and radial highways, and most recently in far-flung exurbs in portions of Western Maryland, Southern Maryland and the Eastern Shore. A similar pattern has occurred around smaller cities at a smaller scale, such as Salisbury, Hagerstown, Bel Air, LaPlata and Frederick.

In 1950, less than 40 percent of the acreage consumed for single-family houses lay outside PFAs. Since the 1970s, nearly three-quarters of acreage consumed by single-family homes lay outside of current PFA boundaries. The cumulative impact has been an increase in the share of single-family residential acres outside of PFA boundaries from 39 percent in the 1950s to 69 percent by the end of 2009.

If Trends Continue: As long as new housing construction is focused in “greenfield” areas, extensive farmland and forestland will be lost to low-density housing development. The projected loss of 404,000 acres of resource land by 2035 will mostly result from residential development.

Why This Matters: Marylanders have an opportunity to ensure that the 491,000 new households projected during the next 25 years are located in areas and built in forms that support sustainable growth and preserve farm and forestland as much as possible.

Some 47 percent of Marylanders commute from their homes to another jurisdiction to work. That rate is the highest in the nation behind Virginia’s 51 percent. Figure 2-4 illustrates both job-poor and job-rich areas, and shows

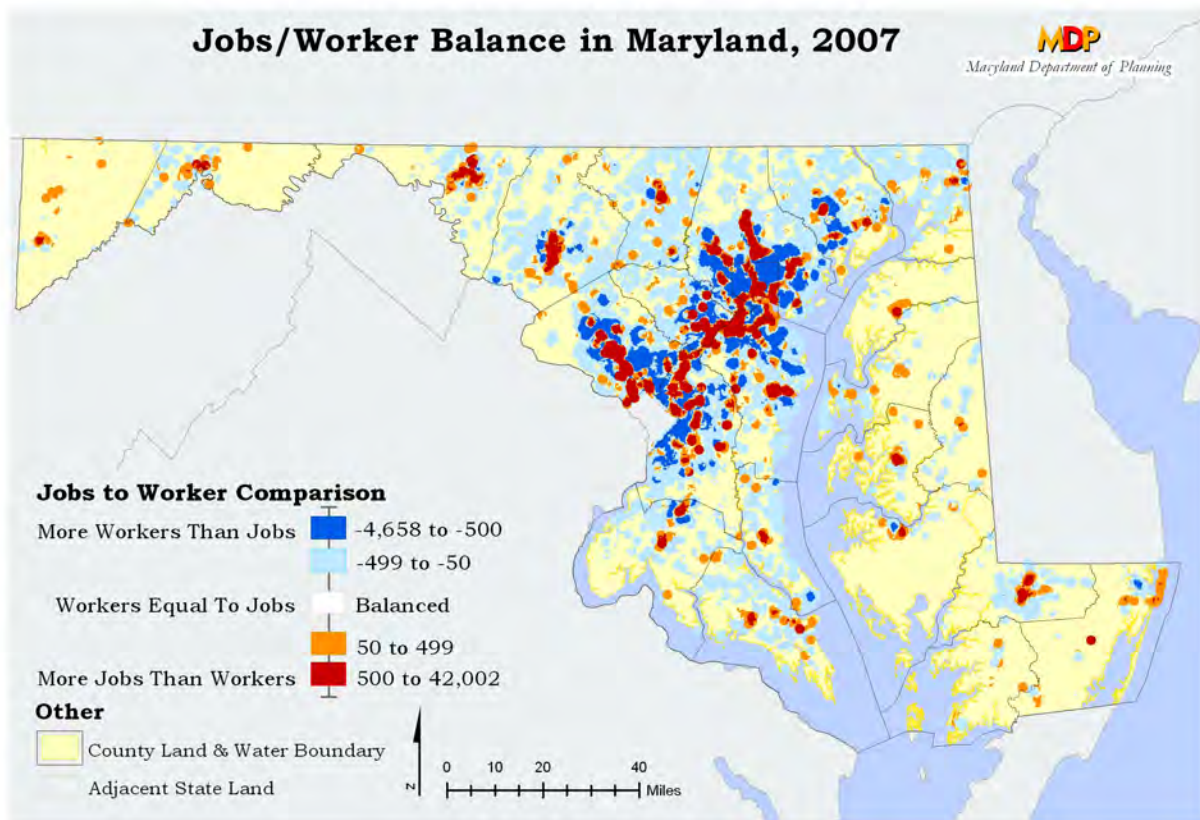


Figure 2-4: Job/Worker Balance in Maryland, 2007

Source: Longitudinal Employer-Household Dynamics Program, U.S. Census Bureau, 2009

that, while there has been migration from urban areas to suburbs, many people continue to work in urban job centers.

A major impact of the desire for larger homes combined with relatively higher housing costs near employment centers is to drive people farther from their jobs in search of housing. This has imbalanced housing and jobs in many places and increased commuting distances and travel times for employees. It has also made it more difficult for highly dispersed residents to access alternate bus, light and heavy rail and commuter rail. A clear priority is more affordable, desirable housing near existing job centers and public transit. A state housing plan that works in conjunction with PlanMaryland will help accomplish this, in tandem with the MDOT's efforts to improve the efficiency and availability of mass transit in parts of the State. Additionally, a state housing plan, supported by PlanMaryland, will work in conjunction with other state and local land-use public policy initiatives to help create opportunities for homeownership and rental housing that ensure a range of housing choices can be provided to meet the needs of a diverse and changing population across all income ranges.

Demographic Trends

Demographic trends have played a large role in how Maryland has developed. Baby boomers contributed to the growth of the suburbs, and now their children are seeking jobs and housing in desirable and affordable locations. Meanwhile, older suburbs, not the central cities, are becoming the first stop for new immigrants to the country. The aging of the baby boomers, delayed marriage and child bearing, and high divorce rates continue to produce fewer people per household and affect housing preferences and demand for recreation and other services.

Past Trends: The total population and number of households in Maryland are increasing at the same time average household size is decreasing. Household size has declined from 3.25 persons per household in 1970 to approximately 2.60 in 2010, and is expected to further decrease to 2.48 by 2030. With fewer people living in each house, the rate of development will be higher than the rate of population increase. At 3.25 people per household, about 308 dwelling units are needed per 1,000 population. When the household size falls to 2.48 people in 2030, the number of dwellings needed to house 1,000 people will rise to 403. Figure 2-5 shows how the cumulative rate of household growth exceeds population growth as the average household size decreases.

Thanks to improved nutrition and health care, Marylanders are living longer than ever as more of the baby boom generation nears retirement age. In 1970, 7.6 percent of Maryland's population was over 65. The 2000 Census counted 11.3 percent over 65, and in 2010, 12.7 percent were projected to be over 65. More than 20 percent of the population may be over 65 by 2030, and a vast majority plan to remain in place when they retire.

Minority population growth has exceeded non-Hispanic white population growth in Maryland since the 1980s. Five counties and the City of Baltimore now have at least 48 percent of their population as minorities.

Foreign-born immigrants are settling in suburbs rather than in urban neighborhoods, as foreign-born immigrants did previously. The influx of immigrants to Maryland—a trend expected to continue—will have a considerable impact on demand for housing.

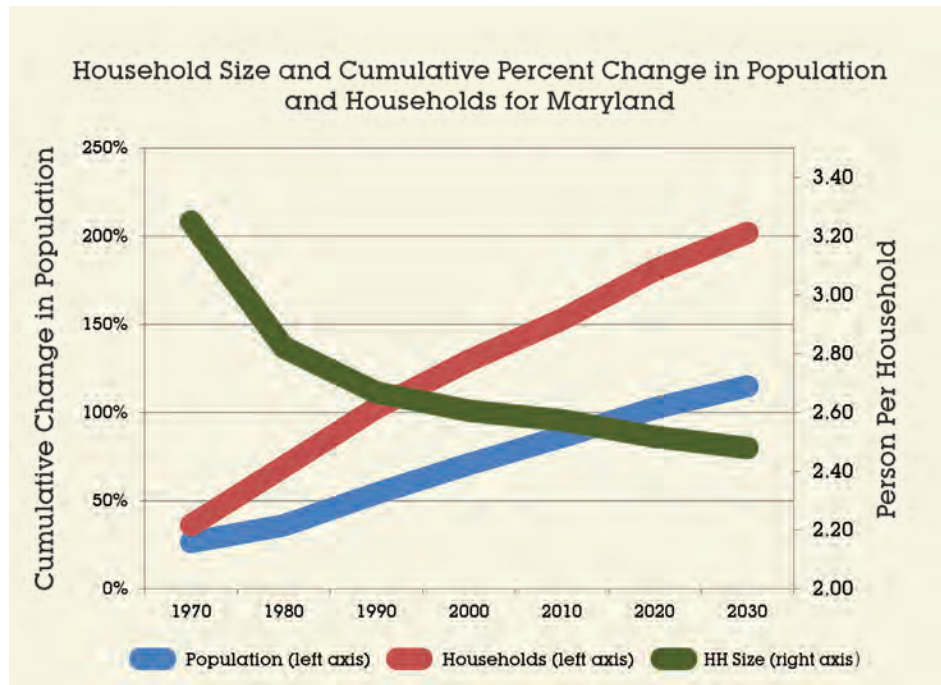


Figure 2-5: Household Size and Cumulative Percent Change in Population and Households for Maryland, 1970 to 2030

Source: U.S. Census Bureau, Maryland Department of Planning

If Trends Continue: The population will continue to increase, and our citizens will become older, have more diverse backgrounds, and will be more likely to have been born in other parts of the U.S or in other countries. Household sizes will continue to shrink due to fewer children being born per family and an increase in single-person households, meaning that population growth will result in even more housing units being constructed.

Why This Matters: Population growth is expected no matter what form future development in Maryland takes. However, the demographic and economic drivers of Maryland's growth are much different today than they were 20 years ago. Maryland needs to plan for increased demand for housing, an aging population, and diverse communities with different needs and expectations. Local plans and state land-use policies will have a strong effect on where these new residents live, how much time they spend commuting, and how much money they pay for housing, transportation, and taxes in the future.

Economic Trends

Maryland is forecast to add 600,000 new jobs by 2030. Its economy is changing, as are decisions about where businesses locate. The largest non-government employers of decades past—steel, aerospace, marine transportation and manufacturing—have been replaced by health care, biotech and medical research, colleges and universities, and service industries. Many of the major employers of today no longer depend on bulky raw materials and large finished products that must be transported by rail or sea. Instead, they depend on knowledge, information and innovation, and make location decisions based on reasonable rents and a supply of educated, technology-savvy, creative workers. Some of these workers are moving to urban neighborhoods and some “new economy” firms are following them. Other workers and employers have chosen to locate in other areas, such as planned employment and mixed-use sites along major highway and transit corridors.

Past Trends: Changes in both Maryland’s economic base and in methods of transporting goods through global supply chains have given many, but not all, businesses more freedom about where to locate. Along with trends in housing, employment locations are becoming increasingly dispersed. Figure 2-6 shows that commercial and industrial land in Maryland has become dispersed since 1973 in patterns that are similar to residential dispersal in the same time period. However, at this point employment is still much more concentrated than housing.

Over the last several decades, Maryland has seen a significant shift in its economic base. Government employment has remained relatively constant as a share of total employment while manufacturing and agriculture have been replaced by biotechnology research, personal and professional services and tourism. Total manufacturing employment in Maryland declined nearly 32 percent from 1990 to 2009, compared with a 20 percent decline in the U.S. as a whole. Even within the manufacturing sector, there has been a shift from traditional heavy industry (steel, chemicals, printing and transportation equipment) to more high-value, advanced technologies (miniaturization, nanotechnology, biotechnology, and information technology). According to the Maryland Department of Business and Economic Development, Maryland now ranks second in the nation for biopharmaceutical innovation. The State is home to 440 life science companies and 50 research-concentrated

Industrial, Commercial, and Institutional Land in Maryland, 1973 and 2010

MDP
Maryland Department of Planning

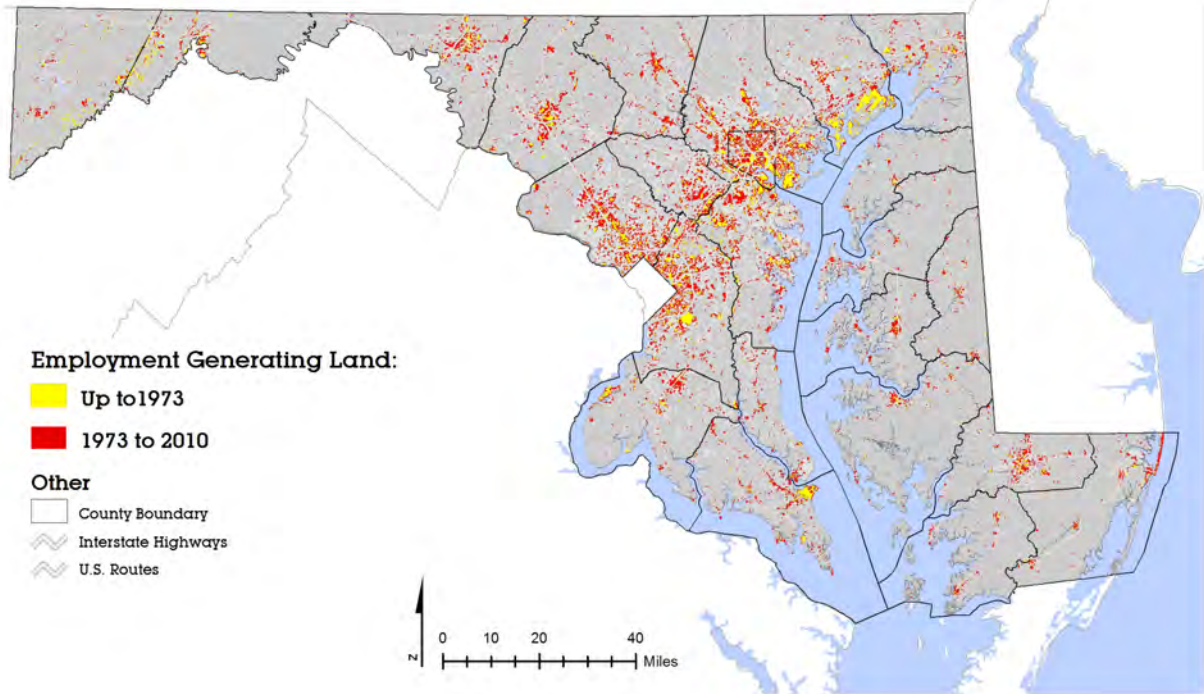


Figure 2-6: Employment-Generating Land, 1973 and 2010

Source: Land Use/Land Cover Analysis, Maryland Department of Planning, 2011

federal institutes, making it a leader in the global life science sector. Most of these companies are located in and near existing population centers. The traditional model of large, centralized workplaces located near important transportation infrastructure (such as ports or railroads) has changed and now includes smaller firms dependent upon highways and airports.

If Trends Continue: Roughly speaking, each acre of economically productive land in Maryland in 1973 supported 10.2 jobs, while each acre in 2010 supported 11.6 jobs. If this trend toward job densification continues, this suggests that the 600,000 additional jobs that Maryland expects to add in the future will require approximately 33,000 acres of land to support them. While trends show that most new employment-generating lands are located in the vicinity of existing developed lands, there will also be additional dispersion of employment in suburban and exurban areas. This, coupled with land use trends for residential development discussed earlier, would lead to higher levels of commuting and vehicle travel and longer commutes.

Why This Matters: Housing can consume potential industrial and commercial land, as well as agricultural land. We have already shown that housing directly threatens 226,000 acres of agricultural land. Housing located near agricultural uses can also exert pressure on those uses to change or be discontinued.⁵ Housing built in close proximity to industrial lands can likewise pressure industrial users to modify their uses or relocate. Development can also threaten large and important economic infrastructure such as railroads, marine terminals and distribution centers around the Port of Baltimore and Baltimore/Washington International Thurgood Marshall Airport (BWI) by encroaching on their operations and reducing their ability to expand. More compact development can create productivity gains from shorter commute times to work⁶ and from the agglomeration of suppliers, customers, and the regional skilled labor market.^{7 8}

New development can also impact sites in Maryland that are the recipients of additional growth and development as a result of the Base Realignment and Closure (BRAC) Act, especially with regard to encroachment from residential development and other facilities near military installations.

Tourism, one of Maryland's largest economic sectors, is potentially under threat by continued low-density development. In 2009, tourism added \$13.7 billion to Maryland's economy.⁹ Keeping the attraction of some of the unique, picturesque and historic areas of the State that are located in more pristine areas, away from development, will help maintain this important sector.

Businesses have a greater chance of succeeding if properly located, provided sufficient room to grow and supported by the necessary public infrastructure. Regions that are not attractive to world-class companies and talent can be passed by when relocation decisions are made. Employment centers need to be carefully planned. In many cases they can be located in mixed-use settings, providing support to commercial and residential uses.

Agricultural Lands

Maryland is one of the most forward-thinking states in the nation when it comes to identifying the most critical farmland and environmental resources and then protecting them through easement or in-fee purchase. Five of the nation's top 12 Counties in preserving agricultural land are in

Best Practices **Crisfield Strategic Revitalization Plan**

The City of Crisfield adopted a Strategic Revitalization Plan (SRP) to examine revitalization potential, economics, and public policy and regulations to revitalize Crisfield. The development of the SRP was partially funded with a Maryland Coastal Community Grant.

The City engaged local residents, elected and appointed officials, and State and local government agencies to develop an SRP with an overriding mission “to make Crisfield a strong economic entity, support reasonable business growth and employment opportunities, and foster the historic heritage of the City of Crisfield.”



Maryland: Montgomery, Carroll, Baltimore, Calvert and Frederick. However, Maryland’s farms, forests, and air and water quality remain under stress from development. The spread of urban development into rural areas has put pressure on Maryland’s agricultural and food processing industries and increased economic inequality in the State’s hardest-hit rural communities.

Past Trends: More than 2 million acres of land in Maryland are currently dedicated to agriculture, but the amount of farmland is declining. Maryland has the sixth highest farmland prices in the nation, which create strong pressure on farmers to sell for development. Between 1982 and 2007, total land in farms declined by almost 500,000 acres, equivalent to one-fifth of the total lands in farming in 1982 (See Figure 2-7). Over the same period, the market value of farm products increased significantly, with much of the growth led by the poultry industry, demonstrating the strength of agribusiness as a viable industry in Maryland.

In 2002, a Joint Resolution of the Maryland General Assembly established a statewide goal to triple the existing number of acres of productive agricultural land preserved by 2022 through four programs: Maryland Agricultural Land Preservation Foundation (MALPF), Rural Legacy, local Purchase of Development Rights/Transfer of Development Rights (PDR/TDR), and the GreenPrint easement acquisition program (which has since ceased operations). The goal of 1,030,000 acres was based on the April 6, 2002, total of 343,333 protected acres. More than 220,000 acres have been preserved since then. However, the goal of 1,030,000 preserved acres will not be met by 2022 at the current rate of preservation.

Maryland's Genuine Progress Indicator (GPI) estimates that every acre of agricultural land that Maryland loses subtracts the equivalent of \$1,131 from the State's wealth and well-being. Since 1950, Maryland's loss of 873,000 acres of farmland (more than twice the area of Baltimore County) has caused it to lose the equivalent of \$1 billion in value.¹⁰ Maryland currently has an estimated 1.8 million acres of farmland in production¹¹ in 12,834 farms, generating almost \$2 billion in sales for Maryland's farmers.

If Trends Continue: Maryland will lose another 226,000 acres of farmland by 2035, subtracting another \$256 million in wealth and well-being according to the State's GPI. This loss will resonate through the farming economy, further fragmenting farmlands and making it harder for farmers to earn a living.

Why This Matters: The fragmentation of farmland has made it more difficult for the remaining farmers to assemble large enough parcels of productive farmland to achieve economies of scale in production.

Impacts on water quality due to development and competition for water from an increasing population have made water more expensive.



Figure 2-7: Farmland in Maryland, 1978 to 2007

Source: U.S. Census of Agriculture, 2007

Conflicts between farmers and non-farm occupants of the landscape—including nuisance lawsuits over noise and odors, traffic, and liability concerns—constrain farming practices and affect efficiencies and profitability associated with the production and marketing of many agricultural commodities.

The disappearance of suppliers, repair services, processors, distributors and the like, concurrent with the influx of low-density residential development into agricultural areas, reduces the profitability and feasibility of farming.

Losing farmland hurts local economies and diminishes Maryland’s cultural heritage. Maryland’s residents will lose the value of locally-grown foods, rural tourism and the unquantifiable but real value to the state of having a healthy and beautiful agricultural landscape.

Natural Resource Lands

Maryland has more than 7,000 miles of coastline on the Chesapeake and Coastal Bays and the Atlantic Ocean, 23 national parks, 280,000 acres of State parks, and 600,000 acres of wetlands. Development poses threats to these lands and the species that rely upon them.

Past Trends: In 2010, more than 1.7 million acres, or over one-quarter of the State was made up of developed land. A large amount of remaining forest habitat in Maryland is fragmented and continues to become more fragmented as family forest owners (who own 57 percent of all forest land) sell and subdivide their property. According to Maryland's Genuine Progress Indicator, each acre of forest that is lost costs the State \$318.50. Since 1960, Maryland has lost 497,000 acres of forest valued at \$158 million for its potential use as habitat, recreation, and carbon sequestration.

Wetlands are complex ecosystems that can improve water quality, provide natural flood control, diminish droughts, recharge groundwater aquifers, and stabilize shorelines. They support a wide variety of plants and animals, including rare and endangered species, migratory birds and the young of commercially valuable fisheries. They also provide recreation. Since development began in Maryland, roughly half of all acres of wetlands have been lost.

Maryland actively protects parkland and open space. Maryland has preserved as many acres of land as has been developed since 1969. While 27 percent of Maryland is developed, about 23 percent is protected with conservation easements or publicly-owned open space. If the population increases without additional land protections, the ratio of protected to developed land will decrease.

If Trends Continue: Maryland is forecast to lose 176,000 acres of forested land by 2035 if current land use trends continue. Because Maryland has adopted no-net-loss policies for its wetlands, no wetland loss is forecast due to development. However, climate changes may cause significant damage to Maryland's wetlands if sea level rise were to occur.

Why This Matters: As forests and wetlands are fragmented into smaller blocks by homes and commercial development, many wildlife species—including rare and endangered species—are harmed. Animals that require large areas of forests, or forest interior species, often can't survive in forest edges and non-forested areas. As a result, the number and diversity of songbirds and other animals that require large areas of contiguous forest are declining. Preserving natural lands has economic benefits. Protecting Maryland's environment helps to protect public health, tourism, recreational and commercial fishing, and ensures that the State's quality of life continues to exist for future generations.

Water Supply and Quality

Adequate capacity in community water and sewerage systems is essential to meet the goals of PlanMaryland. The impacts of inadequate community water supply and wastewater capacity include development moratoria, and increased pressures to build on individual on-site sewage disposal systems in rural areas.

Drinking Water Supply: Maintaining and protecting the quality and quantity of Maryland's drinking water are growing challenges in the face of rapid population and economic growth (See Figure 2-8). Some of the State's reservoirs are threatened by uncontrolled large lot development. In other areas, such as in parts of Southern Maryland, wells have run dry and some groundwater on the Eastern Shore is being threatened by the intrusion of salt water.

Activities at the land surface can seriously impair the water quality for Maryland public drinking water systems. Some groundwater systems relying on vulnerable aquifers already treat for a variety of contaminants related to land use; the more common are nitrates (from fertilizers and on-site sewage disposal systems) and volatile organics (from petroleum products or improperly disposed of cleaning solvents). The cost of treatment can be very expensive. By preventing the contaminants from entering the water supply, the responsibility shifts to the potential source of the contamination rather than the public water system.

Wastewater Treatment: Many counties are expected to reach mandatory caps on pollution outflows from local wastewater treatment plants by 2035; however, to minimize the pollution impact of each new household in Maryland will require as much future growth as possible within sewerred areas. To do so, the further growth of sewerred communities will require alternative means for expanding capacity, such as spray irrigation on farmland, wastewater reuse, or nutrient trading.

Individual On-site Sewage Disposal Systems: Development in rural areas outside of existing towns must rely almost entirely on on-site sewage disposal systems and individual wells. There were approximately 426,000 on-site sewage disposal systems in Maryland in 2009. Of these, 411,000 were residential on-site sewage disposal systems. These systems can present significant issues for public health, water quality and preserving our agricultural and natural heritage. Traditional on-site sewage disposal systems do not provide effective treatment for nitrogen, the pollutant most critical to the health of the Chesapeake Bay. Development using on-site sewage disposal systems generates 10 times more nitrogen per household to the environment (including to groundwater) than development using advanced centralized treatment systems. Even newer enhanced on-site sewage disposal systems do not reduce nitrogen to the same degree as modern community wastewater plants. Further, trends show that the amount of land needed for development has been increasing over time; some of this additional land is needed for on-site sewage disposal system drain fields and building clearance. Outside of sewerred areas, lot sizes are eight times larger on average than areas served by public sewer.

Other Sources of Water Pollution: As growth continues in Maryland, more people will generate more wastewater and stormwater pollution. Although new methods and technologies can reduce the additional pollution from population growth, the impact is not removed entirely. Current development patterns remove forested land, threaten wetlands and create large lawns and large areas of impervious surface. These can exacerbate pollution from stormwater runoff. Air pollution also can have a significant impact on water quality. Airborne deposition of nitrogen, through nitrogen oxides generated by power plants and vehicles, currently accounts for nearly one-third of the nitrogen load entering the Chesapeake Bay. With more air pollution from increased travel, the water quality impacts will be even greater.

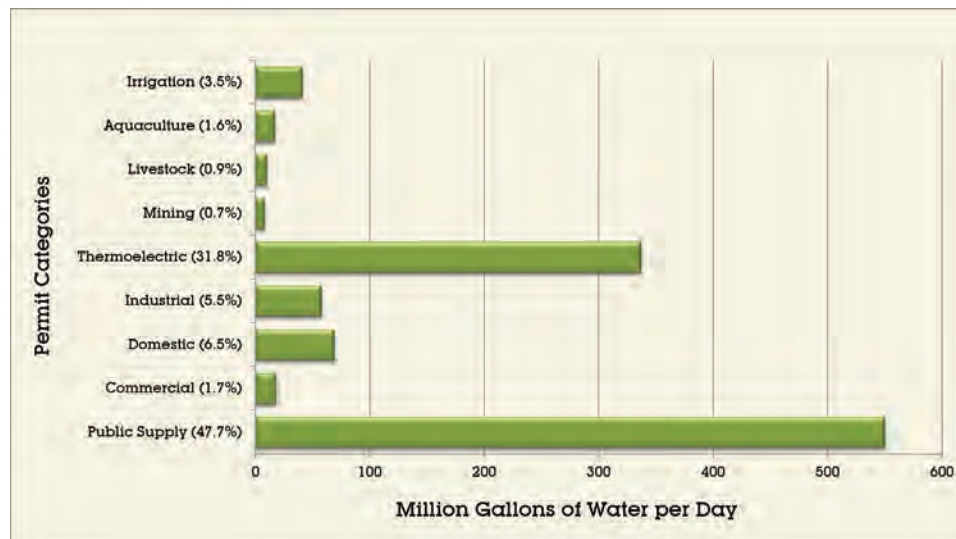


Figure 2-8: Maryland Water Withdrawals

Source: Maryland Department of the Environment - 2005 Advisory Committee on the Management and Protection of the State's Water Resources. Interim Report July 2006

The continuing threat to the Chesapeake Bay: The U.S. Environmental Protection Agency (EPA) has concluded that the extent and pattern of development throughout the Chesapeake Bay watershed are hindering restoration efforts. In its September 2007 report, *Development Growth Outpacing Progress in Watershed Efforts to Restore the Chesapeake Bay*, EPA notes that new development is increasing urban stormwater nutrient and sediment loads faster than restoration efforts are reducing them. The overall health of the Bay between 2008 and 2009 improved from a C- to a C, although much of this improvement was due to decreased flow from the Susquehanna River.

In 2010, EPA issued a Total Maximum Daily Load (TMDL) for the Chesapeake Bay and required all watershed jurisdictions, including Maryland, to develop Watershed Implementation Plans (WIPs) to meet the nutrient and sediment pollution requirements of the TMDL. Pollution from urban stormwater, Waste Water Treatment Plants (WWTPs), septic tanks, agriculture and air pollution must be reduced to meet the Bay TMDL. In addition, EPA requires each State to develop an accounting-for-growth program. All new pollution impacts from development must be offset through additional pollution reduction measures.

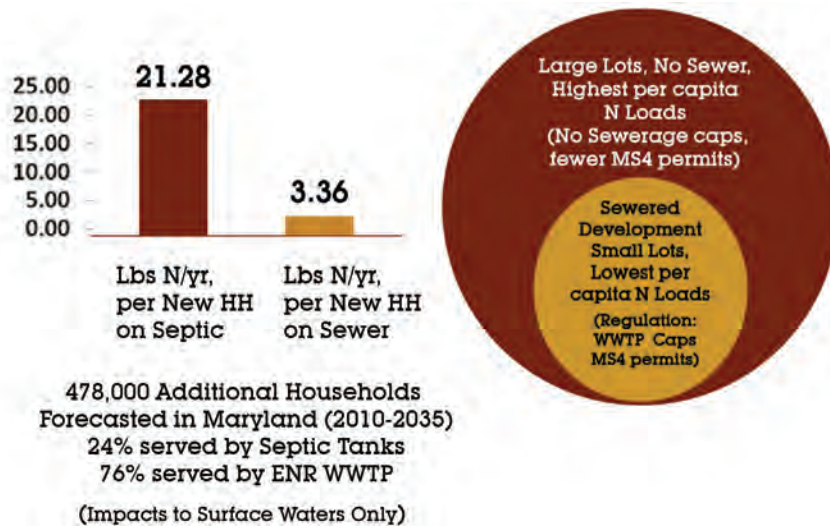


Figure 2-9: Regulatory Constraints: An Uneven Playing Field for Development

Source: Maryland Department of Planning

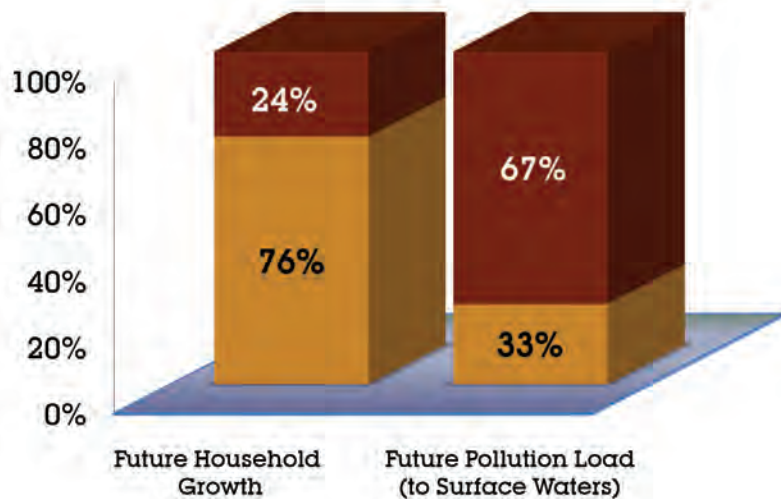


Figure 2-10: Septic Systems Development: A Disproportionate Impact

Source: Maryland Department of Planning

Achieving the goals of PlanMaryland will greatly contribute to Maryland's ability to meet EPA's Bay TMDL requirements by minimizing new pollution impacts from development.

If Trends Continue: Given current trends, there will be more land converted from farmland and forest to development. Much of this land will support homes on individual on-site sewage disposal systems. Over the next 25 years, new development relying on on-site sewage disposal systems is expected to account for 24 percent of growth but 67 percent of new nitrogen pollution. There will also be more pressure to accommodate growth using existing and upgraded WWTPs, which will require significant investment in pollution reduction design and infrastructure.

Why This Matters: The amount, type, design, and location of development, as well as the availability of adequate public water and sewer infrastructure, have a direct impact on Maryland's environment and quality of life. These factors will help determine whether Maryland has a safe and abundant supply of drinking water for future generations. They will affect the ability to restore one of the world's most productive estuaries, not to mention our local streams, rivers and the Coastal Bays. The State and region's capacity to halt the decline in the Chesapeake Bay has immense economic and environmental consequence for Maryland.

Greenhouse Gases and Climate Change

Air quality in Maryland has been improving over the past three decades. However, growth in vehicle miles traveled and energy consumption has offset some of these gains. Twelve counties in Maryland are currently classified as in nonattainment of federal air quality standards for one or more pollutants. As growth occurs in the State, energy generation and transportation demands will increase, leading to increased fuel consumption and greenhouse gas (GHG) emissions. As GHG emissions are linked to climate change, Maryland and other coastal states need to ensure that these emissions are reduced to minimize future impacts from sea level rise in low-lying areas, worsening coastal storms, changing precipitation patterns, and hotter summers. Specific

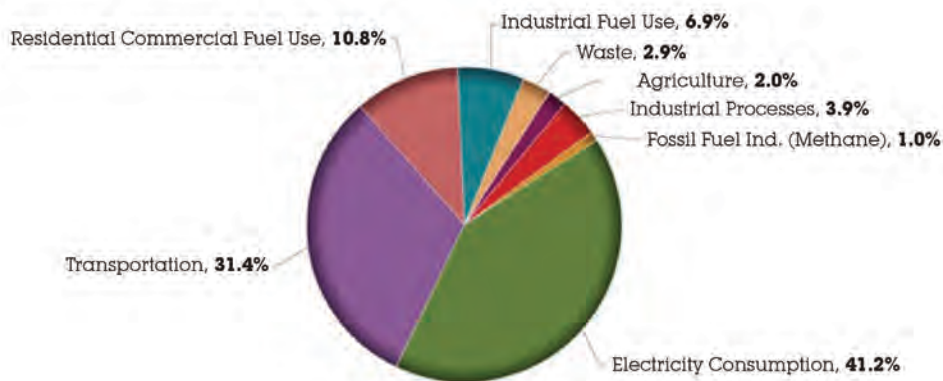


Figure 2-11: Greenhouse Gas Emissions by Source
 Source: Maryland Climate Action Report, 2008

climate change impacts to Maryland are described in the Comprehensive Assessment of Climate Change Impacts in Maryland, part of the Maryland Climate Action Plan.

Past Trends: About three-fifths of Maryland’s electricity is currently generated from coal plants, which are the highest CO₂ emitters; over one-quarter is from nuclear (with no CO₂ emissions) and most of the remainder is from petroleum and natural gas. Figure 2-11 shows estimates of GHG emissions in Maryland by source. According to the EPA, CO₂ emissions in Maryland increased by about 18 percent between 1990 and 2005, from just fewer than 71 million metric tons to almost 84 million metric tons. The transportation and electric power sectors are the two largest sources of CO₂ emissions, contributing three quarters of the total emissions in Maryland.

If Trends Continue: The final Maryland GHG Inventory and Reference Case Projection of the Maryland Climate Action Plan (June 2008) forecasts a continued increase in energy demand and greenhouse gases (GHGs) for stationary and mobile sources in Maryland between 2005 and 2020. Electricity demand for stationary sources (see Appendix C of the Maryland Climate Action Plan) is expected to increase 1.5 percent annually from 2005 to 2020. GHGs from energy generation may be reduced compared to these forecasts now that Maryland has joined nine other Northeast and Mid-Atlantic states in the Regional Greenhouse Gas Initiative (RGGI). This initiative establishes a cap-and-trade system to reduce CO₂ emissions from the power sector by 10 percent by 2018.

Why This Matters: Key impacts of greenhouse gas emissions include sea level rise, temperature change, storm surges, and other extreme weather events. Maryland's location on the Chesapeake Bay makes sea level rise of particular concern, threatening current and future homes and infrastructure. Current projections of sea level rise indicate that many homes and businesses could be impacted. In addition to the pure economic and social loss, sea level rise will increase demand for available lands for development, which could intensify the conversion of rural lands to development. The Comprehensive Assessment of Climate Change Impacts in Maryland forecasts sea-level rise of up to 1.3 feet by 2050 and up to 3.4 feet by 2100. Maryland, along with Louisiana and Florida, will be the states that are most affected by sea level rise brought about by climate change. Unless current trends change, development is expected to increase future transportation GHG emissions even with low-carbon fuels and more fuel-efficient vehicles.¹² Low density development and roadway expansion will increase vehicle usage, a major component of greenhouse gas emissions. Compact development leads people to drive 20 to 40 percent less, at minimal or reduced cost, while reaping fiscal and health benefits. Local governments and metropolitan planning organizations in Maryland are beginning to explore this issue in more detail, but more work needs to be done to curb greenhouse gas emissions throughout Maryland. Achieving the goals of PlanMaryland will play a vital role in achieving the transportation and land use strategies of the GGRA plan by minimizing future vehicle miles traveled and making alternate transportation methods more accessible.

Government and Private Fiscal Issues

Land-use decisions have impacts on the fiscal health of communities, businesses and households. These impacts are often difficult to measure, as there are many complicated and interrelated factors that need to be evaluated. However, there has been a great deal of research in this area, and some conclusions can be drawn.

Most government revenues come from taxes, either through property, sales, or income. While it is sometimes difficult to attribute changes in revenues to differing land-use types, there are examples that show that more compact land-use patterns create more tax revenues per acre of development (and have less per unit impact on nitrogen loading). See Table 2-1 below showing Low Density vs. Compact Development. In addition, equivalent residential

Best Practices

Countryside Preservation

Talbot County's Priority Preservation Area (PPA) contains 83,000 acres, including the Tuckahoe Rural Legacy Area. Almost 29,000 acres are under easement in Talbot, which is more than is protected in 12 other counties in Maryland.

A number of these easements also protect sensitive waterfront land on the western edge of the County. Through the Maryland Agricultural Land Preservation Foundation (MALPF) alone, Talbot has preserved about 11,000 acres. The pace of easement acquisition is relatively slow. However, since 1990, Talbot has lost just 5,941 acres of farmland. That is less than half the average for most other Maryland counties. The County also established moderately protective rural zoning allowing no more than three lots per the first 20 acres, then one unit per 20 acres and maintains a program for the Transfer of Development Rights (TDR) away from sensitive lands.



and commercial properties that are in close proximity to transit stations are worth more than those further away, and also have increased taxable value. Other studies have shown that design standards for neighborhoods can cause property values to appreciate 29 percent faster than similar properties in other areas in the same jurisdiction.¹³ However, more Maryland-specific research needs to be conducted in these areas to quantify revenue effects to Maryland government entities.

Table 2-1 – Comparison of Low Density versus Compact Development Taxable Value and Nitrogen Loading Yields

Site Characteristic	Low Density Development	Compact Development
Site Area	790 acres	790 acres
Number of Detached DUs	215 DUs	2130 DUs
Average Lot Size	2 ½ acres	¼ acre
Assessed value per acre	\$152,666	\$730,125
Total Assessed value	\$120,606,520	\$576,798,560
Units on conventional on-site sewage disposal systems	215 DUs	0 DUs
Nitrogen loading to the environment (wastewater only)	23.2 lbs/hh/yr	1.78 lbs/hh/yr
Nitrogen loading to the environment (wastewater and stormwater combined)	34.62 lbs/hh/yr	3.36 lbs/hh/yr
Nitrogen loading to surface waters only (wastewater and stormwater combined)	21.28 lbs/hh/yr	3.36 lbs/hh/yr

It is clear that government expenditures in areas such as roadways, water and sewer can be affected by land-use patterns. Infrastructure such as roadways and sewer systems need to extend to where users need them. The

more dispersed the users are the larger the infrastructure network has to be on a per capita basis to service them. Preliminary research by MDP shows that a denser development pattern in the future could remove the need to construct up to 5,937 miles of neighborhood roads (a 71 percent reduction from the dispersed pattern), most of which are the responsibility of local governments, and 1,364 miles of primary and secondary highways (a 20 percent reduction), most of which are the responsibility of State government. Denser development would also help save local governments an estimated \$55 million in water and wastewater costs.

Spending on education is also affected by land-use patterns. For example, school bus transportation costs have surged, particularly since gasoline prices began to climb in the mid-2000s. The State spent \$225.1 million on school bus transportation in the 2009-2010 school year, a 28-percent jump from the \$175.5 million it spent in the 2005-2006 school year. The higher costs weren't due to enrollment growth. They were due to transportation costs per pupil rising 26 percent, from \$751 to \$949, during the same period.

When government policy supports development patterns that increase costs, these costs are often not only borne by government but are passed on (or externalized) to individuals and businesses. Research has shown that, overall, the average cost of a home could be \$16,000 higher in low-density areas, due to the infrastructure that is built by developers and whose cost is passed on through higher home prices. A 2005 study shows that, taking all factors into account, the per capita savings for residents in the Washington/Baltimore area could reach \$6,069 if 25 percent of the low-density development projected to be built from 2000 to 2025 was shifted to high-density development.¹⁴

If Current Trends Continue: More roadways cost more money to build and maintain. Less dense housing requires more infrastructure to connect it to water and sewer systems. Similar interlocking relationships exist for energy, public transit, and public safety.

Why This Matters: It is in the interest of all of Maryland's citizens to ensure that future growth is fiscally responsible and does not burden households or businesses with excess costs. Planning for compact growth between today and 2035 will save both State and local government money by reducing the amount of road, water, and wastewater treatment facilities that need to be

Best Practices

Purple Line Master Plan

The Purple Line, a proposed 16-mile light rail line, will run from Bethesda to New Carrollton and provide direct connections to Metrorail, local and inter-city bus, the MARC train and Amtrak. An east-west route connector for Montgomery and Prince George's counties, the Purple Line has been under study since 1992. In October 2011, Governor Martin O'Malley announced that the Federal Transit Administration (FTA) had given approval for the Purple Line to move forward and enter the preliminary engineering phase. FTA approval means that work on the project now moves to preparation of more detailed plans, schedules and cost estimates, as well as completion of environmental studies.



created to service new development. More efficient government operations can reduce tax burdens on individuals and businesses. Development that reduces distances between residences, workplaces, and services saves both time and money for residents and businesses, and frees that time and money to go towards more productive uses. If a local government decision on land use undercuts that statewide vision or erodes the natural resources already being protected by large public investment, all State taxpayers will pay the price for that.

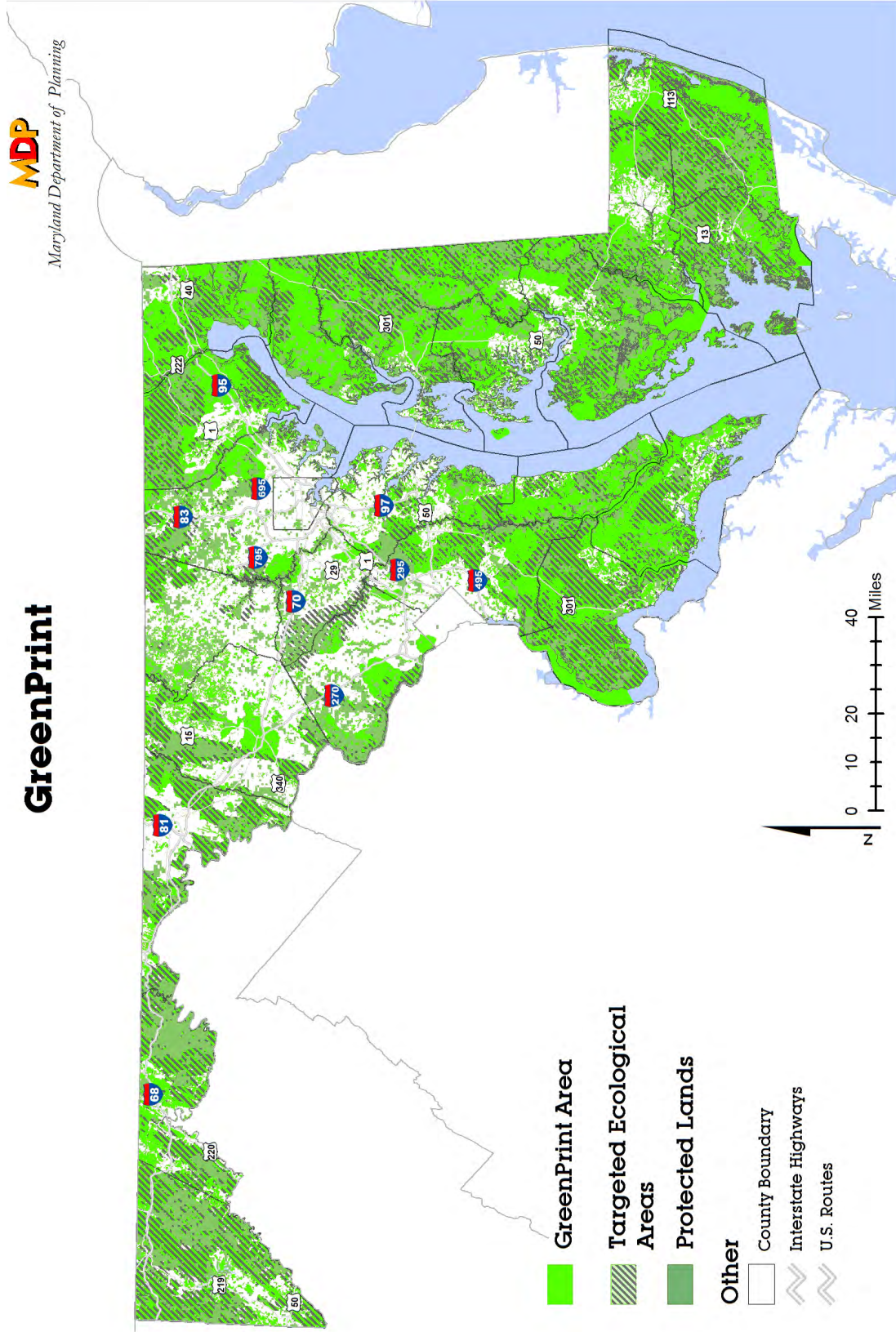


Figure 2-12: GreenPrint

Source: Maryland Department of Natural Resources, November 2011

Lands Affected by Local and State Policies

Maryland has collected significant information on policies that affect land use in the State. Much of this information is available through the State's Smart, Green and Growing initiative, and is visually represented by three land use mapping tools known as GreenPrint, AgPrint, and GrowthPrint. These tools are designed to incorporate the best available data and are updated as new information is made available.

GreenPrint (Figure 2-12) identifies areas that have a heightened relative value for preservation and restoration based on environmental and ecological factors. These areas include large blocks of forests and wetlands; forests important for protecting water quality, wildlife and rare species habitats; areas supporting high quality tidal and non-tidal waterbodies, fisheries, bay and coastal ecosystems; and wetland areas important for climate change adaptation. Targeted Ecological Areas define the most ecologically important areas within GreenPrint and are preferred for Stateside Program Open Space funding. GreenPrint is a valuable tool for prioritizing land conservation decisions and for building a broader consensus for sustainable growth and land preservation decisions into the future.

AgPrint

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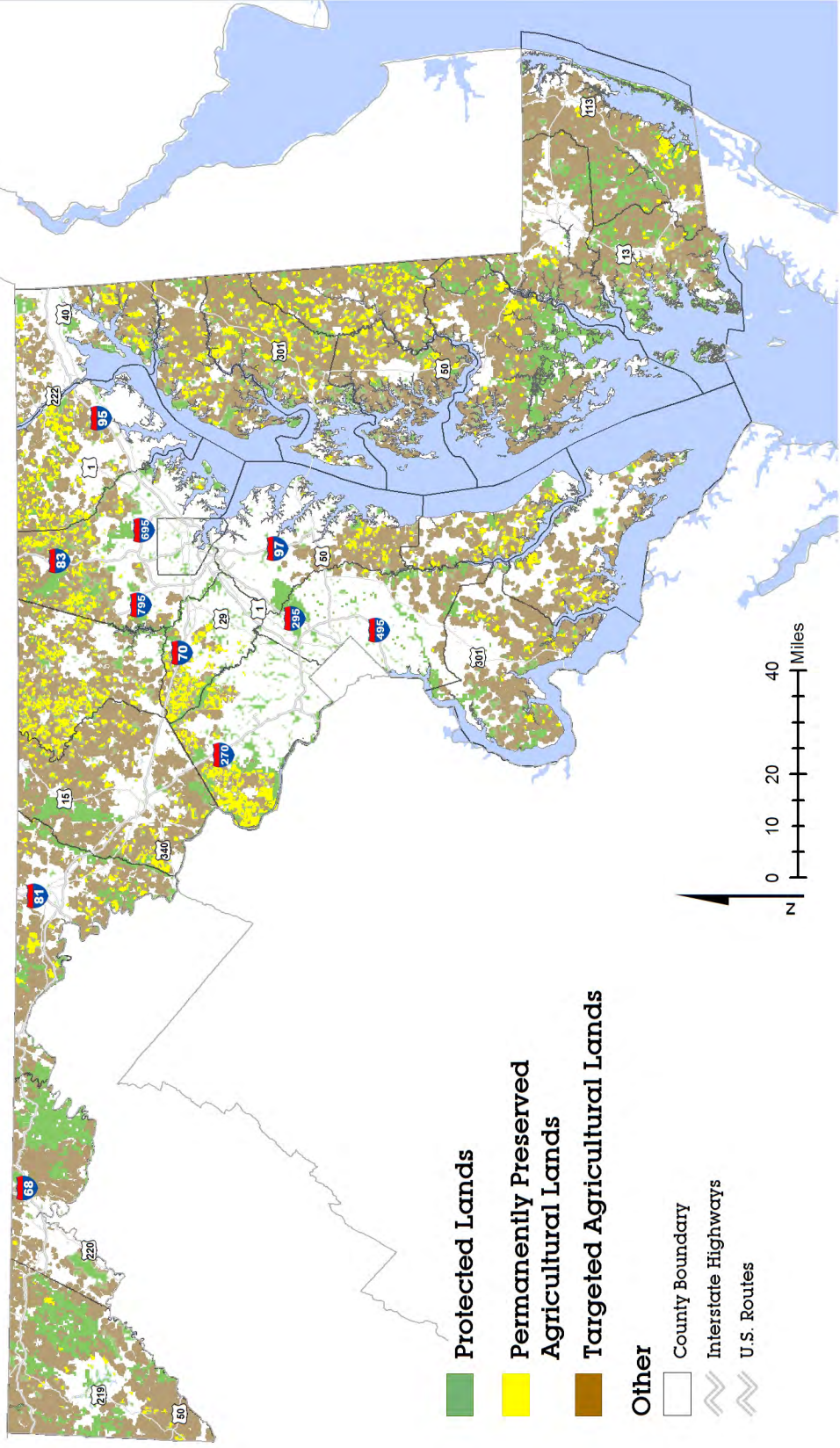


Figure 2-13: AgPrint
Source: Maryland Department of Natural Resources, November 2011

AgPrint (Figure 2-13) identifies certain agricultural areas for continued use as resource producing lands and sets priorities among them, based on their degree of stability. Stability is determined by looking at how fragmented these areas are by development, the level of market demand, how vulnerable they are under existing zoning, whether and in what time frame the resource will be compromised, and the potential return on public investment for retention of these areas. AgPrint is a significant tool for identifying and prioritizing valuable resource lands, including prime farmland, and directing State and local funds and resources to protection of those areas as well as providing incentives for appropriate and compatible rural industries.

GrowthPrint

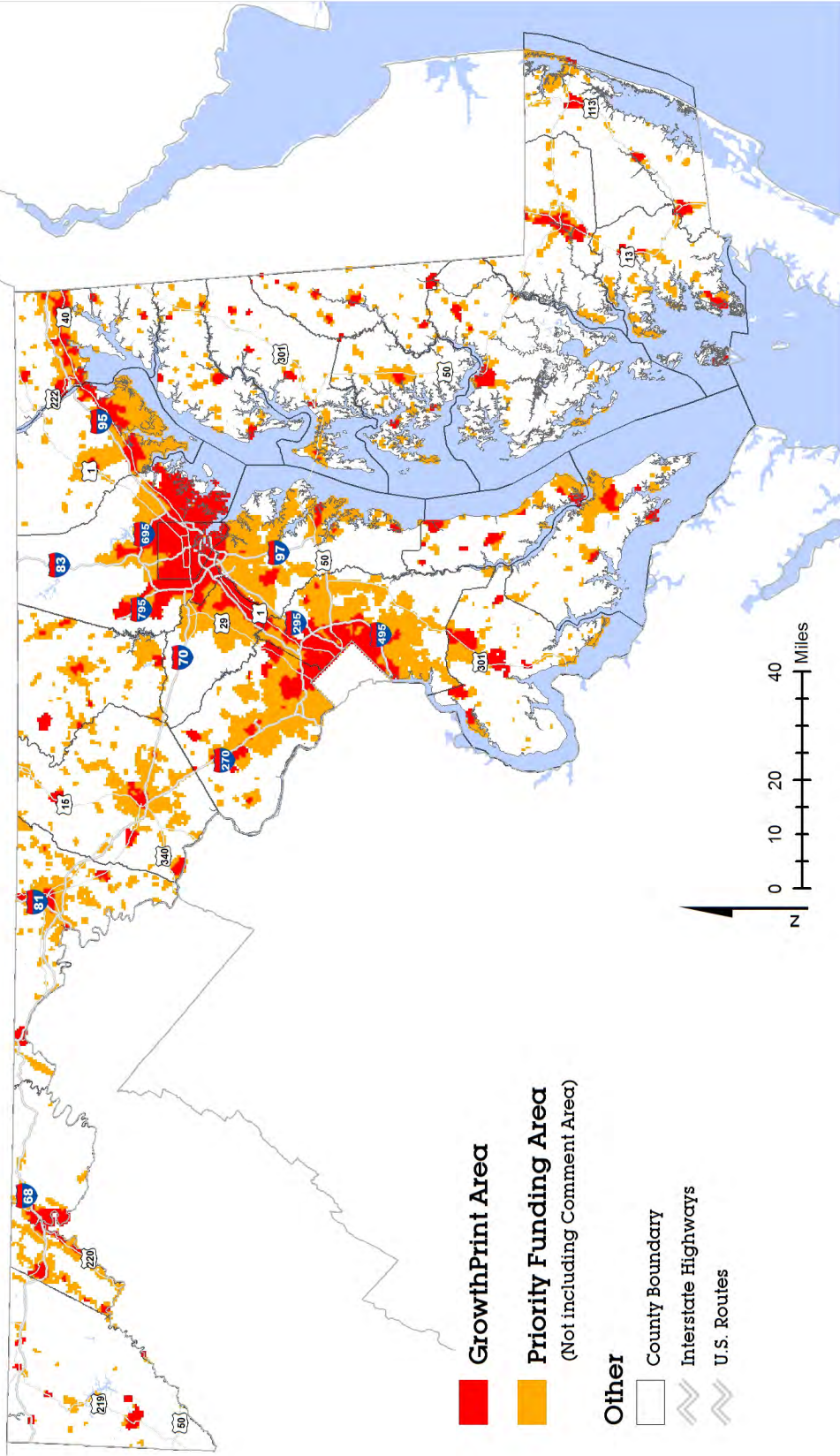


Figure 2-14: GrowthPrint
Source: Maryland Department of Planning, 2011

GrowthPrint (Figure 2-14) areas are subsets of Priority Funding Areas and are comprised of geographies that constitute locally designated areas that receive State funding and/or program assistance. The existing programs that reflect GrowthPrint areas are Sustainable Community Areas (former Community Legacy and former Neighborhood Revitalization Areas, BRAC Zones, designated Transit Oriented Development Areas), and Enterprise Zones. GrowthPrint is a valuable tool for identifying these and other areas that are suitable for infill development, revitalization and redevelopment.¹⁵

Envisioning the Future in 2035 – Implications for Infrastructure

In an effort to illustrate how the future landscape of Maryland could look in the year 2035, the Maryland Department of Planning estimated how land use would change under two scenarios:

- 1) A current policies scenario that assumes that the state will continue to develop following current trends. Using population, household, and employment projections, future land use is estimated based on current zoning regulations, sewer service areas, and other existing policies and regulations.
- 2) A Smart Growth scenario that assumes that Maryland will grow in accordance with the goals of this Plan. The Smart Growth scenario represents steps—some ambitious, some moderate—toward realization of those goals.

The assumptions behind the Smart Growth scenario include:

- Priority funding areas are developed at a minimum density of 3.5 units per acre and capture at least 80 percent of future growth within each county.
- Lands outside of PFAs are developed at densities of no more than 1 unit per 20 acres.
- Lands currently preserved, which are protected from future development, are included in both scenarios.

Using these assumptions, 300,000 fewer acres would be developed in Maryland under the Smart Growth scenario, leading to an almost equivalent protection of agricultural and forest lands (Table 2-2).

Table 2-2 - Changes in Developed, Agricultural, and Forest Land under Current Trends and Smart Growth Scenarios

Change in Acres of ...	Current Trends Scenario	Smart Growth Scenario
Developed Land	404,122	109,364
Agriculture	-225,857	-54,494
Forest	-175,598	-52,540

Source: Maryland Department of Planning, Growth Simulation Model (GSM), March 2011

The "Current Trends" scenario increases the number of developed acres (e.g. residential, industrial, commercial, institutional, extractive) by 24 percent (404,122 acres) between 2010 and 2035. By implementing some basic Smart Growth principles, the percent increase in developed land could be reduced to only 6 percent or 109,364 acres.

If the Smart Growth vision is achieved, it will have significant impacts on both infrastructure costs and water quality. Table 2-3 summarizes the implications of the two scenarios for nitrogen loading and roadway construction costs (developed by MDP) and the cost to provide water and sewer infrastructure and schools (developed by the University of Maryland Center for Smart Growth). Full achievement of the vision of this Plan would reduce vehicle miles travelled by 30 percent (in 2035 alone) and greenhouse gas emissions by 6.4 percent (in 2035 alone). Also, between 2010 and 2035, the Plan would reduce new road miles by 36 percent, new road construction/maintenance costs by 28 percent, water and sewer infrastructure by 3 percent, and school construction costs by 10 percent.

Table 2-3. Expected Capital Costs and Environmental Implications from Current Policies and Smart Growth Scenarios

	Current Policies Scenario (2035)	Smart Growth Scenario (2035)	Difference (Total)	Difference (% Reduction)
Roadway miles				
Community Road (miles)	5,907	2,291	3,616	61%
General Roadway System (miles)	9,249	7,399	1,850	20%
Community Road Cost (Billions)	\$25.4	\$9.8	\$16	61%
General Roadway System Cost (Billions)	\$102.5	\$82.0	\$20	20%
Water and wastewater				
Water and Wastewater Costs (millions)	\$2,666	\$2,598	\$68	3%
Cost per household (\$)	\$1,155	\$1,125	\$29	3%
Schools				
Construction Cost (millions)	\$4,341	\$3,910	\$431	10%
Nitrogen Loading from New Households				
Wastewater from new septic tanks (lbs/yr)	1.12 million	0.59 million	0.56 million	49%
Wastewater from additional WWTP flows (lbs/yr)	0.64 million	0.74 million	-0.1 million	-16%
New urban stormwater (lbs/yr)	2.24 million	0.58 million	1.66 million	74%
Total Nitrogen Increase to Surface Waters only (lbs/yr)	4.0 million	1.9 million	2.1 million	53%

Source: Maryland Department of Planning, 2008, with 2011 updates. Urban stormwater loads are based on future residential development acreages as forecast by the MDP Growth Simulation Model, March 2011

Where Do We Grow From Here?

Maryland has a long history of effective and progressive land use planning and management. However, our current efforts need to be redoubled to achieve many established public goals and objectives for communities, conservation and quality of life.

Maryland is not large (42nd in land area in the U.S.), but it is populous (19th most) and densely populated (5th most). How we handle growth will have enormous impact on the Chesapeake Bay and agriculture, which produce thousands of jobs; on the price tag for public infrastructure; on energy consumption and on environmental sustainability.

We're only at the beginning, not the end. PlanMaryland presents an unprecedented opportunity for collaboration between state agencies, the State and local governments, and government and the private sector. It is a framework plan that establishes goals and objectives; initiates a process to define the geographic focus of the Plan; initiates the development of Implementation Strategies, and provides a process for management and oversight of carrying out the plan. The chapters that follow explain how these framework pieces work together.

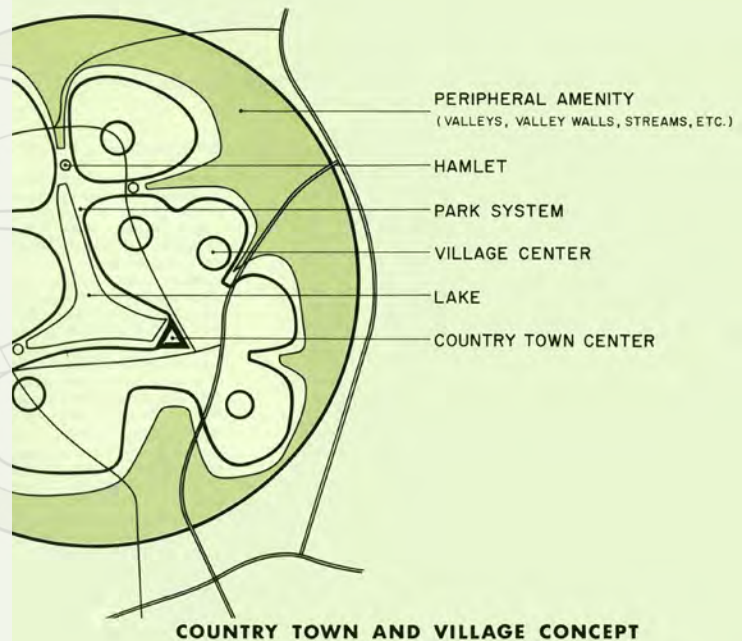
"How we handle growth will have enormous impact on the Chesapeake Bay and agriculture, which produce thousands of jobs; on the price tag for public infrastructure; on energy consumption and on environmental sustainability."

Best Practices

The Plan for the Valleys

The Plan for the Green Spring and Worthington Valleys in Baltimore County has been widely recognized as a seminal model for sustainable growth management. Baltimore County was one of the first jurisdictions in the country to use urban growth boundaries and conservation design as a method for controlling sprawl and directing growth away from sensitive landscapes. The results include resource conservation zones designed to protect farmland and natural resources, more than 50,000 acres of land in permanent protection under conservation easements, and the creation of an urban-rural demarcation line restricting water and sewer service to urban areas. The plan by Wallace-McHarg Associates (now WRT) received a National Planning Landmark Award from the American Planning Association, but the county deserves recognition for sustained implementation efforts.

The Plan for the Valleys



3

Visions, Goals and Objectives – The Foundation for Sustainable Growth

Governor O'Malley's Task Force on the Future for Growth and Development in 2008 developed 12 Planning Visions of Maryland's Economic Growth, Resource Protection and Planning Policy. The visions were enacted into law as part of the Smart, Green and Growing planning legislation of 2009. They updated the state's seven planning visions that were enacted in 1992 and updated with an eighth vision in 2000. The 12 visions provide the foundation for PlanMaryland. They can be grouped under three primary goals:

Goal 1 – Concentrate development and redevelopment in communities where there is existing and planned infrastructure.

Goal 2 – Preserve and protect environmentally sensitive and rural lands and resources from the impacts of development.

Goal 3 – Ensure that a desirable quality of life in Maryland's communities is sustainable.

Each goal has a series of objectives. They are intended to serve as a framework for State and local governments and the private sector, so those parties can be informed by State priorities as they pursue their own plans and objectives.

Goal 1:

Concentrate development and redevelopment in communities where there is existing and planned infrastructure.

Visions:

Growth areas	Community design	Infrastructure
Transportation	Housing	Economic development

Twelve Visio

Of Maryland's Economic Growth, Resource Protection and Planning Policy

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, 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 provide 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 Bay and its 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
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

Source: Maryland Annotated Code, State Finance and Procurement Article §5-7A-01 and Article 66B§1.01

Objectives

Establish and define growth areas – Accommodate non-resource based residential and business development in desirable, compact, sustainable communities.

Limit sprawl development – Minimize the continued spread of lower density residential development, directing growth when possible to defined growth areas.

Enhance rural centers – Focus growth in rural areas in existing centers, served where feasible by adequate sewer and water service, in ways that are compatible with local community character.

Redevelop first – Take full advantage of existing development, infrastructure and public services through infill and redevelopment before developing new land outside of growth areas.

Encourage mixed-use areas – Promote, wherever possible, land use plans and development projects that integrate a mix of land uses into functional communities in which residents can live, work and play – meeting many of their daily needs – without driving.

Create quality places – Plan and build attractive, desirable places for businesses to invest and people to live, learn, work and play, and minimize market demand for development outside these areas.

Build walkable communities and promote safe travel routes – Design communities to promote pedestrian-friendly environments in which homes, stores, and offices, as well as schools, libraries, parks, recreation centers and other public facilities, are well connected, rather than isolated from one another; land uses should be mixed so that people can access many amenities within the communities in which they live and work.

Best Practices **Easton Hospital Relocation**

Shore Health Systems, part of the University of Maryland Medical System (UMMS), has operated the Memorial Hospital at Easton since 1996. The hospital employs more than 1,000 Town and County residents and provides medical and emergency services to nearly 70,000 residents on the Eastern Shore. With the need to expand and available land at a premium, a proposal was initially made to move the hospital to a rural location outside of the Town. The County, Town and multiple State agencies worked to keep Easton Hospital near the existing Town. Shore Health Systems will instead relocate to an area that is now within the Town boundary adjacent to the Easton Airport.



Support historic preservation – Preserve the sense of place unique to each community through rehabilitation of historic structures as an integral part of community sustainability plans, recognizing that building reuse supports both energy efficiency and community character conservation goals.

Connecting with nature – Provide access within a community to natural and recreational amenities through walking, bicycling, or transit, without exclusive reliance on automobiles.

Develop hazard resilience – Plan and build Maryland’s coastal communities and inland urban environments in a manner that protects human habitat and infrastructure from risks associated with climate change: sea level rise, coastal storms, precipitation-related weather extremes, and urban heat effects.

Goal 2:

Preserve and protect environmentally sensitive and rural lands and resources from the impacts of development

Visions:

Environmental protection Resource conservation Stewardship

Objectives

Protect the environment, natural resources and biodiversity - Protect sensitive environmental areas through easement, public ownership and other means. Protect wetlands, lakes, rivers, and other water bodies from upland impacts.

Mitigate and enhance the environment –Mitigate, restore and enhance already compromised natural resources and environmentally sensitive areas, through appropriate development and redevelopment activities.

Support resource-based industries – Protect, support and enhance resource-based industries such as agriculture, forestry, mining, outdoor recreation and tourism, seafood harvesting, renewable energy and other emerging industries from encroachment of incompatible land uses. Minimize the intrusion of rural residential development on resource lands. Promote the economic viability of resource-based businesses and the preservation of relatively large contiguous tracts that sustain resources and resource-based industries.

Best Practices **Bel Air Reckord Armory Redevelopment**

Using a number of state, federal and private grant sources along with Town funds, Bel Air began restoration and redevelopment of the Bel Air Reckord Armory as a community center in 2004. The facility dates back to 1914. After refurbishing both the interior and exterior of the building, creating a handicap accessible entrance and developing an adjacent park/plaza, the Armory serves as a Visitors Center for both the Town and County, offices for the Town's Economic Development Department, offices for the Bel Air Downtown Alliance, a recruiting office for the National Guard and a primary center for both public and private events and activities. It is an accessible "green" oasis in the heart of the downtown.



Safeguard water resources – Ensure adequate supplies of groundwater and surface water. Protect areas integral to sustainable water resources used for public water supply, ecologically important or consumable aquatic natural resources, or other important public purposes.

Balance preservation and conservation – Stabilize the land base of areas designated for preservation and conservation, which supports resource-based industries and preserves the cultural and historic resources. Limit the impact of development in order to protect the integrity of the resources and provide time for easement and land acquisition programs to achieve public land preservation and resource conservation goals.

Strategically invest in rural areas – Target transportation infrastructure investments in rural areas to meet the needs of rural residents and resource-based industries and uses, while minimizing environmental impacts.

Promote adaptive and resilient ecosystems –Identify, map and protect lands and waters that provide important ecosystem functions and services, from the impacts of climate change, development, impervious cover, invasive species and other pests and diseases.

Address climate change – Reduce energy consumption and greenhouse gas emissions, particularly as they relate to energy supply and conservation, natural resources management, land use and transportation.

Goal 3:

Ensure that a desirable quality of life in Maryland’s communities is sustainable.

Visions:

Quality of Life and Sustainability
Infrastructure
Transportation
Economic development

Implementation
Public participation
Housing
Stewardship

Objectives

Promote a safe and healthy environment – Support new or existing economic, social, environmental, and governmental systems in Maryland that enhance the quality of life in Maryland’s metropolitan and rural communities without compromising the land, water, air, natural and cultural resources.

Plan for growth – Strategically plan and implement development, public infrastructure (e.g. water, sanitary sewer, transportation, and other facilities), and resource conservation to maximize healthy lifestyles and to minimize consumption of fossil fuels, greenhouse gas emissions, overuse of water supplies, production of waste, exposure to man-made and natural hazards, and pollution of air and water resources, and to retain the economic, ecological and scenic values of Maryland’s landscapes. Manage Maryland’s investment in public facilities to take advantage of existing assets, maximize the efficient use of resources and existing infrastructure, and phase in the orderly expansion of services.

Promote job growth – Pursue economic development efforts that expand business prospects and enhance employment opportunities for all income levels, targeted to each region’s natural resources, housing opportunities, public services and facilities. Improve access to training opportunities for people of all income levels.

Compete globally - Leverage the power of Maryland’s diversity, its geography, and Maryland’s innovative economy in global trade, next generation manufacturing, biotech, green-tech, clean-tech, cyber security, information technology, and aerospace. Advance a green economy through strengthened coordination, communication and education among State agencies, local government, the general public and the private sector.

Foster a balanced economy – Build on and protect leading drivers of economic growth such as seaports and airports, life sciences, information technology, and federal and military-related economic activity. Encourage State and local policies and practices that support resource-based industries, manufacturing, and service businesses to locate in Maryland, as well as provide an educated workforce. Make it easy to do business and live in Maryland through government (state, local and federal) transparency, predictability and automation.

Best Practices

White Flint

Montgomery County planners embarked on a Smart Growth comprehensive planning effort to transform hundreds of acres of strip shopping centers and surface parking lots in North Bethesda into a mixed-use, compact urban center. The plan will redevelop an auto-dominated suburban strip into an environment where people walk to work, shops and transit. The strategy builds upon transit assets – White Flint Metro Station, nearby MARC commuter line and bus service along Rockville Pike. The North Bethesda Market/White Flint project will include 397 residential units and 200,000 square feet of retail with a variety of sustainable design measures, including green roofs and reduced parking. A pedestrian plaza with public art and new streets and sidewalks separated from automobile traffic will highlight the pedestrian experience.



Create a business friendly environment – Expand opportunities for private investors and developers in order to have an enhanced business environment that has:

- Clear and coherent public goals and objectives for development and community sustainability;
- Predictable and transparent government decision-making processes;
- Streamlined and coordinated State and local regulatory procedures for development;
- Focused State and local resources and incentives;
- Targeted job training and educational opportunities; and
- Supportive policies for entrepreneurship and small businesses.

Promote healthy communities – Improve the access that all residents of Maryland’s metropolitan and rural population centers have to locally produced, high quality, nutritious food; local employment opportunities; natural environments for recreation and enrichment; affordable housing; alternative transportation choices; and high quality schools, without excessive travel, consumption of energy and degradation of the State’s resources.

Expand transportation choices – Provide integrated, efficient, and economical transportation systems that serve the mobility needs of Maryland’s people, goods, and services, and that reduce reliance on automobiles and minimize greenhouse gas emissions. These systems include transportation options that provide mobility, convenience, and safety for all residents, including those who are disabled and/or transit-dependent.

Support affordable housing opportunities – Ensure that an adequate supply of affordable housing is available for all income levels, commensurate with the housing needs in each community and region. Examine housing issues at the State and local level to identify housing production opportunities, barriers to affordability and strategies to achieve desirable residential neighborhoods.

Educate and advocate for public participation in decision-making at all levels – Support public education and outreach that informs residents of the challenges facing our communities, and encourages involvement in creating a more sustainable quality of life.

Collaborate and coordinate government's response – Communicate and collaborate with government agencies at all levels to establish common priorities and achieve shared interests. Create partnerships among government agencies, business entities, and residents to create sustainable communities balancing efficient growth and resource use with resource protection and conservation, as well as the joint use of public facilities. Coordinate State and local government plans, programs and implementation efforts to maximize effectiveness and efficiency to support sustainable communities.

Focus government efforts – Utilize the geographic place designations of PlanMaryland to organize the efforts of State agencies and local governments and maximize the effectiveness of governmental resources. Align State and local capital and non-capital plans, regulations, programs and procedures to achieve a consistent and coordinated strategy that addresses the impacts of growth, the benefits of preservation and the need for a sustained quality of life for all Marylanders.

Monitor and refine implementation – Evaluate progress regularly at the State and local level in terms of achieving PlanMaryland's goals. Make adjustments in implementation strategies as populations, land uses, businesses and economics change. Routinely examine and improve the effectiveness of communication and coordination among State agencies and local governments to achieve the Plan's goals.

Best Practices

Miller's Court

An innovative adaptive re-use of a vacant historic building, Miller's Court now provides affordable workforce housing for teachers and incubator space for education-related businesses and non-profits in a LEED Gold certified building. The equivalent energy of 126 semi-tankers of gasoline and 7,000 tons of solid waste were saved by renovating the structure rather than demolishing and rebuilding it. Leveraged with a \$2.7-million state tax credit, the renovation was named one of the top 5 Smart Growth projects in the nation by the U.S. Environmental Protection Agency in 2010.





4

Defining the Geographic Focus of the Plan

One cannot plan without a map. Implementation of any plan for land use, sustainable resources and communities requires an understanding of the geographic context for implementation. To achieve the visions and goals of PlanMaryland, changes on the ground must occur. The establishment of Planning Areas will help identify where and how State agencies can best deploy their resources and work with the private sector to achieve the objectives of the plan. Planning Areas are intended to build on places already established through local comprehensive planning and zoning. Local zoning maps and ordinances have already established which land uses are allowed, where, and describe other features associated with those land uses. Local governments and State agencies have prepared plans, passed laws and allocated funding toward targeted growth and revitalization, as well as strategic preservation efforts. GreenPrint, AgPrint and GrowthPrint (collectively referred to as “the Prints” and discussed in Chapter 2) are GIS mapping tools that display many of these existing targeted State programs.

Local governments may choose to participate and identify Planning Areas for all, portions or none of the lands within their jurisdiction.

Planning Areas: Locally Proposed Places

PlanMaryland establishes five Planning Area-Place categories for growth, revitalization, land preservation and resource conservation, and maintaining public services and quality of life. These categories are:

1. **Targeted Growth and Revitalization Areas**
2. **Established Community Areas in Priority Funding Areas**
3. **Future Growth Areas**
4. **Large Lot Development Areas**
5. **Rural Resource Areas**

(Planning Areas for Preservation/Conservation that may overlap one or more of the Planning Area-Place categories are described later in this chapter.)

1. Targeted Growth and Revitalization Areas

Targeted Growth and Revitalization Planning Areas will vary in character and intensity of development depending on the region of the State and size of the community. These areas are broadly defined to emphasize mixed-use, higher density residential and business development, historic residential neighborhoods, and employment opportunities, and to better connect residential and business populations to retail, transportation (including public transit), educational, recreational and employment opportunities.

Targeted Growth and Revitalization Areas build on existing Priority Funding Areas (PFAs), which rely heavily on land use and residential density as defining criteria. Sustainable Communities designated under the Sustainable Communities Act of 2010, if identified by a local jurisdiction, will be automatically recognized as part of the jurisdiction's Targeted Growth and Revitalization Planning Area.

The purpose of a Targeted Growth and Revitalization Area:

- Provide focal points for dense, mixed-use growth, economic development, and revitalization
- Accommodate a significant portion of a jurisdiction's non-resource-based residential, business and job growth.
- Increase the supply of desirable residential and commercial development within a jurisdiction; minimize market pressure for growth outside PFAs.
- Integrate transportation and land use to provide a high level of accessibility to goods, services and resources, and to facilitate non-motorized travel, and, where appropriate, transit use.

2. Established Community Areas in Priority Funding Areas

Established Communities in PFAs are locations within a jurisdiction's Priority Funding Area that already provide many Marylanders places to live, work, and play, but for the most part are not intended for substantial growth or revitalization. While PFAs are generally sized for a 20-year planning horizon, the Established Community portion is typically not targeted for State and local government resources to accommodate growth. In some cases State and

Best Practices

Arts District Hyattsville

The Arts District has become a cornerstone of Hyattsville's revitalization efforts. Located on Route 1 and close to the Metro and the Hyattsville Historic District, this mixed-use community features row homes, condominiums, live-work units, shops and a new community center. Gov. Martin O'Malley selected Arts District Hyattsville as one of Maryland's 15 "Smart Sites." The development has been named Best Urban Smart Growth Community by the National Association of Home Builders, the Best Mixed-Use Design by Monument Awards and the Best Green Building by the Maryland-National Capital Building Industry Association.



Best Practices **Kentlands**

Kentlands in Gaithersburg is one of the earliest and most successful models of “New Urbanist” or traditional neighborhood design in the United States. Kentlands includes 1,655 residential units, 2 million square feet of retail and office space and a public town square reminiscent of traditional historic towns. The community also has a system of artificial lakes and jogging trails and is divided into districts named for historic parts of the property such as “Old Farm” and “Gatehouse.”



local government resources may be directed to an Established Community Area to accommodate growth outside of its boundaries. It is important to note that State and local government resources are intended to be directed to Established Community Planning Areas to maintain the existing high quality of life in those areas.

The purpose of an Established Community Area:

- Provide diverse, stable places in which residents and businesses continue to live, work and play and support the stability of property values.
- Maintain the quality of life, and social and economic function, and protect the character of existing residential and commercial neighborhoods.
- Maintain public facilities and services to the Established Community.
- Support the infrastructure and service needs of the community, addressing existing deficiencies, without expanding public facilities and service capacities that encourage growth.
- Promote sustainability enhancements where possible.

3. Future Growth Areas

A Future Growth Area is typically undeveloped land that is not ready to be developed, but that the local government has recognized as a logical place for community expansion within an existing Priority Funding Area or as an addition to it. In municipalities, Future Growth Areas may be parcels identified in the local comprehensive plan's municipal growth element. Local and State resources are not usually allocated to advance development of these areas in the near term, but these areas are included in long-range planning efforts to ensure the continuity of public infrastructure and land-use compatibility.

The purpose of a Future Growth Area:

- Identify areas, either currently located within a jurisdiction or outside, where future growth will take place, but are not currently the primary target for local and State resources.

- Plan for the long-term, phased public and private investment in the community.
- Plan for public facilities and services.
- Provide for the long-term land-use compatibility of the community and identify potential inter-jurisdictional issues.

4. Large Lot Development Areas

Large Lot Development Areas can be characterized as low density, auto-dependent and single-use, with large lot single-family houses being the most prevalent land use. Typically, these areas are not served by public water and sewer, but may require higher levels of public services than agricultural and other resource-based uses. Some of these areas accommodate significant population.

The purpose and intent of the Large Lot Development Area is to:

- Maintain existing levels of public services.
- Minimize the impacts of existing and future Large Lot Development Areas on rural and other resource lands, resources and resource-based industries.
- Discourage expansion of Large Lot Development Areas.
- Limit development-related public facilities and services that support additional Large Lot Development Areas.
- Minimize public funding for projects, programs and services that encourage additional non-resource-based development in Large Lot Development Areas.

Best Practices **Worcester County Land Protection**

Worcester County, whose population has more than doubled since the 1940s, has enacted appropriate agricultural zoning and a variety of programs to protect its agricultural economy, its rural landscape and fiscal stability. The county's comprehensive plan was amended in 2010 with a Priority Preservation Area (PPA) element that targets 200,000 acres, or 64 percent of the county, for preservation. Worcester's goal is to protect 800 acres annually for the next decade using the Maryland Agricultural Land Preservation Foundation, Rural Legacy Program, Conservation Reserve Enhancement Program-Permanent Easement Program and easement donations to the Lower Shore Land Trust.



5. Rural Resource Areas

Rural Resource Areas are typically those areas in a jurisdiction where land preservation and conservation efforts take place. Generally, these are not located in urban areas. They often have resource-based industries such as agriculture or forestry that need to be protected. Other areas may have natural, historic, or cultural resources that may be endangered by development. In many cases, these Rural Resource Areas also have identified one or more Planning Areas for Preservation/Conservation for added resource protection.

The purpose of the Rural Resource Area:

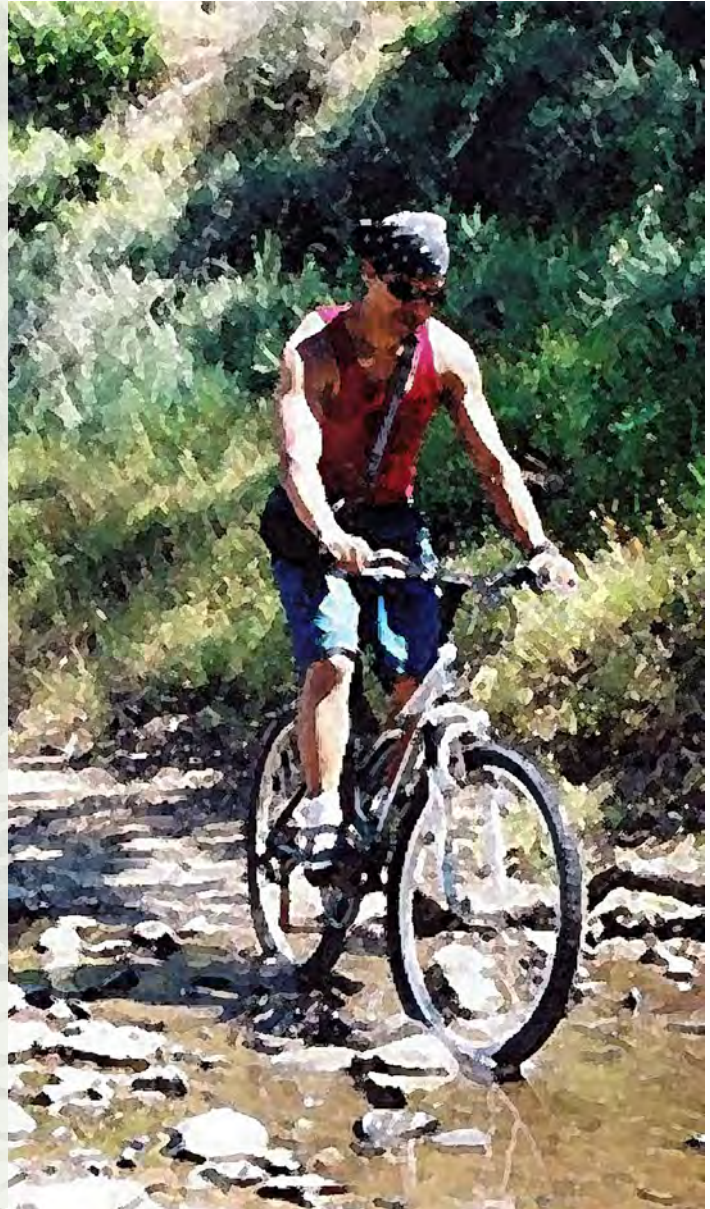
- Identify areas rich in agricultural, natural, forestry and other rural resources.
- Identify areas integral to water supply and quality standards.
- Identify properties with significant terrestrial and aquatic living resources, and habitats.
- Identify areas that support outdoor recreation and tourism.
- Protect the cultural resources and scenic values that define the rural landscape's unique character.
- Limit non-resource based development to levels that will support and sustain the resources.

Planning Areas for Preservation/Conservation

PlanMaryland establishes five Preservation/Conservation Planning Area categories to identify areas to protect and preserve. As with Planning Area-Places, local governments may choose to participate and identify Preservation/Conservation Planning Areas for all, portions or none of the lands within the jurisdiction. These are generally locations where State and local resources and/or regulations are devoted to land preservation and resource conservation. The Preservation/Conservation Planning Areas are:

Best Practices **Cumberland Trails and Bikeway Master Plan**

Cumberland enjoys a unique position in cycling as the meeting point for the C&O Canal Towpath and the Great Allegheny Passage -- regional and national trails that draw cyclists to the city. The Cumberland Trails and Bikeway Master Plan serves as a companion to the city's comprehensive plan. It helps make Cumberland a welcoming tourist destination for bicycle users by promoting services such as "shop & ship" that helps bikers ship home goods bought in town, linking a rural resource area with economic development. The trail was estimated in 2008 as having a positive \$3 million economic impact on Allegany County, and that was prior to its extension into Pittsburgh.



1. Priority Preservation Areas for Agriculture

Priority Preservation Areas (PPA) for Agriculture are identified by local plans as intended for the conservation of agricultural and related rural resource lands. These (mostly) undeveloped lands lie outside Priority Funding Areas. These areas are recognized by the State Agricultural Certification Program. Consequently, State and local programs are already coordinating in many of the ways conceived by PlanMaryland for this category of Preservation/Conservation Planning Areas.

As established through the Agricultural Certification Program, Priority Preservation Areas for Agriculture identified through PlanMaryland are areas:

- Rich in agricultural, natural, forestry and other rural resources that support agricultural resource-based industries and numerous important ecosystem functions and features.
- Of a size that is appropriate to support diverse forms of profitable agricultural production consistent with the local comprehensive plan.
- Supported by local goals in the local comprehensive plan to preserve at least 80% of the undeveloped land remaining in the delineated Area at the time of certification, and to protect the integrity of agricultural operations and industry.
- Governed by local zoning, land use management and preservation tools that stabilize the resource land base, support resource-based industries, and provide enough time to achieve State and local land preservation goals before they are compromised by development.

The purpose of a Priority Preservation Area for Agriculture

- Preserve and protect agricultural lands and related rural resources from the impacts of development.
- Protect resource-based industries in Maryland's rural areas – such as agriculture, forestry, mining, outdoor recreation, tourism, seafood harvesting, renewable energy and other emerging industries – from the encroachment and impacts of incompatible development.

- Limit development on and around rural lands through effective land-use controls, incentives, and innovative funding mechanisms, in order to preserve large contiguous tracts of land to sustain the resources and resource-based industries.
- Ensure that transportation infrastructure in rural areas meets the needs of rural residents and resource-based industries, and does not undermine conservation objectives by encouraging incompatible development.

2. Natural Resource Areas

Natural Resource Areas support terrestrial and aquatic living resources, habitats, and ecosystem functions of regional or statewide significance, as well as human uses of these areas. They include tidal fisheries, bay and coastal ecosystems; non-tidal fisheries, wetlands, rivers and streams; forests and other lands comprising major hubs and connecting corridors of green infrastructure; wildlife and endangered species habitats; and areas targeted for land conservation, public use and recreation.

The purpose of a Natural Resource Area

- Preserve and protect environmentally sensitive and ecologically significant lands, waters and resources from the impacts of development.
- Protect resource-based industries in and around Maryland's natural resource areas – such as agriculture, forestry, mining, recreation, tourism, seafood harvesting, renewable energy and other emerging industries – from encroachment and the impacts of incompatible land uses.
- Ensure that development in and around natural resource areas is minimized through land-use controls, incentives, and innovative funding mechanisms, to protect the long-term integrity of living resources, habitats and biological communities.
- Ensure that the transportation infrastructure in natural resource areas meets the needs of residents and business and does not undermine conservation objectives by encouraging incompatible development.

3. Water Resource Areas

Water Resource Areas are integral to safeguarding a sustainable water supply and consist of:

- Surface water supply watersheds.
- Wellhead protection areas for public water systems using groundwater.
- Sole source aquifers.
- Water management strategy areas.
- Outcroppings of confined aquifers used for public water supply.
- Groundwater recharge areas of other aquifers important as public or private water supply.

The purpose of a Water Resource Area

- Ensure safe and adequate water supply for Maryland citizens.
- Manage activities within drinking water source protection areas to prevent contamination of drinking water supplies.
- Protect public and private water supply, water quality standards and designated beneficial uses established under the Clean Water Act.
- Protect water resource-based industries in Maryland – such as aquaculture, recreation, tourism, renewable energy and other emerging industries – from the impacts of incompatible land uses.
- Appropriately regulate development in water resource areas through effective zoning, development standards and review, and incentives, and through innovative funding mechanisms to preserve important tracts of land that are large and contiguous enough to sustain the water resources.
- Ensure that transportation infrastructure in Water Resource Areas meets the needs of residents but does not undermine conservation by encouraging incompatible development, or result in negative impacts to drinking water quality.

- Protect lands and waters providing important ecosystem functions and services from the impacts of climate change, development, impervious cover, invasive species and other pests and diseases.

4. Historic and Cultural Areas

Historic and Cultural Areas are more than the historic preservation efforts associated with a particular building. Historic preservation should be viewed as a broader approach to growth, redevelopment, investment and land-use decisions. Historic and Cultural Areas can be found in places identified for growth, revitalization, preservation or existing communities where no changes are expected. Historic and Cultural Resource Areas should be identified and protected, while also encouraging local governments and private property owners to make full use and appreciation of these resources. The existence and promotion of these resources often enhance areas and make them more attractive for economic development, tourism, and other private investment.

The purpose of a Historic and Cultural Area

- Encourage State agencies and local governments to achieve the growth, housing, and economic development needs of a community through the maintenance, rehabilitation, and adaptive use of historically, architecturally, and culturally significant buildings, sites, structures, and districts.
- Prioritize and incentivize investment in the rehabilitation of existing building stock.
- Retain, maintain, and enhance the distinguishing designs, materials, uses, and spatial relationships that make the area historically, architecturally, and culturally significant.
- Ensure that new construction within Historic and Cultural Resource Areas complements the character of the existing building stock and environment.
- Minimize or avoid impacts to archeologically sensitive areas and create policies for identifying and recovering such resources when impacts cannot be avoided.

5. Climate Change Impact Areas

Climate Change Impact Areas are lands likely to experience two feet of relative sea level rise by the middle of the century and as much as four feet or more by the end of the century, as determined by Maryland's Commission on Climate Change. These areas also include lands made more vulnerable to storm surge damage or stormwater flooding from extreme weather events, as well as non-coastal areas sensitive to climate change impacts.

The purpose of a Climate Change Impact Area

- Identify, map, preserve and protect critical natural and man-made environments from the impacts of climate change and related natural hazards. Critical natural environments include those that perform important ecosystem functions and services and buffer built environments from the impacts of climate change and related natural hazards. Critical man-made environments include infrastructure, areas of concentrated development, and historical and cultural resources located within vulnerable areas.

Identification Process

The identification process does not require local governments to revise their comprehensive plans beyond the statutory six-year assessment process, nor do local governments have to adopt specific regulations or capital financing to have Planning Areas identified. The Maryland Department of Planning will be working with local governments and State agencies to develop a series of guidelines that describe the appropriate location of Planning Areas. If a local government decides to pursue identification of Planning Areas, they should examine how these local efforts can be coordinated to further the visions, goals and objectives presented in PlanMaryland. This is similar to the effort performed by State agencies as part of the Implementation Strategies to be described in Chapter 5.

To demonstrate the relevance of PlanMaryland Planning Areas to local governments in a clear and concise manner, State agencies will prepare a report on their initial assessment of their major plans, programs and procedures that relate to PlanMaryland, determine how the Planning Areas, collectively or individually, could be used in their agencies, and identify

Best Practices
**Lyric Theatre
Building
Redevelopment**

An accidental fire gutted the former Lyric Theatre building in downtown Frostburg in 2004. All that remained intact was the façade. After the property was donated to the city by the property owner, the city joined with Frostburg State University and a private developer to redevelop the site. The university relocated its Advancement and Foundation offices to Main Street and opened a satellite bookstore. Now along historic Main Street, Frostburg feels more like a college town.



anticipated benefits/incentives when the associated Implementation Strategies are completed. State agencies should note any anticipated conflicts that may arise between different State agencies' application of these Planning Areas as part of the assessment.

Local governments are strongly recommended to identify all applicable Planning Areas within their jurisdiction at one time to facilitate a comprehensive State assessment of their preliminary locally identified

Planning Areas. If a jurisdiction wants to identify all or part of the county or municipality for one or more of the Planning Areas, it will be up to the local government. Regional and metropolitan planning agencies are encouraged to coordinate the efforts of local governments and serve as a forum to establish regional priorities, as well as help local governments identify planning areas and facilitate resolution of conflicts between planning areas, particularly across jurisdictional boundaries.

The purpose of the Planning Area identification process is to recognize that local governments already have targeted areas and may add specific areas in the future for growth, revitalization, or the conservation of one or more priority resources. Locations proposed by local governments as Planning Areas will be reviewed by the State according to a set of Planning Area guidelines. Planning Areas will be confirmed by the Smart Growth Subcabinet in accordance with the process described in Chapter 6. The State will publish updated PlanMaryland Planning Areas maps periodically to depict the location and boundaries of each Planning Area. In the case of GrowthPrint, once areas have been formally identified as Targeted Growth and Revitalization Planning Areas they will also be added with other areas already targeted by State programs for growth and revitalization as shown on the GrowthPrint GIS map.

Identification of Preservation/Conservation Planning Areas is intended to serve multiple purposes; first and foremost the identified Planning Area aligns State and local government efforts to target resources. The identification of Preservation/Conservation Planning Areas also enables State agencies to coordinate their efforts to more effectively and efficiently protect and enhance resources within Maryland. In working with local governments to identify Preservation/Conservation Planning Areas, there may be areas that are critical to a State agency's statutory goals and public obligations. In that circumstance, a State agency itself may propose a Preservation/Conservation Planning Area. State proposed Preservation/Conservation Planning Areas will be considered using the same Planning Area guidelines. The State agency is encouraged to propose the area jointly with local governments. The State agency shall consult with the affected local governments and seek their input. While local government support is strongly encouraged, a State-proposed Preservation/Conservation Planning Area that does not have local government support through its capital and non-capital plans, programs and procedures, may still warrant being identified as a Preservation/Conservation Planning Area.

Ongoing Evaluation of Planning Areas

Identified Planning Areas will be re-assessed during the evaluation of a jurisdiction's comprehensive plan, at least every six years in accord with the review and amendment cycle required in State law. Local governments may at those times or through interim comprehensive plan amendments propose changes in Planning Areas within PlanMaryland as appropriate. As part of the routine local comprehensive plan updating, identified Planning Areas that no longer meet the intended purpose or the Planning Areas guidelines need to be collaboratively re-classified. Changes in identified Planning Areas will be reflected in the regular updates to PlanMaryland and any associated maps.

State and Local Commitments for Planning Areas

The identification of Planning Areas signifies an important starting point to implement PlanMaryland and will engender substantial State and local commitments. State agencies' commitment to implement PlanMaryland will occur through the preparation and execution of Implementation Strategies associated with Planning Areas. Local government's commitment to implement PlanMaryland in the identified Planning Areas is through its comprehensive plan, planning and zoning tools, capital improvement program, and other local implementation mechanisms.

Planning Area Implementation Schedule

Spring 2012: State agencies' final report on assessment of major programs, identification of Implementation Strategies and Benefits of Planning Areas

Spring 2012: Begin first round of Planning Area identifications

December 2012: Complete first round of Planning Area identifications

No sooner than January 2013: Implementation Strategies begin to be used to guide applicable funding, regulatory and other State agency actions to support Planning Areas



5

State Coordination and Implementation

To achieve the goals and objectives of PlanMaryland we must align and coordinate State and local capital and non-capital programs, policies, and procedures for growth, revitalization, preservation and sustainability. State agencies will work with the Maryland Department of Planning to develop Implementation Strategies for PlanMaryland compatible with existing State statutory and public obligations. The Implementation Strategies are also intended to promote coordination and collaboration with local governments to achieve the goals and objectives of PlanMaryland. The Implementation Strategies should utilize the Planning Areas, where appropriate, to strengthen the focus of growth, revitalization and preservation.

As a policy and management tool, PlanMaryland is not intended to articulate the exact programmatic steps that State agencies will take. Rather, each Implementation Strategy contains the conceptual structure of the approach and describes generally the expected benefit from implementing the strategy. The details on how the Strategy is executed will be the responsibility of the lead State agency or agencies.

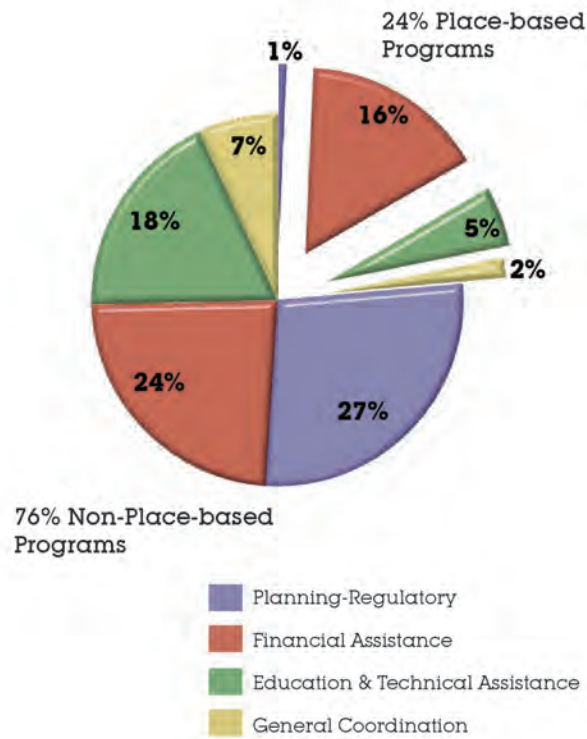
The Implementation Strategies, themselves, do not supersede existing laws and regulations that State agencies must follow. In those instances where a State agency may have discretionary authority associated with an existing policy, program or procedure, the Implementation Strategies represent a coordinated approach to be more effective in promoting growth and preservation in appropriate areas of Maryland. Through the implementation of PlanMaryland, if State agencies identify the need to amend laws or regulations to more effectively achieve the desired public outcomes, those laws and regulations will be subject to the legislative process under the General Assembly and/or the State's rules regarding new or revised regulations.

Agency Assessment

Currently, most State programs are not oriented to specific PlanMaryland geographies. An assessment of nearly 300 programs in 11 State agencies found that only 24 percent of the programs have place-based orientations. (A place-based program has eligibility criteria, benefits or other program features that vary depending on area or location.) The rest of the State programs do not vary criteria, benefits or services based on location. Through the Implementation Strategy process, each agency will have the opportunity to evaluate if more State programs should be aligned geographically to better support PlanMaryland goals and objectives.

During the initial development of the Implementation Strategies, State agencies will evaluate their major plans, programs and procedures to determine how they can be better aligned with the goals and objectives of PlanMaryland, and how the Planning Areas could be used.

Local governments will be given a reasonable period of time to go through the identification process prior to any Implementation Strategies being executed where Planning Areas are used in funding, regulatory or other State agency actions.



Strategy Development

Implementation Strategies should:

- Identify the challenges or opportunities that need to be addressed to achieve the goals and objectives of PlanMaryland.
- Describe the desired public outcomes.
- Generally layout the approach to achieve these outcomes.
- Identify who should be involved in achieving this strategy.

The Implementation Strategies and associated mechanisms will be the principal driving forces for PlanMaryland’s success. They provide the incentives, in the forms of State capital, regulatory, planning, and services that will encourage local government participation to implement the Plan and will also provide many reasons for the private sector to support Plan goals.

For complex issues impacting the economic and physical development of the State that do not fall under the responsibility of an individual agency, the State will develop Implementation Strategies using multi-agency efforts similar to Maryland's recently developed Climate Action Plan. Each agency will bring to the process its own inter-governmental collaborations with local governments and the private sector to ensure these are considered in strategy development. Some of these multi-agency Implementation Strategies, such as a State Housing Plan and a State Transportation Plan, may be so integral to the successful implementation of PlanMaryland that they are incorporated into PlanMaryland as separate Plan Elements. These multi-agency Implementation Strategies will address topics such as transportation, economic development, environmental protection, housing, and infrastructure from a state-wide perspective. Other Implementation Strategies may be directed to inter-jurisdictional issues, such as the coordination of federal, state and local land-use concerns, like promoting compatible land development adjacent to BRAC and other federal facilities.

Some initial Implementation Strategies developed for PlanMaryland will take advantage of existing State programs that:

- Already are aligned (e.g., PFA funding rules) or have already been somewhat re-aligned with PlanMaryland's Goals (e.g., public school construction funding policy outside Priority Funding Areas, provisions in stormwater management regulations that allow requirements for on-site impervious and environmental site design to be satisfied through off-site mitigation according to an approved watershed management plan).
- Are in the process of being better coordinated with PlanMaryland (such as the relationship between Sustainable Communities and Targeted Growth and Revitalization Planning Areas).
- Are poised to become better coordinated with the Plan (Growth Offset strategy under the Bay TMDL Watershed Implementation Plan, and incentives and requirements for sustainable transportation/ land-use practices through air quality and transportation programs).

With stakeholder input (i.e., State agencies, local governments, non-profit organizations, private developers and the public), other implementation mechanisms can be identified to support widespread achievement of Plan goals in a manner that is unique to the character of Maryland's regions, towns and communities.

Guidelines for State Agency Implementation Strategies

In developing the Implementation Strategies and any associated implementation mechanisms, the following general guidelines for preparing Implementation Strategies will be followed:

Each strategy benefits both the original public purpose of the relevant program or procedure, and supports the goals of PlanMaryland.

Conflicts between established program procedures and use of the program to support Plan goals are resolved in ways that are compatible with existing statutory guidelines and fulfill existing public obligations governing the relevant program.

Parties or interests that may be affected by re-aligning the relevant program are involved in and have the opportunity to influence strategy development.

In formulating and carrying out strategies, steps are taken to resolve or minimize conflicts and potential negative impacts on public and private interests, as well as ensure fair distribution of services and benefits to all people.

Depending upon the Implementation Strategy, State agencies should use the following issue-specific guidelines as they align and coordinate their plans, programs, and regulations.

Guidelines for Agriculture and Rural Resource Lands

Maximize the return on public investment in land preservation by investing strategically where preservation is supported by local goals and land use practices.

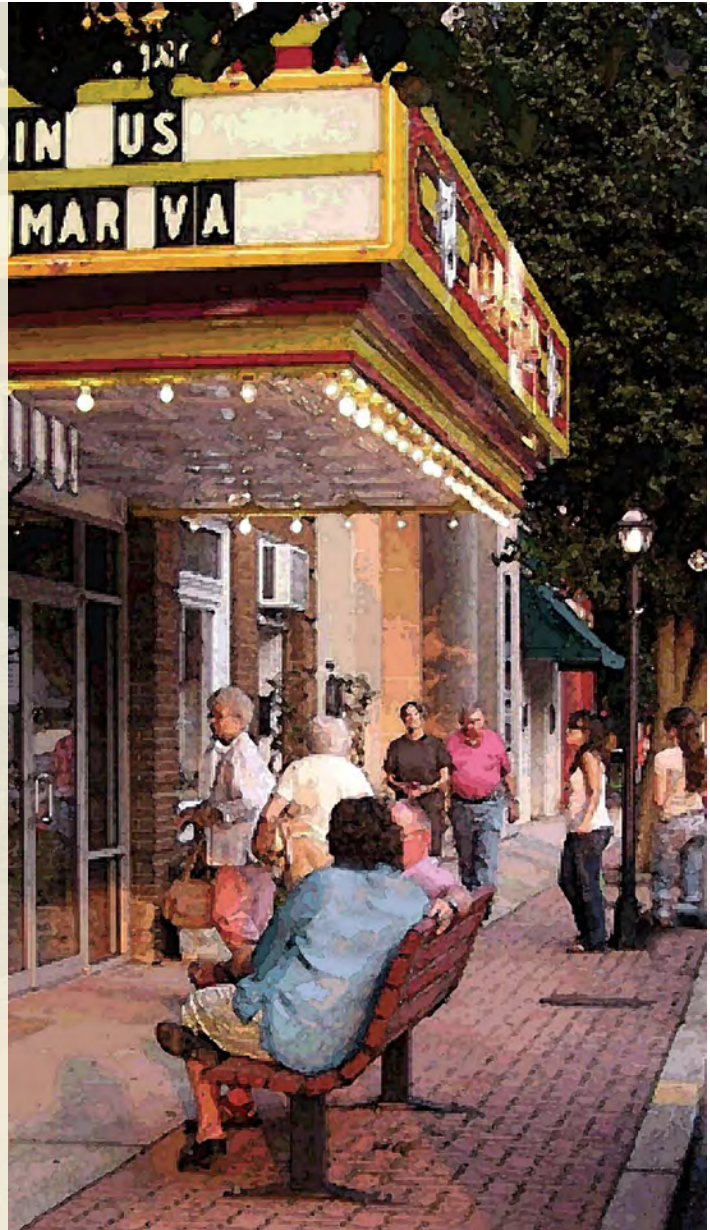
Where appropriate, resource protection should be complementary to an overall economic development strategy that recognizes the need for employment in rural communities.

Guideline for a Sustainable Transportation/Land Use System

Better coordinate transportation and land-use decision-making to maximize efficiencies and infrastructure investment and to support Maryland's environmental, social and economic sustainability.

Best Practices **Mar-Va Theatre Historic Preservation**

The Mar-Va Theater was built in 1927 on the main street of Pocomoke City as a vaudeville theater capable of seating 720 people. In its heyday, the Mar-Va was played by many famous performers, which included some old-time cowboys such as Tom Mix, Roy Rogers, Hop-a-Long Cassidy and Smiley Burnett. Rehabilitation of the Mar-Va has been funded by a variety of sources including the Maryland Historical Trust, the National Trust for Historic Preservation, and others. Today, the theater is operated by the Mar-Va Performing Arts Center, Inc., whose goal is to create a unique and comprehensive arts center that will enhance the cultural, economic and educational life of the community for many years to come.



Best Practices **Carroll Creek**

This dramatic redevelopment and revitalization project in Frederick started as a flood control project to reinvigorate economic growth. More than \$150 million in private investment is planned or underway for a mix of new construction, infill and historic renovation. When completed, more than 400,000 square feet of office space, 150,000 square feet of commercial and retail space and nearly 300 residential units are expected to be built. About \$11 million in improvements have been completed to date, including brick pedestrian paths, water features, planters with shade trees and plantings, pedestrian bridges and a 350-seat amphitheater for outdoor performances. Carroll Creek was honored as the 2007 Project of the Year by the Maryland chapter of the American Planning Association.



Guidelines for Water, Sewer, Schools and Other Public Facilities

Maximize Maryland's environmental, social and economic sustainability through State supported infrastructure and public facilities.

Encourage greater local government and private sector investments that support land-use patterns that further PlanMaryland's goals and objectives for identified growth areas.

Maximize, to the extent possible, public return on investments in water, sewer and other public facilities.

Maximize State investment in community buildings and public facilities, such as schools and libraries, by coordinating location decisions as early as possible between local and State entities.

Encourage local government and school district collaboration on school siting and planning to ensure that schools are located in close proximity to residential neighborhoods and are accessible by safe bicycle and pedestrian paths.

Strategically locate State investments in schools and other public facilities to foster community identity and vitality in a manner that complements the historic character of these communities.

Guidelines for Water and Natural Resources Protection

Protect important aquatic and terrestrial natural resources.

Minimize new or increased pollution from growth and development.

Protect sources of drinking water supply.

Make conservation of existing natural features and systems a high priority in Natural Resource Planning Areas.

Where there is overlap or conflict between Targeted Growth and Revitalization Areas and Preservation/Conservation Planning Areas, look for balanced resolutions that achieve the public objectives for conservation and development.

Guidelines for Reducing Climate Change Impacts

Promote the safety and well-being of Maryland's citizens by avoiding infrastructure capacity improvements that increase human exposure to natural disasters.

Avoid assumption of the financial risk of development and redevelopment in vulnerable or hazardous coastal areas.

Ensure wise and sound public investments in Maryland's sea level rise inundation zone. However, appropriate conservation efforts along Maryland's shorelines should not preclude important investment in the State's water-dependent infrastructure, such as our seaports.

Analyze climate change impacts on historical and cultural resources and prioritize necessary recovery, documentation, and protection efforts.

Protect critical natural environments from impacts of climate change (i.e., sea level rise, temperature increase, precipitation change) and climate-induced natural hazards.

Guidelines for Economic Development

Advance knowledge-based and technology-driven industries, particularly information technology and life sciences.

Support regional and economic diversity through investment in Maryland's traditional sectors of agriculture, manufacturing and tourism.

Target physical infrastructure investments that jump-start new economic activity and advance economic competitiveness of Maryland.

Increase predictability, transparency and efficiency of the decision-making processes for development projects in PlanMaryland-identified Targeted Growth and Revitalization Planning Areas. Reduce costs of development through the elimination of unnecessary or inefficient regulatory practices.

Promote regulatory flexibility that allows State agencies to promote development, resource conservation, and a sustainable quality of life consistent with Plan goals and objectives, in ways that are compatible with agencies' existing statutory obligations.

Guidelines for Community Design

Promote community design through the combined efforts of State and local governments to create economically dynamic, attractive and sustainable places for people to live, work and play.

Encourage the development of design guidelines to address the mix of land uses and connectivity of streets, sidewalks, bike paths and transit, where

applicable, to link homes and workplaces to shopping, schools and other public facilities.

Preserve communities' unique sense of place by encouraging preservation of historical and cultural resources, context-sensitive new construction and a holistic, place-based approach to community design.

Guidelines for Social Equity, Safety and Education

Promote social equity (equal opportunity, in a safe and healthy environment), safety and education insofar as possible in land use, development and preservation matters.

Promote planning that makes schools, libraries, parks and other public facilities readily accessible to everyone, especially low-income residents and others who have few transportation options.

Guidelines for Housing and Neighborhood Revitalization

Promote affordable housing opportunities for all incomes through the combined efforts of State and local governments to achieve economic health and neighborhood stability.

Promote and preserve housing opportunities and create innovative community development initiatives to meet the challenges of a growing Maryland and ensure that all Maryland citizens have the opportunity to live and prosper in affordable, desirable and secure housing in thriving communities.

Foster and support a full range of housing choices near high quality schools and other amenities that enhance the quality of life for residents.

Encourage the preservation and adaptive reuse of historic buildings and ensure that new construction in historic areas is context-sensitive.

Guidelines for the Sustainability of Energy, Food and Water

Promote sustainable energy use and generation, recognizing however that energy generation, transmission and distribution remain subject to Federal, State and local rules and are not limited by this Plan.

Strengthen local food systems so that all residents of the State have access to safe, nutritious, and affordable local food produced in a way that protects the environment, enhances the economy, encourages land preservation, and improves nutrition, with particular emphasis on places that are underserved by supermarkets and other food vendors.

Protect water quantity and quality within reservoir watersheds and the groundwater recharge areas of confined and unconfined aquifers used for water supply.

Recognize historic preservation as a sustainable practice, prioritizing rehabilitation and adaptive reuse of existing structures as a strategy for responsible growth.

Guidelines for Capital Budgeting

Use State investment in capital improvements to encourage development, redevelopment and economic growth in locations best suited to accommodate growth and achieve PlanMaryland goals and objectives.

Minimize State investments that may compromise or damage historic, cultural, and natural resources or environmentally sensitive lands. Encourage use or rehabilitation of available existing historic buildings where practicable and feasible when allocating State resources for capital projects.

State-funded capital improvements for new construction will be guided by departmental plans and consistent with Plan Maryland goals. To the extent practicable State capital investments should be made according to the following priority sequence:

- 1. Protection of public health and safety.**
- 2. Infrastructure maintenance and system preservation.**
- 3. Redevelopment, enhancement improvements and capacity expansions in Targeted Growth and Revitalization Planning Areas.**
- 4. Enhancement improvements in Established Community Areas in Priority Funding Areas.**
- 5. Enhancement improvements in communities outside PFAs.**

Best Practices **Avalon Theatre**

Built at a cost of \$100,000 in 1921, The Avalon Theatre originally boasted leaded glass, a second-floor ballroom, a 300-tube pipe organ and an 18-foot dome complete with 148 lights. Renovated in 1934 under new ownership, the exterior was changed to the Art Deco style that appears today. The Avalon became a well-known movie house, hosting three world premier events. After 64 years, however, the movie house closed in 1985 and began to fall into disrepair. Under local leadership, the Avalon was restored with a \$1.3 million renovation and sold as a performing arts center. When the arts center was unsuccessful, the theater was sold at auction in 1992 to the only bidder – the Town of Easton. Since 1994, the Town leased the theater to the Avalon Foundation, a non-profit headed by local residents. The Avalon Theatre has remained a cornerstone for the community.



State capital investments should be based on a long-range strategic plan that considers purpose, future needs, and efficient delivery of services to achieve the goals and objectives of the Plan. However, State capital improvements will, from time-to-time, occur outside of identified growth areas, established communities and outside of Priority Funding Areas. These investments remain eligible for an exemption as defined by law and, to the maximum extent practicable, include measures to preclude or minimize induced growth resulting from the capital investment.

Guidelines for Open Space in the Built Environment

Maximize opportunities for physical activity by promoting safe, convenient, and connected walking paths, trails, and bikeways as well as neighborhood-based park and recreational options.

Promote policies that support open space, recreation and other opportunities for physical activity through the combined efforts of State and local government.

Coordination and Collaboration by State and Local Governments

The goals and objectives of PlanMaryland will be achieved with the cooperation and active participation of local governments to follow through with the Implementation Strategies that come out of this process. Regional and metropolitan planning agencies will also play an important role in developing, coordinating and implementing PlanMaryland's Implementation Strategies. PlanMaryland Implementation Strategies will take place under the auspices of the Smart Growth Subcabinet, as discussed further in Chapter 6. State agencies will work to resolve conflicts that may be identified and realign programs or procedures to support the goals and objectives of the Plan, and report these conclusions to the Smart Growth Subcabinet. If necessary, the Smart Growth Subcabinet will consider unresolved issues and recommend solutions.

It should be noted while Chapter 5 focuses predominantly on State agencies realigning their plans, programs and procedures to achieve the goals and objectives of the Plan, it is equally important that local governments take steps to align their policies, programs and procedures for PlanMaryland to be successful. As part of each Implementation Strategy that impacts local governments, the strategy should include efforts to encourage local governments to be a partner in achieving PlanMaryland's goals and objectives. Implementation of PlanMaryland does not and should not usurp or undermine local planning and zoning authority. The Plan provides State agencies a framework to re-align and improve State plans, programs and procedures to achieve the goals and objectives of PlanMaryland and is not intended to be used by State agencies to contradict existing state regulations and permitting procedures.

Schedule for Implementation Strategies

The implementation of PlanMaryland recognizes that each State agency's program assessment will be a significant undertaking occurring over several years. During the first stage of Implementation Strategy development, the lead State agencies with primary land and infrastructure responsibilities will be asked to report on their initial assessment of major plans, programs and procedures related to PlanMaryland. Preparation of this report by these State Agencies will be submitted to the Smart Growth Subcabinet prior to identifying any Planning Areas. This report will include a listing of all Implementation Strategies anticipated to be prepared prior to a first Round of Identifying Planning Areas.

Schedule for Development of Implementation Strategies:

Begin Spring 2011: First round of Implementation Strategies.

Spring 2012: Final reports by State agencies on assessment of major programs, outline of Implementation Strategies and Planning Areas.

December 2012: Culminate first round of Implementation Strategies, submitted to Smart Growth Subcabinet for review and acceptance.

No sooner than January 2013: Execution of Implementation Strategies where Planning Areas are used in funding, regulatory or other State agency actions.

Begin January 2013: Second Round of Implementation Strategies.



6

Management and Tracking Progress

Management of PlanMaryland's implementation will occur under the auspices of the Smart Growth Subcabinet, with oversight and advice from the Maryland Sustainable Growth Commission. Recognizing the importance of local governments to the successful implementation of the Plan, the Plan's management structure also includes a collaborative outreach and review process coordinated by the Maryland Department of Planning and monitored by the Sustainable Growth Commission.

Role of the Sustainable Growth Commission

The Sustainable Growth Commission served an important advisory function during the initial preparation of PlanMaryland, and will play an even more critical role advising the Smart Growth Subcabinet throughout the Plan's implementation. Section 5-706 of the State Finance and Procurement Article points out that the Sustainable Growth Commission will "advise on the content and preparation of the State development plan, State transportation plan, and State housing plan and the implementation of these plans, including the relationship of these plans with local land use plans." Given its diversity of perspectives and breadth of knowledge, the Commission will provide the Smart Growth Subcabinet a comprehensive and effective sounding board to explore the issues identified as the Plan is put into action.

The Commission will provide guidance on the Plan's implementation by reviewing the efforts of the Smart Growth Subcabinet, State agencies, counties and municipalities. It is expected that the Commission will establish one or more standing workgroups that will monitor the Plan's implementation and make recommendations on proposed Implementation Strategies.

The Maryland Department of Planning (MDP) will report at least annually to the Commission on the Plan's overall implementation, and will provide interim progress reports throughout the year. The Commission will in turn advise the Smart Growth Subcabinet regarding needed adjustments to PlanMaryland and the implementation process.

Role of the Smart Growth Subcabinet

The Smart Growth Subcabinet is responsible for managing the Planning Area identification process and development of Implementation Strategies, the two essential components of PlanMaryland. The Planning Areas and the Implementation Strategies will provide the means to geographically and programmatically align the State agencies and to coordinate with local

governments and the private sector to achieve the goals and objectives of PlanMaryland. The Subcabinet will provide the leadership necessary to advance a collaborative effort among State agencies and local governments, directing available resources to effectively promote smart growth.

Some of the primary duties of the Smart Growth Subcabinet related to PlanMaryland are:

- Coordinate information on specific institutional approaches to develop effective Implementation Strategies to achieve PlanMaryland goals and objectives.
- Disseminate information to agencies and local governments for application through their own capital and non-capital plans, programs and procedures.
- Collaborate at the inter-agency level to ensure the success and ongoing implementation, monitoring and updating of the Plan.
- Market, educate, and advocate for PlanMaryland within each State agency.
- Design inter-agency guidance and tools to implement PlanMaryland.
- Facilitate resolution of problems or conflicts that impede Plan implementation.

The Subcabinet will also promote an outreach effort to create a network of intra-agency participants to ensure effective two-way communication within State Government about the Plan and how it can be improved. Participants from local governments, the private sector, interest groups, and the general public will be invited to help share knowledge and insights. Other outreach efforts, such as the Planning Director's Roundtable, will be used to disseminate information and obtain feedback.

Implementation Strategies

The Smart Growth Subcabinet will facilitate the evaluation of proposed Implementation Strategies to ensure that the most effective strategies are being pursued to achieve the Plan's goals and objectives. Where

Best Practices

Carroll's Community Comprehensive Plans and Town/County Agreements

Carroll County and its eight incorporated municipalities have a long-standing tradition of interjurisdictional cooperation. The county and its municipalities routinely collaborate on the county's Community Comprehensive Plans and the annual renewal of Town/County Agreements. These agreements facilitate an open relationship between the county and the municipalities and provide ongoing regional collaboration that furthers the goals of Smart Growth.



Best Practices Edmonston's "Green Streets"

The Green Street project transformed Decatur Street, Edmonston's main residential street, into an environmentally sensitive thoroughfare. The project utilizes the best in sustainability practices -- from the tree canopy overhead to the stormwater system underground. By virtue of the town's location, straddling the Anacostia River, and having experienced years of devastating flooding from poor environmental practices, the Mayor, Council and residents came to a consensus to reverse these trends and build a "Green Street." The project makes a positive contribution to the environment, especially local rivers and the Chesapeake Bay.



appropriate, the sponsoring State agencies may reach out to local governments and other stakeholders to determine the impact and effectiveness of the proposed Implementation Strategies. The Smart Growth Subcabinet will take final action to accept the Implementation Strategy, or will request that the proposed Implementation Strategy be returned to the sponsoring State agency or agencies for further revisions.

Planning Area Identification Process

The Maryland Department of Planning (MDP) will be the Smart Growth Subcabinet's coordinating agency to help local governments identify Planning Areas using the collaboratively developed set of Planning Area Guidelines. MDP will also facilitate the distribution of information that local governments may need in picking out prospective Planning Areas, and provide feedback from State agencies on Planning Areas being considered.

The Smart Growth Subcabinet will initiate the Planning Area identification process upon receipt of a proposal from a local government or State agency, following these steps:

State agencies will review prospective Planning Areas based on established Planning Area guidelines. If additional information is needed, MDP will coordinate with State agencies to obtain it from the proposing local government or State agency.

The Subcabinet will consolidate and compare the reviews and recommendations from the State agencies on proposed Planning Areas to address any conflicts or inconsistencies. The Subcabinet review will consider:

- Consistency with the Planning Area Guidelines.
- State agencies' assessments and recommendations.
- Evaluation of consistency in identifying the proposed Planning Area with previously identified Planning Areas.
- Determination of whether the State and/or the local capital and non-capital plans, policies, ordinances, regulations, and procedures are likely to support achievement of PlanMaryland's goals and objectives for the proposed Planning Area(s).

Local governments will be informed of the Subcabinet's review and have an opportunity to provide input to the Subcabinet prior to the Planning Area identification decision.

The Smart Growth Subcabinet will consider the reviews and recommendations, along with any local government input, in making its determination on the Planning Area identification.

Based on initial experience of the Planning Area identification process, the Subcabinet may establish a formal protocol.

Maintaining Consistency and Coordination Over Time

To maintain focus and ensure consistency and coordination over time, PlanMaryland proposes to establish a Consistency Review Process that the Smart Growth Subcabinet can use to evaluate PlanMaryland's implementation by State agencies. As part of the Consistency Review Process, the Smart Growth Subcabinet should establish a procedure to investigate concerns raised that State policies and procedures may appear contrary to the goals and objectives of the Plan. This consistency review process is not directed to the evaluation of local government comprehensive plans. The structure and process used to conduct the consistency review will be developed as one of the first Implementation Strategies for PlanMaryland.

Ongoing Collaboration and Outreach

A number of public participation techniques will be used based on the subject matter and the potentially impacted community. This includes an ongoing collaboration among the members of the Smart Growth Subcabinet and representatives of counties and municipalities throughout Maryland. Regardless of the approach, the public participation process must be as open and transparent as possible.

PlanMaryland Completion and Amendment Process

Once the Planning Secretary has determined that PlanMaryland is complete pursuant to Title 5 - State Planning, Subtitle 6 – State Development Plan of the State Finance and Procurement Article, the Plan will be transmitted to the Governor and filed in accordance with Section 5-605. Subsequent amendments to PlanMaryland will also be reviewed and filed in accordance with Section 5-605.

Measuring Performance

The Smart Growth Subcabinet will prepare a yearly progress report that captures the impacts of decisions by State agencies and local governments over both the preceding year, and cumulatively over multi-year periods. Much of the information reported by the Smart Growth Subcabinet will have been collected by State agencies and local governments throughout the year for various other reporting purposes. PlanMaryland's reporting process will avoid additional or redundant data collection and evaluation, utilizing to the extent possible legislatively mandated reporting and existing reporting systems – such as local planning commission annual reports and perhaps a "SmartGrowthStat" version of StateStat. StateStat is the performance-measurement and management tool that Governor Martin O'Malley implemented to make State government more accountable and efficient.

Determining all appropriate metrics that should be used to measure PlanMaryland's progress cannot be identified before the Plan implementation begins for a number of reasons:

Targets should be set after a baseline of data has been collected. Some of the potential metrics will utilize information collected during the Planning Area identification process, based on the Planning Area Guidelines. Other metrics may be identified through the initial State agency assessments associated with the Implementation Strategies. Over time, as data are collected and evaluated, it will be appropriate to set targets for the measures being evaluated.

The measures are expected to evolve. Performance measurement is not a static process but one that evolves as new issues arise and data and technology improve. However, the Smart Growth Subcabinet will strive to maintain consistency in the reporting procedures and to minimize unnecessary changes to measures.

Based on these considerations, the measures used to assess PlanMaryland's progress can be found in PlanMaryland's Metrics Guidelines, which will be updated from time to time based on available information. Both the Metrics Guidelines and Smart Growth Subcabinet's annual progress report will adhere to the following principles of performance management. Reporting will:

- Be organized around Plan goals and objectives.
- Be measured both statewide and locally.
- Include an update on the Planning Areas.
- Include an update on Implementation Strategies.

Chapter 1: Introduction

- 1 1959 State Planning Act, Maryland Annotated Code, Article 88C § 2 (former)
- 2 1974 Land Use Act, Maryland Annotated Code, Article 88C § 2 (former)
- 3 2009 Smart, Green and Growing Act, Maryland Annotated Code, Article 66B § 1.01 and State Finance and Procurement Article § 5-7A-01

Chapter 2: Trends and Land Use Implications

- 1 Cost of Commuting Indicator, Maryland Genuine Progress Indicator (GPI), 2011 (<http://www.green.maryland.gov/mdgpi/25.asp>)
- 2 www.sha.state.md.us/oppen/vehicle_Miles_of_Travel.pdf
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- 4 229 million daily VMT * 365 days.
- 5 See Section G of this chapter, Agricultural Lands, for more information.
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- 8 Muro, M. and Puentes, R. 2004. Investing in a Better Future: A Review of the Fiscal and Competitive Advantages of Smarter Growth Development Patterns.
- 9 www.mdifun.org/AboutMDTourism/Documents/Annual_Report_2011.pdf
- 10 See Maryland's Genuine Progress Indicator for more information: <http://216.230.107.66/mdgpi/index.asp>
- 11 Excludes forested land
- 12 Ewing, Reid, Bartholomew, Keith, etc. "Growing Cooler – The Evidence on Urban Development and Climate Change." The Urban Land Institute. October, 2007.
- 13 Maryland Association of Historic District Commissions
- 14 Buchell, R.W., Downs, A., McCann, B., and Mukherji, S. 2005. Sprawl Costs: Economic Impacts of Unchecked Development. Washington, DC: Island Press.
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Countryside Preservation: Maryland Department of Planning

Purple Line master plan: Maryland Transit Administration

The Plan for the Valleys: Wallace, Roberts & Todd

Easton Hospital Center: Shore Health Systems

Bel Air Reckford Armory Redevelopment: Public Domain

White Flint: Montgomery County Planning Department

Miller's Court: preservationnation.org

Arts District Hyattsville: Hyattsville Community Development Corporation

Kentlands: EPA, Office of Smart Growth

Worcester County Land Protection: Natural Resource Conservation
Service

Cumberland Trails and Bikeway Master Plan: Public Domain

Lyric Theatre Building Redevelopment: Maryland Department of
Planning

Mar-Va Theatre Historic Preservation: Mar-Va Theatre website

Carroll Creek: Tim Jacobson

Avalon Theatre: Richard Lippenholz, courtesy of Preservation Maryland

Carroll's Community Comprehensive Plans and Town/County Agreements:
Carroll County, Maryland

Edmonston's "Green Streets": Town of Edmonston

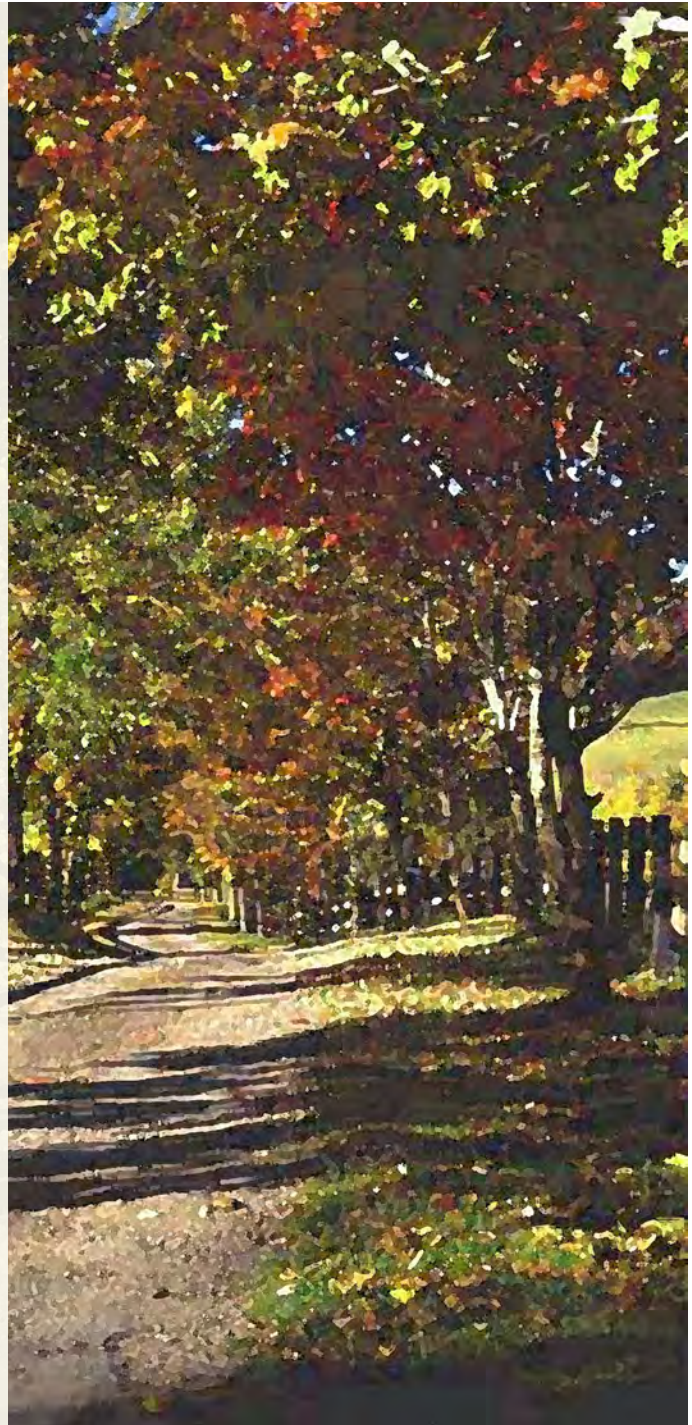
"We stand now where
two roads diverge.
But unlike the roads
in Robert Frost's
familiar poem, they
are not equally fair.
The road we have
long been travelling
is deceptively easy, a
smooth superhighway
on which we progress
with great speed, but at
its end lies disaster. The
other fork of the road
-- the one "less traveled
by" -- offers our last, our
only chance to reach a
destination that assures
the preservation of our
earth."

Rachel Carson

"Silent Spring"

1962, Silver Spring,

Maryland





Smart, Green & Growing

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Martin O'Malley, Governor
Anthony G. Brown, Lt. Governor



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