

DEVELOPMENT PATTERN/ LAND USE

*Subregion 6 Preliminary
Master Plan and Proposed
Sectional Map Amendment*

Land use and development are a key component of an area's sustainability, particularly as they impact the environment and create the need for particular types of transportation systems, other types of infrastructure, and public facilities. The development pattern defines how much land is developed for residential, employment, and institutional purposes, how much is conserved for agricultural and other natural resource uses, and how much is preserved for environmental, scenic, and recreational purposes.

The following goals provide a basis for planning for a more sustainable development pattern in Subregion 6:

- ❖ Use county resources wisely by recognizing the interconnections among land use, transportation, the natural environment, public health, well-being, and equity. This includes adopting a holistic, long-term view of our investments that includes social and environmental costs, not just short-term economic considerations.
- ❖ Require the efficient use of tax revenues; avoiding as much as possible the need to increase public expenditures to build and service new infrastructure when the fiscal demands for maintaining and improving existing infrastructure are already tremendous.
- ❖ Maintain and improve the diversity of living, employment, mobility, and recreational options available to current and future residents in the subregion through decision-making that supports and reinforces the development goals of the General Plan across tiers.
- ❖ Promote a development pattern that improves mobility options by making transit service more accessible, preserves irreplaceable agricultural and natural resource lands, concentrates commercial centers, and sustains a diverse and vibrant economy.
- ❖ Continue to create and offer incentives to reward land owners for conservation and stewardship of critical resource lands; recognizing the benefits that these behaviors provide to the current and future generations.

Map 7 (in the back of this book) is the Future Land Use Map for Subregion 6. The map has several purposes.

- ❖ It reflects land use policies that provide the basis for a more refined classification of land into districts for zoning purposes that regulate the use of land (that is, what uses can occur where and under what conditions), as well as the subdivision and development of land.

FUTURE LAND USE MAP

- ❖ It serves as a guide to the county’s future desires and interests for land development, preservation and conservation. Where land is not currently zoned in accordance with the future land use map, the map shows where applications for floating zones or comprehensive design zones would be supported provided the proposal was in accordance with the subregion plan’s goals and objectives.
- ❖ The map includes the boundary dividing the Developing Tier and Rural Tier. This line is an important policy line affecting, for example, eligibility for public water and sewer service and transportation and fire standards under the county’s APF requirements.
- ❖ It serves as a guide to decision-makers regarding public facilities—primarily water and sewer—as well as schools, economic development, and transportation. Maps showing existing and future public facilities are in the Public Facilities chapter.

The Future Land Use Map divides the region into ten land use designations (Table 7).

TABLE 7 FUTURE LAND USE MAP DESIGNATIONS

Land Use Designation	Intent/Types of Land Uses
Commercial	Retail and business areas, including employment uses such as office and service uses.
Industrial	Manufacturing and industrial parks, warehouses and distribution. May include other employment such as office and service uses.
Institutional	Uses such as large military installations, colleges, schools, and churches.
Mixed-Use	Areas of mixed residential, commercial, employment, and institutional uses. Residential uses expected to dominate overall land use in the designated area and may include a range of unit types.
Public and Private Open Space	Parks and recreation areas, publicly owned natural areas (such as state forests).
Rural	Agricultural land (cropland, pasture, farm fields), forest, very low-density residential. The county’s intent is for these areas to remain rural and to conserve these areas’ natural resources, primarily forest and forest resources, for future generations. New residential development is permitted at a maximum density of one dwelling unit per five acres.
Residential Low	Residential areas of up to 3.5 dwelling units per acre. Primarily single-family detached dwellings.
Residential Medium	Residential areas between 3.5 and eight dwelling units per acre. Primarily single-family dwellings (detached and attached).
Residential Medium-High	Residential areas between 8 and 20 dwelling units per acre. Mix of dwelling unit types including apartments.
Residential High	Residential areas over 20 dwelling units per acre. Mix of dwelling unit types including apartments

RURAL TIER

The Rural Tier comprises almost 70 percent of Subregion 6 and is the largest contiguous rural area in the county, containing much of the county's remaining farmland as well as forest land and other environmental, scenic, and historic resources. It is under development pressure due to its strategic location close to existing or planned regional centers including Washington, D.C., Annapolis, Bowie, Largo, and Westphalia; the easy access to major highways, especially US 301 and MD 4; and the regional traffic these roads carry. New policy incentives and regulatory controls are needed to conserve the remaining agricultural and other natural resource lands that are increasingly subject to fragmentation within the Rural Tier.



Nearly all of the Rural Tier is designated rural on Map 7, reflecting the county's goal to preserve rural resources, character, and open space. Some large tracts are designated institutional, such as the Western Branch Wastewater Treatment Plant (WWTP), USAF Globecom site, and Chalk Point Power Plant. A few small, scattered areas such as in Aquasco, Baden, and Croom, have designated commercial uses to serve the needs of residents in those communities. In the future, these communities could benefit from a more in-depth look at their existing market conditions, opportunities for small-scale economic development projects that complement rural character, and ways to integrate these areas with the promotion of the heritage and agritourism themes identified later in this plan.

Map 7 also shows public and private open space. In the Rural Tier these spaces are primarily land in the Patuxent River Park and Cedarville State Forest.

This chapter also identifies land use policies to allow agriculture to continue and flourish in the subregion. The Economic Development chapter discusses other policies and strategies that are needed in the areas of economic and business development and support, strategic planning, and marketing.

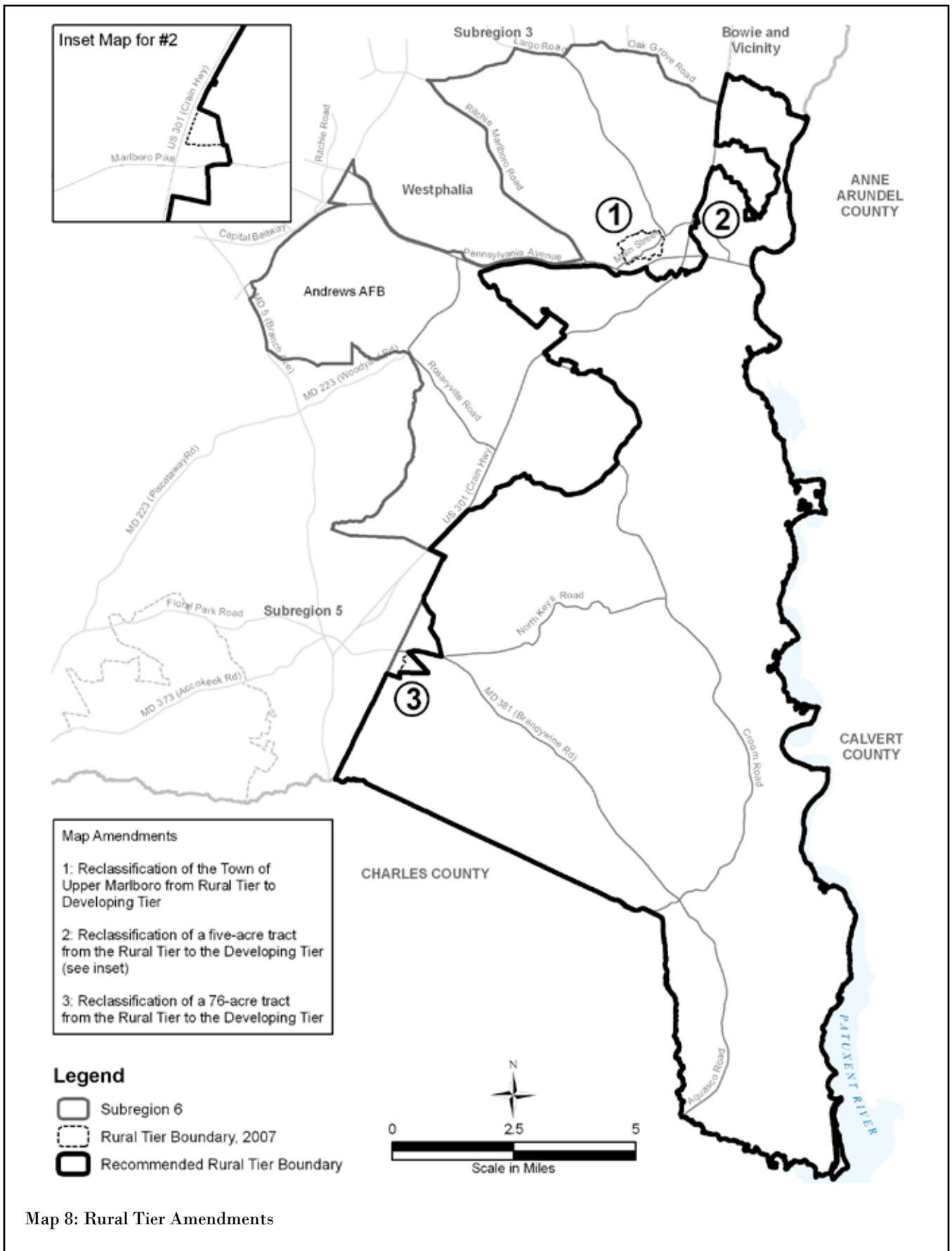
The 2002 General Plan established the boundaries for the Rural Tier. As noted earlier, the Rural Tier and Developing Tier each have their own set of General Plan policies and priorities that are intended to guide growth and development by controlling, for example, eligibility for public water and sewer service, investments in transportation and transit, and more. The plan placed the Town of Upper Marlboro in the Rural Tier. As a part of this master plan process review, it has become evident that the town, which is served by public water and sewer, does not meet the criteria for Rural Tier designation. This master plan supports the recommendations

Modifications to the Rural Tier

outlined in a recently completed study done in partnership with the Town of Upper Marlboro, the Upper Marlboro Town Vision and Action Plan, for maintaining Upper Marlboro's small town character and rich heritage, while also promoting compatible redevelopment and infill development to increase the tax base. At the same time, the town's existing infrastructure, not to mention its future vision for itself, make its current classification as part of the Rural Tier inconsistent with General Plan policies.

During preparation of the subregion plan an analysis was made of removing properties from the Rural Tier to the Developing Tier. It was determined that minor changes to the tier boundaries could be supported (Map 8); changes that resolve problems with properties that are split between tiers and changes to reflect properties that are served by public sewer. Other than these, the plan does not support changes to the Rural Tier area for the following reasons:

- ❖ Making the Rural Tier smaller will increase pressure on remaining resource lands. Maintaining the connectivity of the resource and fragile lands that remain is critical to reinvigorating the rural economy, strengthening communities, and preserving the diversity of options that current and future residents have for housing and recreation.
- ❖ Climate change and energy needs require communities to reassess how they use land resources. Rural land near major urban areas is an increasingly valuable resource and commodity for food and energy production and, potentially, for offsets for development activities, emissions, or pollution. Given its value, reductions in rural land should only be made for the most compelling reasons.
- ❖ There is a large amount of approved development in the pipeline in the Developing Tier portion of Subregion 6 and other parts of the county. In addition, there are significant opportunities for infill and redevelopment in and around the county's General Plan centers, most of which are serviced by a world-class transit system.
- ❖ Moving land from the Rural Tier to the Developing Tier makes it eligible for public sewer. Most if not all the sewer flow would be to Western Branch WWTP which will exceed its current capacity based on planned and pipeline development (see Public Facilities chapter). This subregion plan recommends caution in changing land use designations that would increase demand for sewers because of the uncertainties surrounding the effects of Maryland's nutrient caps on WWTP discharges and the time it may take to expand capacity if and when it is needed.
- ❖ This subregion plan's policy is stronger support for redevelopment and infill development in existing and planned development areas rather than for "green field" development that takes up natural resource lands. This includes encouraging cooperative



Map 8: Rural Tier Amendments



partnerships between government and business to redevelop existing commercial areas before the development of new sites to avoid the proliferation of aging, underutilized properties. This is a trend evident along the US 301 corridor in the study area, as well as throughout the county.

- ❖ Changes to the Rural Tier line to allow for large new commercial areas would be inconsistent with the General Plan and may have negative effects on commercial areas in nearby designated centers such as Bowie, Westphalia, and Brandywine. There are no compelling reasons to amend the General Plan for this purpose in this subregion plan.

POLICY 1

Limit amendments to the General Plan tier boundaries to resolve problems with properties that are split between tiers and properties that are served (or programmed to be served) by public sewer (see Map 8).

STRATEGIES

1. Reclassify the Town of Upper Marlboro from Rural Tier to Developing Tier.
2. Reclassify property in the northeast quadrant of US 301 and Marlboro Pike from the Rural Tier to the Developing Tier.
3. Reclassify property south of Brandywine Road by Air Force Road from the Rural Tier to the Developing Tier.

Rural Preservation: Tools and Programs

Priority Preservation Area

All Maryland counties must have a certified priority preservation element as part of their General Plans if their agricultural land preservation programs are to be eligible for certification by the state. Once certified by the state, these areas become eligible for a greater amount of public funding to preserve these lands.

A priority preservation area¹ (PPA) is an area that:

- ❖ Contains productive agricultural or forest soils, or is capable of supporting profitable agricultural and forestry enterprises where productive soils are lacking

¹ The full definition is in the Annotated Code of Maryland Agriculture Article. See also HB 2-2006.

- ❖ Is governed by local policies that stabilize the agricultural and forest land base so that development does not convert or compromise agricultural or forest resources
- ❖ Is large enough to support the kind of agricultural operations that the county seeks to preserve
- ❖ Is accompanied by the county's acreage goal for land to be preserved through easements and zoning in the PPA equal to at least 80 percent of the remaining undeveloped areas of land in the area

In 2008 Prince George's County applied to the State Department of Planning and the Maryland Agricultural Land Preservation Foundation to certify its agricultural land preservation programs. Certification would enable the county to retain 75 percent of agricultural land transfer tax funds for use in land preservation, compared to 33 percent without certification. Between FY 2004 and FY 2007 the difference between the percentages averaged \$1.2 million per year. Successful certification is an increasingly rigorous process and beginning in FY 2009 must include establishment of a PPA. The proposed PPA in Subregion 6 would cover approximately 39,000 acres, or 58 percent of the Rural Tier in the study area.² It generally covers the outer portions of the subregion along the Patuxent River, the border area with Charles County, and from Marlton south to Brandywine. (Map 9). (Other subregion plans may recommend additional PPAs in other parts of Prince George's County.

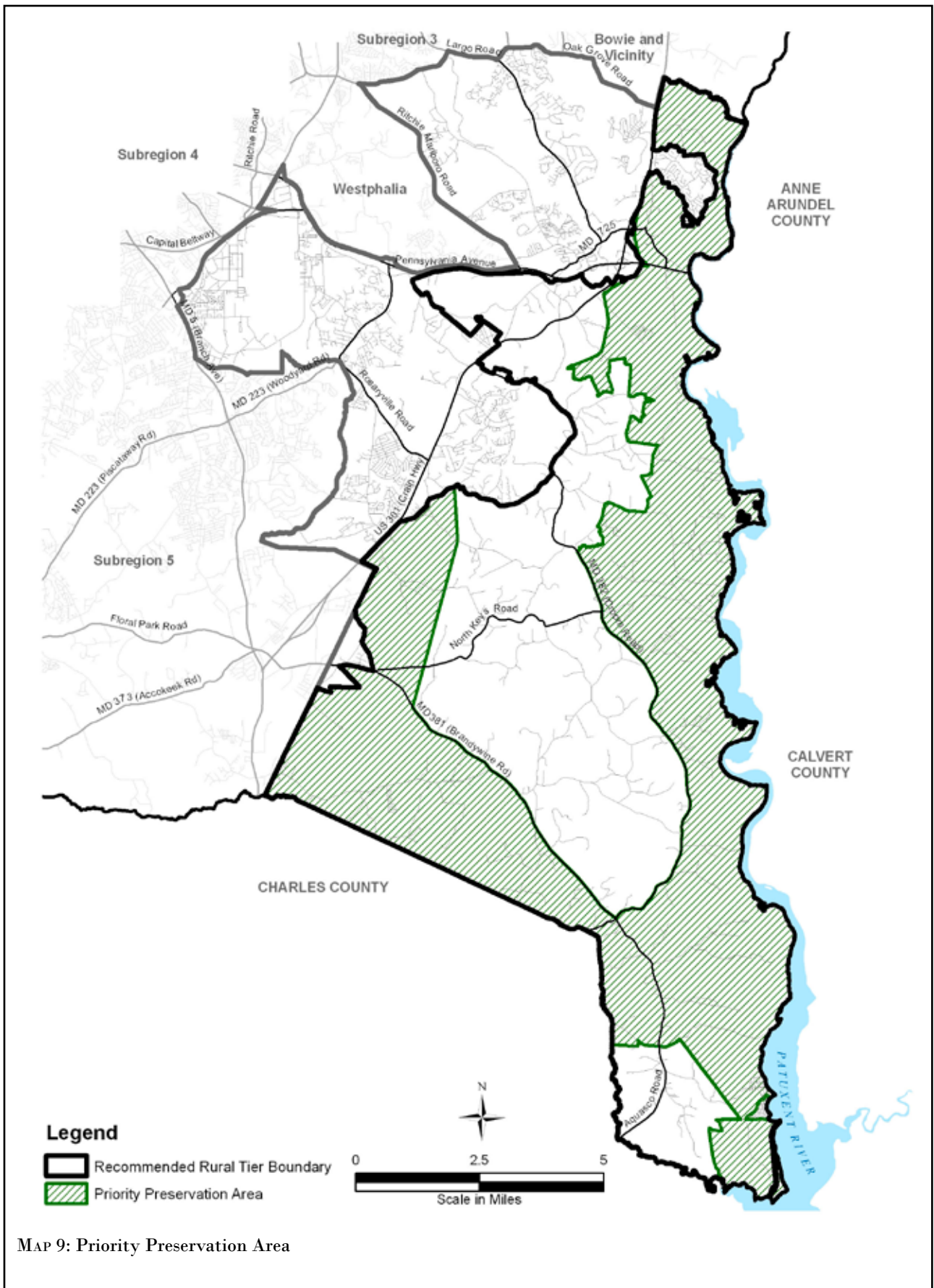


It is important to note that the county's goals of preserving rural resources, character, and open space also apply not only within the PPA, but also to areas in the Rural Tier outside the PPA.



Consequently, properties outside of the PPA should be eligible for the preservation tools listed below. Given the limited resources that might be available to implement these tools, areas within the PPA would be given the highest priority.

² The methodology for delineating the proposed priority preservation area and establishing the preservation goal is detailed in Appendix 1.



MAP 9: Priority Preservation Area

The PPA boundary was created using the following criteria:

Primary Criteria	Supporting Criteria
Areas of Class I, II, and III agricultural soils	Green infrastructure
Areas with known interest in agricultural land preservation among land owners	Areas with mineral resources
Areas with forest resources, with special attention to hardwood resources	Rational, simple boundaries, following where possible natural features and roads, rather than property lines
The county's state-designated Rural Legacy area	Contiguity to areas already protected
Areas least compromised by development	

A detailed explanation of how the PPA boundary was created and is available in Appendix 1.

Achieving the PPA protection goal will require a broad range of policies and actions in the areas of zoning, easements, and other forms of land preservation. The major actions that are recommended in this plan are described below. It should be noted that by using these tools that approximately 15,500 acres could be preserved, which would exceed the master plan goal.

PARKS AND OPEN SPACE ACQUISITIONS: The county expects to continue its long-term policy of acquiring land for recreation and natural resource protection in Subregion 6, especially in Patuxent River Park. Many of these acquisitions will be within the PPA.

PURCHASE OF DEVELOPMENT RIGHTS—
AGRICULTURAL EASEMENTS: Purchase of development rights (PDR) is expected to be a major source of financing for land preservation. The county's first easements were sold in 2004 (in Subregion 5). In the first half of 2008, three easements under the Maryland Agricultural Land Preservation Program (MALPF) were sold in Subregion 6. The county adopted its own PDR program in 2006. Easement applications totaling over 2,000 acres are pending within the area of the PPA. Interest is expected to be stimulated further if the county can add an installment purchase agreement option, in which easement payments are made over time rather than in one lump sum.



OTHER EASEMENTS: A variety of other types of easements can contribute to land preservation in the PPA. These include easements in the Patuxent River Rural Legacy area, historic preservation easements through the Maryland Historic Trust, and environmental easements through organizations such as the Maryland Environmental Trust. In many parts of the country such easements may be donated or acquired at small cost. In many parts of Maryland local land trusts play an important role in land preservation as easement holders or as brokers between landowners and the eventual easement holders. Organizations such as the Trust for Public Land and the Conservation Fund may also become active as they are in other parts of the state.



CONSERVATION SUBDIVISIONS: Although the easement programs and resource mitigation requirements are intended and expected to direct development out of the PPA, some development can be expected to take place in the PPA. Under the county's conservation subdivision regulations adopted in 2006, subdivisions in the Rural Tier are required to conserve, and place under easement, at least 60 percent of the land within the subdivision. Consideration should be given to increasing this requirement to 70 percent within the PPA—a requirement that will not change the potential density yield under the underlying O-S zoning.

WOODLAND CONSERVATION: The county's Woodland Conservation and Tree Preservation Ordinance requires mitigation for development activities that affect woodland. This program, together with enhancements proposed in other strategies, will lead to additional land preservation in the PPA from both on-site and off-site mitigation. On-site preservation will result from mining and from conservation subdivisions. Off-site preservation will result partially from mining and partially from mitigation for development from outside of the PPA.

Program modifications should be considered to stimulate and facilitate landowner interest in selling woodland conservation easements to developers from outside the PPA needing mitigation sites, such as creating a retention bank, which would be forward funded (200 acres), or reforestation bank (establish the bank for at least two years).

RESOURCE MITIGATION: Recognizing that soil is irreplaceable as a nonrenewable resource, development, including other activities such as mining, occurring on class I, II, and III agricultural or forest soils in the Rural Tier in Subregion 6 will be required to mitigate for that loss. Class I, II and III soil types are the most fertile soils and are required to be present in order to be granted certain state easements. The mitigation may take the

form of either purchasing easements on resource lands elsewhere in the Rural Tier, within the PPA preferred, or paying a fee-in-lieu to support the county's PDR program. The precedent for such action is the county's Woodland Conservation and Tree Preservation Ordinance which requires mitigation for development that affects woodland anywhere in the county.

In the future the county expects there to be demand for land for other types of mitigation such as carbon offsets (planting trees or preserving woodlands to offset greenhouse gas emissions) or for nutrient trading (planting trees or preserving woodlands to compensate for nitrogen phosphorus loading that exceeds watershed load limits).

VOLUNTARY AGRICULTURAL ZONE: During preparation of the subregion plan some property owners expressed interest in a very low-density agricultural zone, allowing perhaps only minor subdivisions for family conveyances. This would provide assurance to participating landowners that land within the zone would not be divided for development purposes. While support for large-scale downzoning for agricultural/forest preservation is currently lacking, the voluntary application of such a zone may be supported in some parts of the subregion.

In addition to these recommended programs, the plan also recommends further study of two other emerging programs.

TRANSFER OF DEVELOPMENT RIGHTS (TDR): During preparation of this subregion plan much consideration was given to TDRs³. Indeed, several bills were drafted in 2007 and 2008 for consideration by the County Council. As demand increases for the use of TDRs in the Developed and Developing Tiers, TDRs could become a useful tool. Should a TDR program be approved and implemented, it should be considered as another option for preserving valuable resource lands and open space alongside the policies recommended by this plan.

EASEMENT OVERLAYS: To encourage and provide incentives for land owner participation in land conservation, easement overlays should be permitted. For example, a farm that has sold an agricultural conservation easement restricting development of the farm, but not restricting timbering on the woodland portion, could also sell a separate easement restricting timbering on the woodland portion. The effectiveness of this tool should be further analyzed so that it can be utilized where appropriate.

³ The transfer of development rights from a sending (rural) area to a receiving (development) area.

POLICY 2

Develop preservation programs for Subregion 6 to protect critical resources and offer property owners a range of options for receiving compensation for good stewardship of the land. Utilize all available federal and state programs in Subregion 6 for achieving the same purposes.

STRATEGIES

1. Gain state certification for the priority preservation area (PPA) in Subregion 6.
 - ◇ Identify needed revisions to the zoning code and programmatic changes required to implement the PPA and draft legislation to make necessary changes.
2. Require mitigation for activities that use soil productivity classes I, II, III agricultural or forest soils in the Rural Tier in Subregion 6.
3. Increase funding for, and participation in, programs for the purchase of development rights for agricultural easements.
 - ◇ Create an installment purchase agreement option.
4. Stimulate and facilitate landowner interest in selling easements under the county's Woodland Conservation and Tree Preservation Ordinance.
5. Raise the profile of opportunities for landowners to participate in other easement programs.
 - ◇ Identify a county clearinghouse for information on land preservation opportunities available to landowners.
6. Develop a voluntary agricultural zone.
7. Investigate the use of easement overlays to encourage and provide incentives for land owner participation in land conservation.

Treatment of Agriculture by the Zoning Ordinance and other Regulatory Requirements

This plan uses the term “agriculture” to cover the broadest range of agricultural enterprises including cropland, livestock, nurseries, equine, forestry, and other specialty enterprises such as vineyards and wineries.

Farming on the urban fringe is changing. As discussed further in the Economic Development chapter, the structural change is to smaller farm operations that offer a more diversified basket of goods such as produce, livestock, equine, value-added products and services, and agri-tourism activities than did traditional grain and tobacco operations.

Zoning requirements need to support this by allowing flexibility for farm operations to use land in ways that might not be suitable in less rural environments. While few farms in the county are currently experimenting with these kinds of nontraditional agricultural activities, the trend is growing, there is citizen interest, and the county should ready itself by having supportive zoning in place.

There are federal, state, and county permit requirements for food preparation, processing, marketing and sales, as there are for other activities that will interest farmers in pursuing new agricultural ventures. Determining the extent and appropriate authority for these requirements can be time-consuming and confusing. In addition to amending the Zoning Ordinance, the county should assess whether it can streamline permit requirements within its purview to provide further incentives to agricultural and resource industry development.

POLICY 3

Increase property owner options for profitable agricultural and forestry enterprises by amending the treatment of agriculture in the Zoning Ordinance and examining other regulatory processes for streamlining.

STRATEGIES

1. Revise the Zoning Ordinance to:

- ◇ Remove or revise the “on the premises” provision in the definition ⁴, which limits a farm to processing, treating, etc., only what is produced on that farm.
- ◇ Include value-added processing in the definition. Assess the appropriateness of using the following definition of value added: “the processing of an agricultural product in order to increase its market value, including such processes as canning, milling, grinding, freezing, heating and fermenting.” The term should include cheese and wine production.
- ◇ Add the following to the table of permitted uses: equine activities such as boarding, veterinary medical and rehabilitation services, training, showing, and recreational riding activities.

⁴ Current definition: “The “Use” of land for farming, dairying, pasturage, apiaries, horticulture, floriculture, and animal husbandry, which may include “Accessory Uses” for processing, treating, selling, or storing agricultural products produced on a farm (on the premises). The term “Agriculture” shall not include the commercial feeding of garbage or offal to animals, the slaughtering of livestock for marketing, or the disposal of sludge except for fertilization of crops, horticultural products, or floricultural products in connection with an active agricultural operation or home gardening.” Prince George’s County Zoning Ordinance, Definitions 27-107(a)(9).

- ◇ Include other activities in the table of permitted uses such as pick-your-own produce operations, corn mazes, cut-your-own Christmas trees farms and flower operations, sales of decorative plant materials, farm tours for a fee, and petting zoos.
 - ◇ Include necessary safeguards to protect the use and enjoyment of adjoining property when making changes to the definition of agriculture.
2. Investigate opportunities for streamlining county regulatory processes for activities related to new and emerging agricultural enterprises. Requirements for sales and marketing for all agriculturally-related products should be examined for reform opportunities which will support these enterprises.
 3. Develop an outreach strategy to apprise farmers of the full set of land use and other regulations related to agricultural and forestry activities.

Mineral Resources

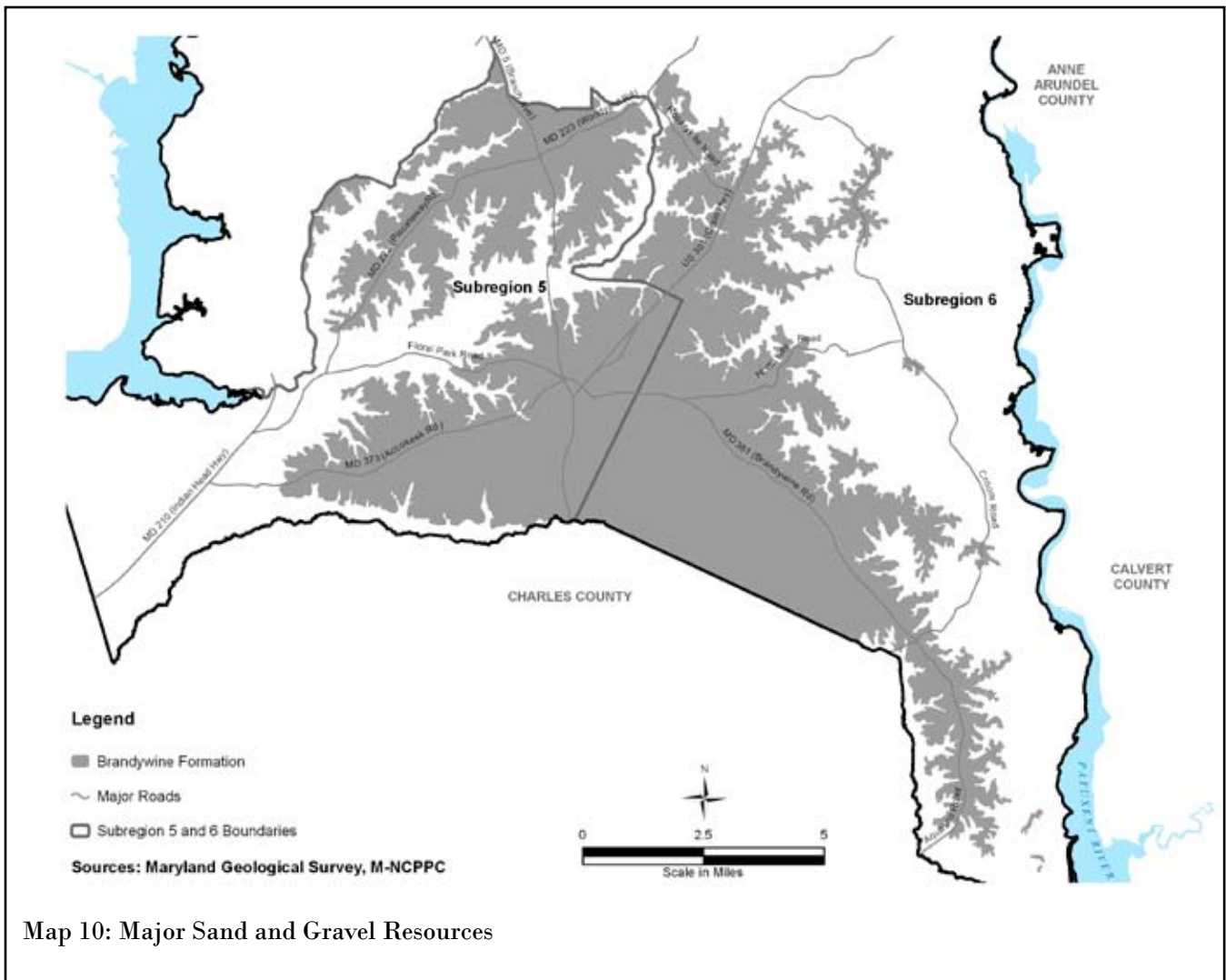
Under state law a comprehensive plan must incorporate land use policies and recommendations to balance mineral resource extraction with other land uses and prevent the preemption of mineral resources extraction by other uses.

Subregion 6 contains extensive mineral resources based on the presence of large sand and gravel deposits affiliated with the Brandywine formation (see Map 10, note that the resource extends into much of Subregion 5). The resources provide an economic base that provides jobs, value-added services such as cement and concrete production, and other economic benefits (see also the Economic Development chapter). It should be noted that the availability of these resources is limited in the state and that Prince George’s County is one of a few counties that has sand and gravel deposits.

An overlay zoning district is a tool that would help preserve access to the resource and prevent the preemption of mineral resources extraction by other uses⁵. Such a district would also support the PPA by directing development elsewhere.

Mining projects can have significant negative impacts on nearby communities and property owners, particularly with respect to noise, dust, and truck traffic. To address these issues, new and expanding projects go through an extensive review and approval process at the state and county level. At the county level a special exception is also required. As part of the special exception process the county reviews the effects of the project on the environment as well as potential effects on noise, dust, and traffic. Even with all

⁵ An overlay district “lays over” the base zoning district or districts. Within the overlay special zoning regulations apply.



Map 10: Major Sand and Gravel Resources

of these reviews, the need for additional efforts to ensure minimal adverse impact on the community and adjacent property owners has been raised by residents.

POLICY 4

Preserve access to mineral resources where sufficient and economically viable mining potential exists.

STRATEGIES

1. Develop a mineral overlay zoning district that corresponds to the unexploited sand and gravel deposits avoiding already developed lands.
 - ◇ Delineate boundaries for the district that are limited to the portion of the PPA that does not border the Patuxent River and consider extending the district into Subregion 5.

2. Within the overlay district, for parcels 50 acres or larger:
 - ◇ Require resource surveys of mineral resources prior to development for other uses.
 - ◇ Guarantee access to mineral resources, if present, prior to development.
 - ◇ Require mitigation for development projects that proceed without extracting the resource by placing a protective easement on other land in need of protection, or payment of a fee-in-lieu to support the county’s land preservation programs.

POLICY 5

Minimize the short- and long-term impacts of mining operations on adjacent properties and communities.

STRATEGIES

1. Increase setback requirements on developing residential properties to minimize potential effects of noise and dust from future mining on adjoining unexploited parcels
2. Evaluate the necessity for additional post-mining reclamation requirements, above those already required by law, which would match preservation, community recreation, and environmental needs. Within the PPA these should include consideration of reclamation for agricultural preservation or the establishment of woodlands.
3. Evaluate the need for a mine reclamation study in the county to develop an inventory of reclaimed and abandoned sites, assess compliance with current reclamation requirements, determine the suitability of reclaimed properties for supporting high quality woodlands, and identify mechanisms for financing the reclamation of abandoned sites.

Residential Development

Residential development in the Rural Tier must balance development pressures and landowners’ equity with the desire to maintain rural environments and character. To do this, policies have been created to encourage residential development at low densities in limited amounts to occur in ways that help preserve the features that contribute to rural character.

One of the General Plan objectives is to limit development annually in the Rural Tier to less than one percent of the dwelling unit growth in the county. This objective acknowledges that due to limited fiscal resources and the desire to revive the agricultural economy, residential growth should be directed away from the Rural Tier with its valuable agricultural and other natural resource lands. It also recognizes that public funds for additional public facilities should not be used to encourage further development in the Rural Tier.

In 2007 county legislation was passed to ensure that new subdivisions in the Rural Tier were designed to retain and enhance the rural character. As a result, conservation subdivisions (which were first recommended in the last Subregion 6 master plan) are now required for all development in the Rural Tier. Initial results of this program indicate that additional requirements may be necessary to achieve its objective.

POLICY 6

Ensure that conservation subdivisions strengthen the rural character of the surrounding area.

STRATEGIES

1. Strengthen the existing requirements for the preservation of open space in conservation subdivisions to include items such as existing or potential contiguity (with afforestation) to woodlands, historic sites and their environmental settings, preservation of viewsheds, potential for protecting biodiversity and/or unique agricultural or environmental features.
2. Increase the percentage of open space requirement in conservation subdivisions within the PPA from 60 to 70 percent.

POLICY 7

Ensure that roadway and lighting improvements associated with conservation subdivisions and other types of development in the Rural Tier are consistent with preservation goals.

STRATEGIES

1. Establish a collaborative effort with the community, the county's Department of Public Works and Transportation, the Planning Department, and the State Highway Administration to revise the road code to find ways to meet transportation safety goals while also protecting scenic and historic roads.
2. Develop road standards for the rural tier which include, among other things, the use of full cut-off optics and dark-sky techniques where lighting is required.
3. Create an education and outreach program for developers and real estate agents to promote the development and marketing of housing products and communities which are environmentally-friendly and context sensitive.

The Developing Tier portion of the subregion is generally west of US 301. The land use recommendations for the residential densities in this portion of the subregion are primarily Residential Low and Residential Low Medium. The Future Land Use Map (Map 7) makes few changes to the future land use pattern established in the 1993 Subregion VI Study Area Master Plan and

DEVELOPING TIER

Melwood –Westphalia Master Plan. Consistent with these 1993 plans, this plan maintains the designation of most of the land in the Developing Tier as Residential Low, Institutional, and Public and Private Open Space. Additional small areas in Marlton and Upper Marlboro have been designated for open space for stream buffers, and parklands acquired since the last master plans were approved are designated for open space as well.

Commercial shopping areas in the Developing Tier are located at strategic locations throughout the tier along Old Marlboro Pike next to MD 4 in Melwood, on US 301 at Osborne Road in Rosaryville, at Fairhaven Drive near Marlton, and around the interchange of US 301 and MD 4. Many of these shopping centers are older and in need of upgrades. Commercial centers are proposed in a number of comprehensive planned communities with mixed results. The shopping center at the Villages of Marlborough has consistently experienced significant vacancies since it was built. A new Amish market recently opened in the center. Although it has drawn shoppers from outside the area, it has not seemed to help the overall vitality of the shopping center as even more businesses have closed. In addition, two local activity centers in Woodyard Estates and in Marlboro Meadows have developed only the residential portion of the proposed development.

The 2002 General Plan recognizes that countywide there is an excessive amount of land zoned for commercial uses. Throughout the county as new commercial centers are developed, older ones lose tenants and the shopping center often deteriorates. The Osborne shopping center on US 301 is currently in such a state; although plans have been developed for expansion and enhancement, they have not moved forward. The plan recognizes the need to focus efforts on improving and strengthening existing centers and thus concentrate commercial development rather than allowing it to sprawl along major roads in Subregion 6.

Employment areas in the Developing Tier are located around Andrews Air Force Base (AAFB) and the Town of Upper Marlboro. These areas are well served by major highways, including the Capital Beltway, and support a mix of public and private development. They offer increased employment opportunities for area residents. Around AAFB, it is recommended that the industrial land uses be maintained and that additional areas be designated for industrial land use to create a consistent and compatible land use pattern. In the Upper Marlboro area, it is recommended that a mix of uses be promoted at the entrance to this area at US 301 and MD 725. Mixed-use development in this location can take advantage of its close proximity to the MD 4 and US 301 interchange and create an attractive gateway development to the town. New commercial and residential development would also be supportive of the proposed upgrade of US 301 when the existing highway will become a service road. The commercial core in the Town of Upper Marlboro, which is already a mix of uses,

is also designated for mixed use to provide the flexibility this area needs to promote compatible infill development and revitalization.

This plan recognizes that the industrial area to the east of the Town of Upper Marlboro between MD 725 and MD 4 needs further study. Development in the existing industrial and commercial areas is a mix of uses that is now housed predominantly in older buildings. Although there has been some new investment in this area, the development is fragmented and it presents an unattractive front door to the Town of Upper Marlboro, the county seat. Much of the newer development, including a Home Depot and McDonalds, serve a commercial use rather than an industrial use even though these uses are on properties zoned for industrial uses. The need for property consolidation and redevelopment to enhance and improve this area, which is strategically located at the intersection of two major roadways, should be further studied and a plan for implementation should be developed.

POLICY 1

Promote a development pattern that allocates appropriate amounts of land for residential, commercial, employment, industrial, and institutional land uses in accordance with county development goals by considering local and regional needs, the integration of land uses wherever possible, and the impact of development proposals on the economy, environment, equity, and efficiency.



STRATEGIES

1. Maintain low to moderate-density land uses except as part of mixed-use development and planned communities.
2. Preserve and expand areas of institutional and public and private open space.
3. Appropriately expand and enhance employment areas by expanding Industrial land use designation around Andrews Air Force Base and designating mixed land use for appropriate areas in the Town of Upper Marlboro and at the gateway to the town on US 301.

POLICY 2

Support redevelopment and infill development in existing and planned development areas rather than “green field” development that takes up natural resource lands

STRATEGY

Further study the Upper Marlboro area to determine the most appropriate land uses for a comprehensive revitalization and implementation plan that will build on the foundation in this plan to create a well-designed, attractive, and economically vibrant node.

Andrews Air Force Base

Andrews Air Force Base (AAFB) is a highly significant national, regional, and local facility, and this plan promotes policies and objectives to preserve and strengthen the base. The base provides employment for many residents of Subregion 6 and Prince George’s County and provides strong support to the local economy. Prince George’s County initiated a Joint Land Use Study (JLUS) with AAFB in fall 2008. The purpose of the JLUS is to balance community interests with the military mission of the base. The JLUS includes the Globecom site in Brandywine in addition to AAFB and a half mile radius around the base.

In December 2007, the US Air Force updated its 1998 Air Installation Compatible Use Zone (AICUZ) study for AAFB. The purpose of the AICUZ program is to promote compatible land development in areas subject to aircraft noise and accident potential and its findings and recommendations have been used as the basis for land use recommendations in this plan. Below is a summary of these from the study and pertinent background information.

Runway Airspace Imaginary Surfaces

Imaginary surfaces are surfaces in space around airfields that need to be kept obstacle free. There are seven types of surfaces that need to be regulated to prevent uses, activities or structures that

might be hazardous to aircraft operations. The outermost surface, the Outer Horizontal Surface, and the Approach Departure Clearance Surface extend out as far as six miles horizontally from the Base, east of US 301 and south of Globecom. From a land use perspective the key uses of concern are⁶:

- ❖ Structures within ten feet of some of the surfaces
- ❖ Uses that would attract birds or waterfowl
- ❖ Light emissions that would interfere with pilots
- ❖ Noise

Federal and state ordinances and guidelines have been developed to ensure that noise levels are at acceptable standards. The consensus of these standards is that 65 “A-weighted” decibels (dBA) is the maximum noise level generally acceptable for residential areas.

Map 11 shows the area within the Day-Night-Level DNL65 dBA or greater noise exposure area for aircraft operations at AAFB⁷. Portions of Subregions 4, 5, and 6 are exposed to off-base noise. Subregion 6 is affected east of the base as far as portions of Melwood Road and Rosaryville Road.

Clear Zones and Accident Potential Zones

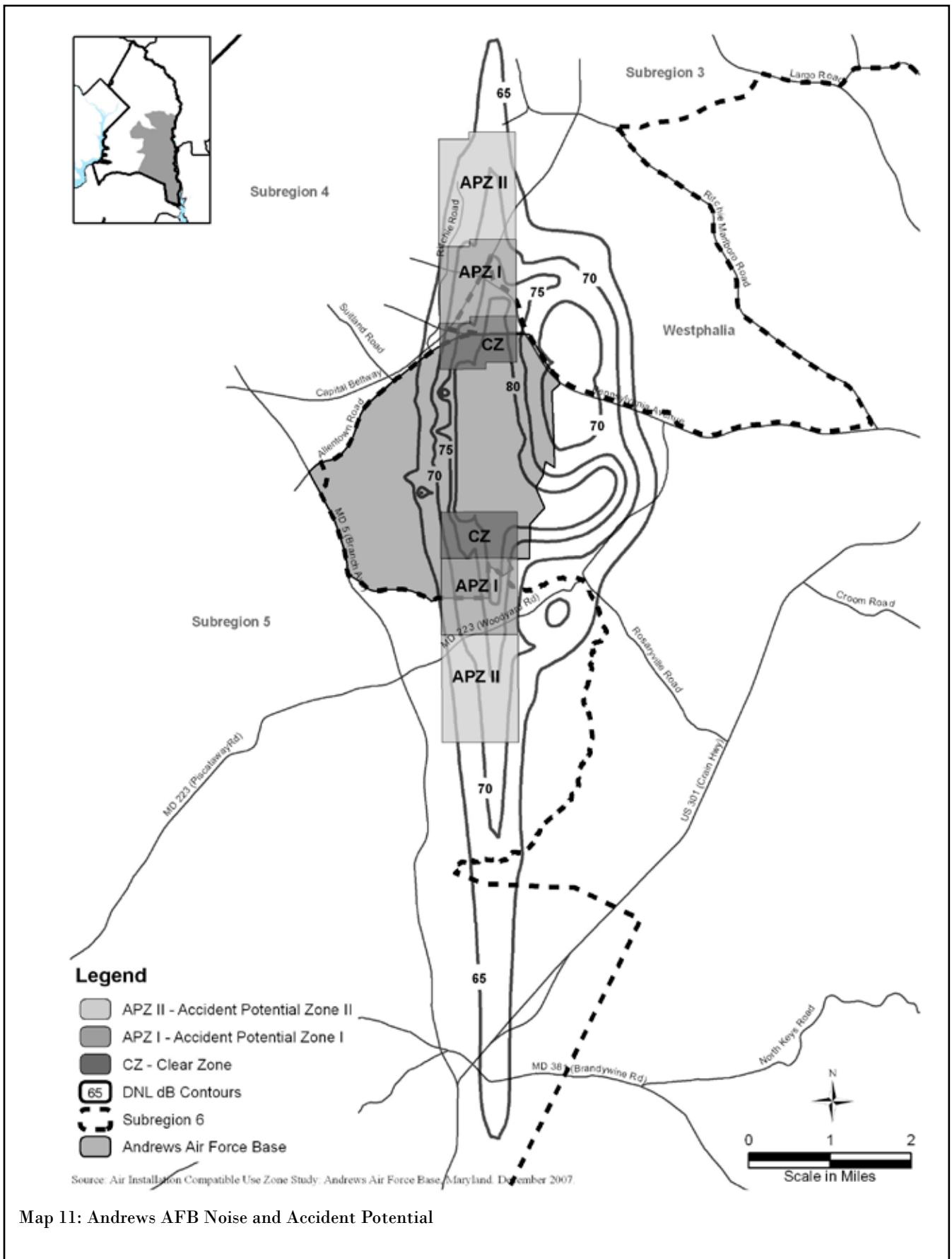
The Clear Zones and Accident Potential Zones (AICUZ) program also includes three aircraft accident safety zones in both incoming and outgoing directions from the base runways: the Clear Zone (CZ) and Accident Potential Zones (APZ) I and II (Map 11). The CZ has the highest accident potential of the three zones, followed by APZ I and APZ II. Federal land use compatibility guidelines have been developed for each noise zone and accident potential zone. In APZ I the guidelines allow reasonable economic use of the land, such as industrial/manufacturing, transportation, communication/utilities, wholesale trade, open space, recreation, and agriculture. Uses that concentrate people in small areas are not acceptable. In APZ II acceptable uses include those of APZ I, as well as low-density, single-family residential and low-intensity personal and business services and commercial/retail uses.

Land Use Compatibility

The Penn-Belt South Industrial Center north of the base is partially within the CZ and partially within the APZ I. The area in the CZ is south of Burtons Lane and is very small. The base

⁶ Other uses of concern not regulated directly or wholly through land use are light emissions that would interfere with pilots, air emissions, and electrical emissions.

⁷ Day-Night Average A-Weighted Sound Level (DNL) is the measure of the total noise environment. DNL averages the sum of all aircraft noise producing events over a 24-hour period, with a ten dB upward adjustment added to the nighttime events (between 10:00 p.m. and 7:00 a.m.).



Map 11: Andrews AFB Noise and Accident Potential

either owns or holds restrictive easements for all property in the CZ. The area in the APZ 1 is industrial, consistent with the land use compatibility guidelines. Fire and Rescue Company 23 (Forestville) is located in APZ I. The county has planned and programmed funding to relocate this facility to the vicinity of Melwood Road and MD 4 (see Public Facilities chapter).

As noted above, this plan expands the industrial area east of AAFB in three areas near Foxley Road consistent with the goal of achieving compatible land uses and development in areas subject to noise potential.

Land west of Sherwood Forest Community Park has been designated for open space to help make its use more compatible with its noise level and because of its proximity to the headwaters of Piscataway Creek. This site may be also be eligible for protection/preservation under the Department of Defense's Readiness for Environmental Protection Initiative (see the Living Areas chapter).

It will be difficult to make all uses around the base in Subregion 6 fully compatible with the noise guidelines. This is particularly true for developed subdivisions, however, many of these were built with noise attenuation requirements. A portion of the DNL 70 dBA and greater noise exposure area extends east of Dower House Road to MD 223 into some established residential neighborhoods (such as Sherwood Forest), institutional uses (such as Clinton Bible Baptist), and planned developments (such as Equestrian Estates).

At the Globecom site in Brandywine only helicopter sorties are flown. There are no CZs or APZs, and noise does not exceed DNL 65 dB and, thus, there are no land use compatibility issues.

POLICY 3

Achieve compatible land uses and development in areas subject to noise and aircraft accident potential.

STRATEGIES

1. Implement the JLUS recommendations, including establishing strategies to balance community interests with the military mission at AAFB and minimize conflicts.
2. Continue to work with AAFB to promote compatible land development in areas subject to aircraft noise and accident potential.
 - ◇ Formalize AAFB participation in the development review process.
 - ◇ Require development within DNL 65 dBA and greater noise exposure areas to be properly protected from the transmission of noise with barriers that affect sound propagation and/or the use of sound-absorbing materials in construction.

- ◇ Evaluate development and redevelopment proposals in areas subject to noise using Phase I noise studies and noise models and Phase II noise analysis as deemed appropriate.
- ◇ Provide for the use of noise reduction measures when issues are identified indicating that the design and construction of building shells will attenuate noise to an interior noise level of 45 dBA (Ldn) or less. See additional recommendations for reducing noise impact in the Environment chapter.
- ◇ Where exterior noise mitigation from overhead sources is not possible, certification from an acoustical engineer will be needed to ensure that acceptable noise levels can be obtained.
- ◇ Expand the industrial area and rezone to an appropriate industrial zone near the base perimeter to ensure nonencroachment.