

DEVELOPMENT PATTERN AND LAND USE

Subregion 6
Approved Master Plan and
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, 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 are 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



Horses are a common sight in the subregion.

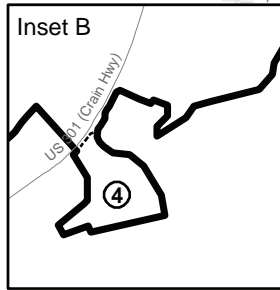
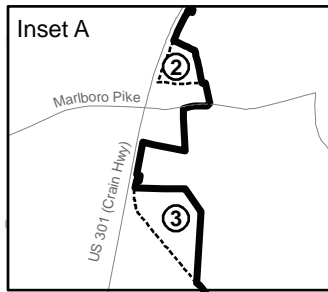
Modifications to the Rural Tier

outlined in a recently completed study done in partnership with the Town of Upper Marlboro, the 2008 *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. For the above reasons, the Town of Upper Marlboro has been placed in the Developing Tier.

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 significantly 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 partnerships between government and business to redevelop

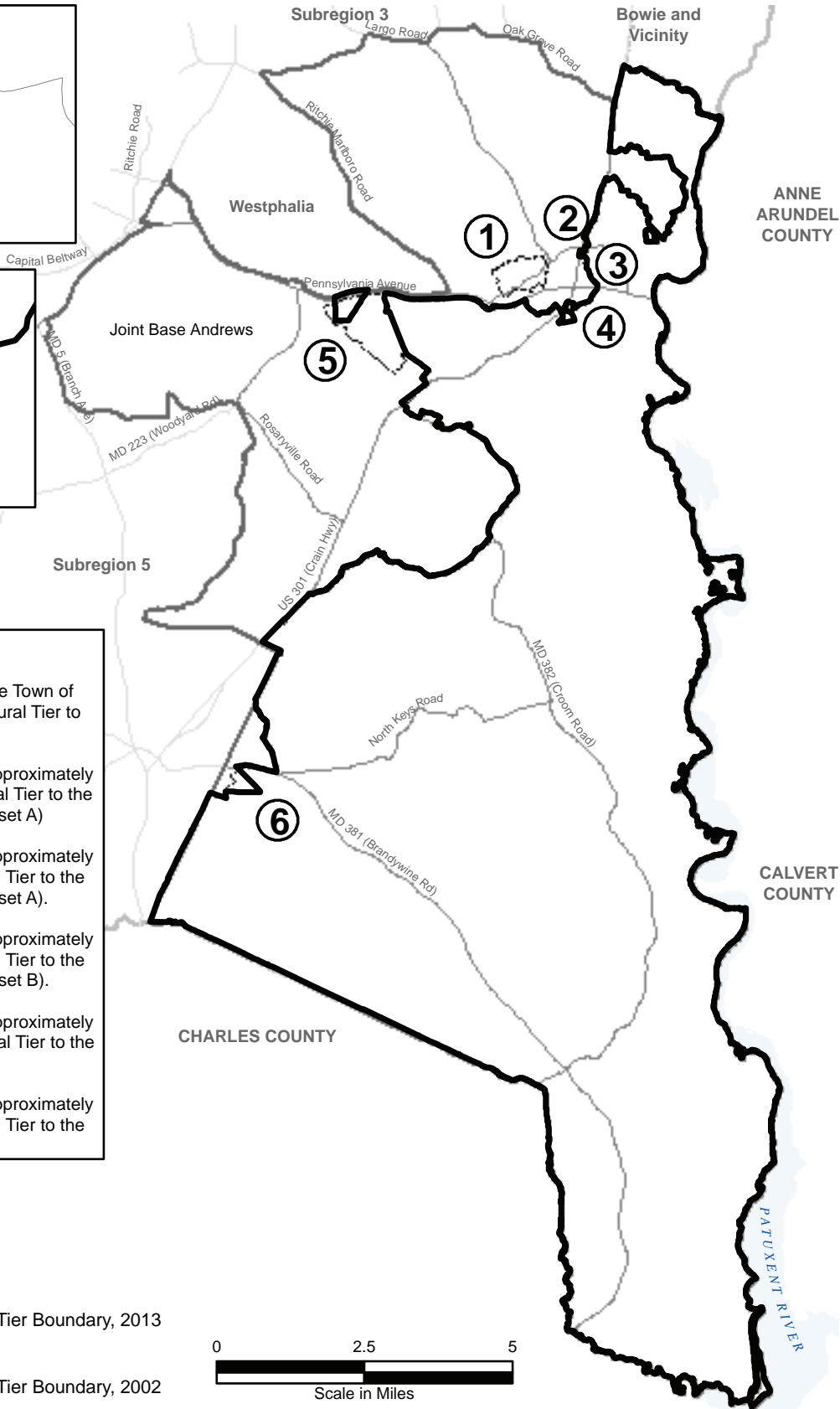
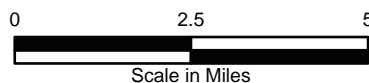
MAP 7: RURAL TIER AMENDMENTS



- Map Amendments**
- 1: Reclassification of the Town of Upper Marlboro from Rural Tier to Developing Tier
 - 2: Reclassification of approximately five acres from the Rural Tier to the Developing Tier (see Inset A)
 - 3: Reclassification of approximately 10 acres from the Rural Tier to the Developing Tier (see Inset A).
 - 4: Reclassification of approximately 22 acres from the Rural Tier to the Developing Tier (see Inset B).
 - 5: Reclassification of approximately 565 acres from the Rural Tier to the Developing Tier.
 - 6: Reclassification of approximately 84 acres from the Rural Tier to the Developing Tier.

Legend

- Approved Rural Tier Boundary, 2013
- Subregion 6
- Approved Rural Tier Boundary, 2002





One of the general stores along Croom Road provides for some commercial needs in the community.

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.
4. The contiguous parcels located south of MD 4 between South Osborne Road and Old Crain Highway should be examined for the application of an equestrian and agricultural heritage-themed, R-L CDZ, which could serve as a gateway to this portion of the Rural Tier in the county and make use of the recently approved community well and septic systems.

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.
- 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.



A private indoor facility is used both for practice and competition of equestrian events.

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. 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.

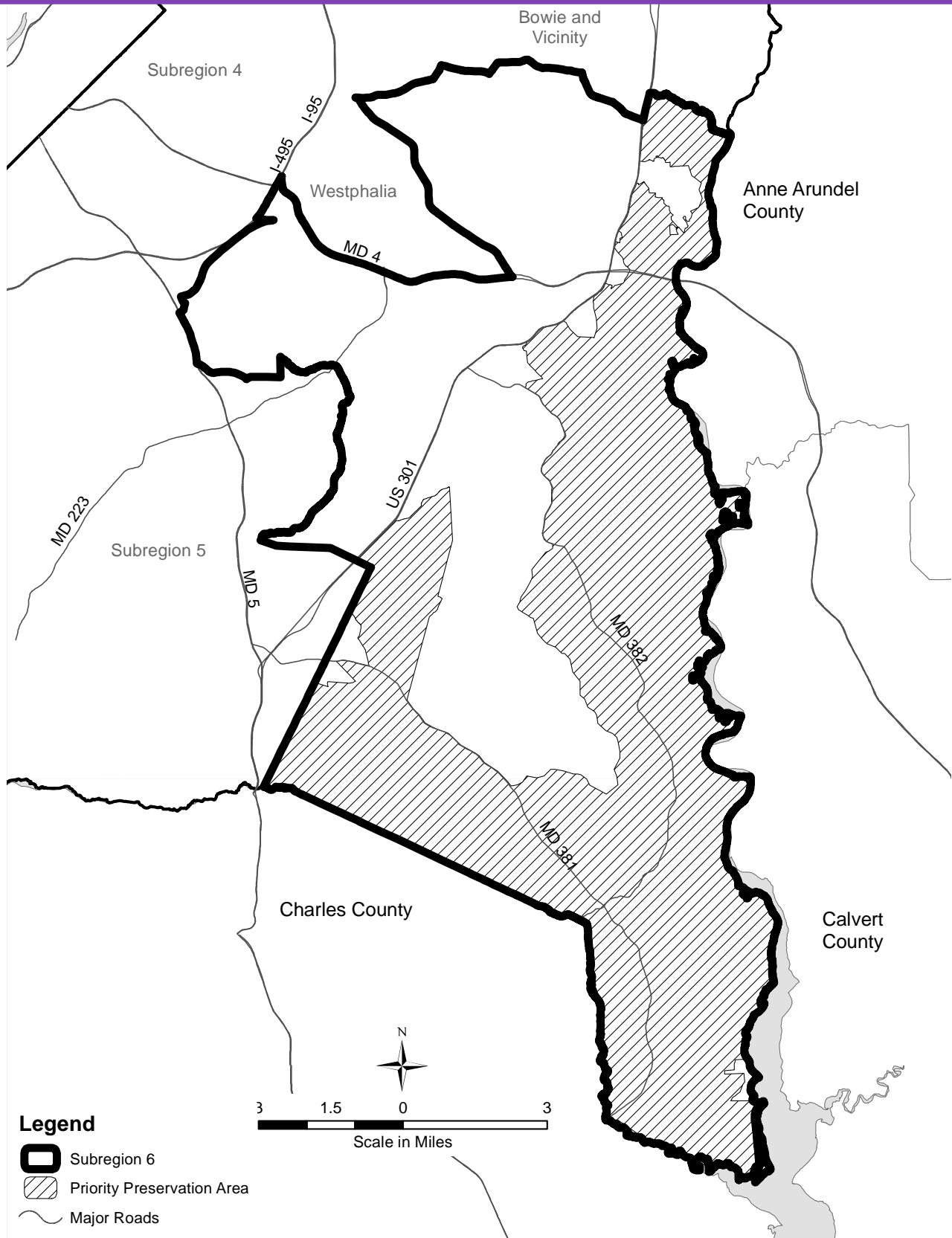


A horse heads back to the stable.

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.

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

MAP 8: PRIORITY PRESERVATION AREA



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.

In July 2012, the county approved the “Priority Preservation Area Functional Master Plan” to achieve the protection goals. The major actions that are recommended in this plan are described below.

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.

PROTECTIVE 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 just 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. Within the PPA consideration should be given to increasing the open space requirement to ensure that the goals of the PPA are met.



The subregion also is home to a few alpaca farms.

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, could 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.

Off-site woodland conservation banks are directed toward locations within the green infrastructure network to the greatest extent possible. Continuing conservation of off-site woodlands in the Subregion 6 PPA can be expected to occur in response to ongoing development occurring throughout the county.

SOIL 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. Land development should be directed away from land with these soil classifications. 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.



Environmental easements ensure that land will be preserved in perpetuity.

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).

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 TDRs². Indeed, several bills were drafted in 2007 and 2008 for consideration by the County Council. As demand increases for

² The transfer of development rights from a sending (rural) area to a receiving (development) area.

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.

RELATIONSHIPS BETWEEN EASEMENTS AND OVERLAYS: To encourage participation in land conservation and stewardship opportunities available in the PPA, property owners should be made aware of the range of programs available and their applicability and interrelationship in the protection of natural land resources. Different protection mechanisms may be applicable to different portions of a site and may coexist without difficulty. Overlaying easements may be in conflict with county and state laws regarding the various easements but should be permitted in the instances where they are not in conflict. The relationship between different land protection mechanisms needs to be carefully evaluated when determining the best mechanisms for a site.

RURAL LEGACY PROGRAM: The Rural Legacy Program provides the focus and funding necessary to protect large, contiguous tracts of land and other strategic areas from sprawl development and to enhance natural resource, agricultural, forestry, and environmental protection through cooperative efforts among state and local governments land trusts and willing property owners.

Protection is provided through the acquisition of easements, and purchases from willing landowners, and the supporting activities of Rural Legacy Sponsors and local governments.

The Rural Legacy Program's goals are to establish greenbelts of forests and farms around rural communities in order to preserve their cultural heritage and sense of place; to preserve critical habitat for native plant and wildlife species; to support natural resource economies such as farming, forestry, tourism, and outdoor recreation; and to protect riparian forests, wetlands, and greenways to buffer the Chesapeake Bay and its tributaries from pollution run-off.

The Patuxent Rural Legacy Area, Prince George's, was approved in 1999 for an area of almost 39,000 acres, is contained within the Rural Tier of Subregion 6, and is also part of the portion of the PPA which drains into the Patuxent River. Consideration should be given to the establishment of a second Rural Legacy area for the headwaters of the Zekiah Swamp Watershed in Prince George's County, which would protect contiguous O-S zoned lands in the Rural Tier. This would include most of the PPA area in Subregion 6 that drains into the Potomac watershed and provide a green infrastructure linkage

with the Zekiah Watershed Rural Legacy Area in Charles County.

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 PPA.
 - 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 propose development on 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. 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 agritourism 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 ³, 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.

³ 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).

- 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.
 - 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.

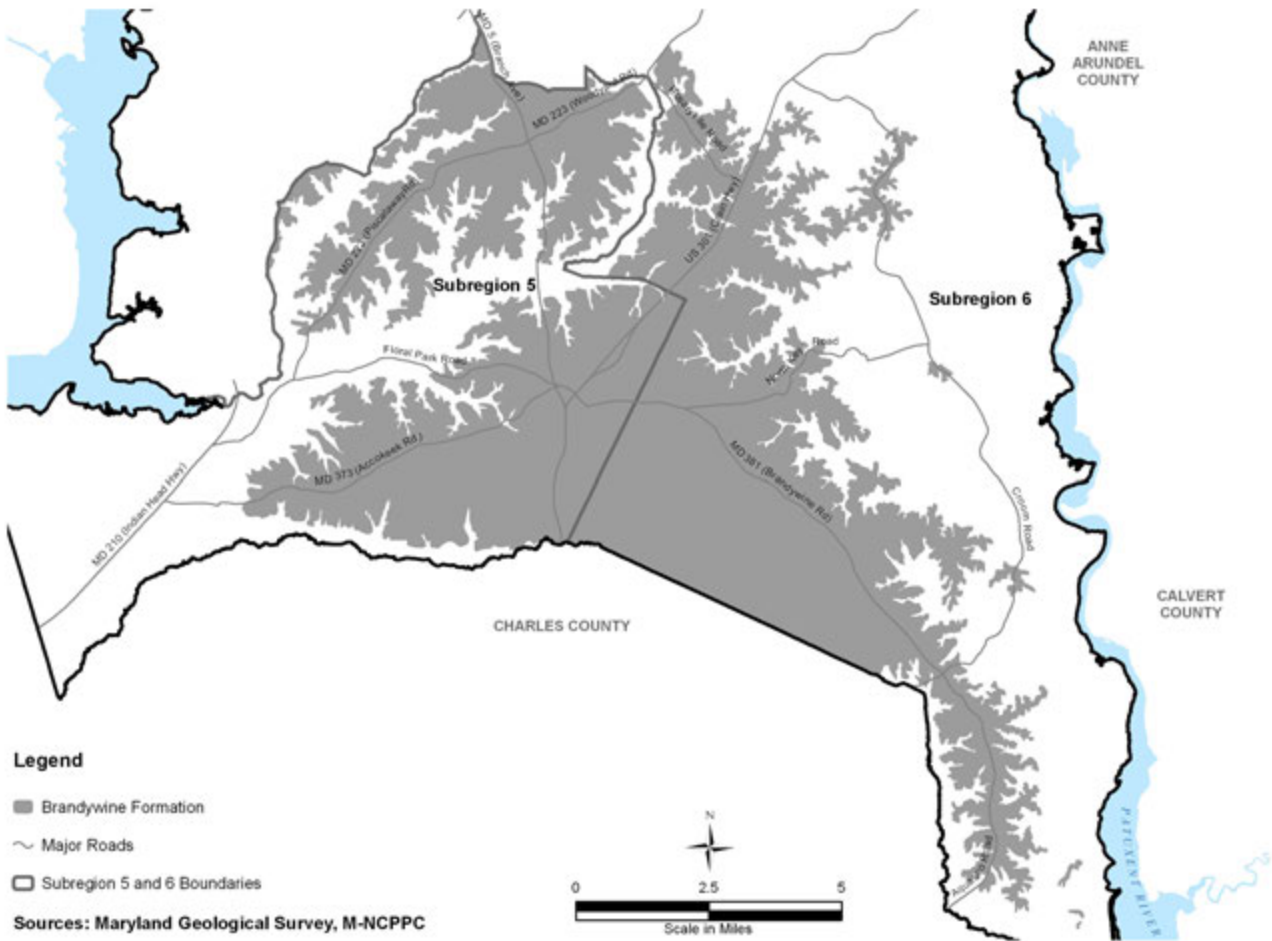
Subregion 6 contains extensive mineral resources based on the presence of large sand and gravel deposits affiliated with the Brandywine formation (see Map 10, note that the resource extends into much of Subregion 5). The resources provide an economic base that provides jobs, value-added services such 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 uses⁴. 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

⁴ An overlay district “lays over” the base zoning district or districts. Within the overlay special zoning regulations apply.

MAP 9: MAJOR SAND AND GRAVEL RESOURCES



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 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. Evaluate the need to increase setback and buffering requirements for adjacent mining and developing residential properties to minimize potential efforts of noise and dust from future mining.
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. Update the inventory of reclaimed and abandoned mine sites in the county and 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 require the application of conservation subdivision techniques for all new residential development proposed in the Rural Tier with a goal of retaining and enhancing the rural character. The initial results of this program are unclear because there have been few applications which have been processed to date. Further evaluation should be carried out in the future to determine if the existing requirements are adequate to achieve the stated objectives.

POLICY 6

Ensure that conservation subdivisions strengthen the rural character of the surrounding area. Identify an effective approach to managing growth in the Rural Tier and to evaluate the impact of preservation measures over time.

STRATEGIES

1. Reexamine the one percent goal for its appropriateness for the Rural Tier. Use a data- and evidence-driven process to consider its impact on land equity, how it should be achieved or enforced, or whether a different approach might be more effective for managing growth in the county.
2. Conduct public outreach to solicit input on identified growth measurement alternatives that will allow time for preservation and other programs to conserve critical resources and offer landowners more options than residential development for receiving equity from their land.
3. Consider the effect of increasing the open space required in the conservation subdivision within the PPA from the 60 percent gross tract area now required.
4. 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.
5. 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.

POLICY 7

Limit roadway lighting improvements in the Rural Tier to those consistent with preservation and safety goals.

STRATEGIES

1. Continue a collaborative effort with the county's Department of Public Works and Transportation, the Planning Department, and the State Highway Administration to meet transportation safety goals while protecting rural character and designated scenic and historic roads.
2. Develop road standards for the Rural Tier that require the use of full cut-off optics and dark-sky techniques.
3. If updates to the existing guidelines for scenic and historic roads are considered in the future, include a public participation component.

DEVELOPING TIER

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 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 Joint Base Andrews Naval Air Facility Washington (JBA) 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 JBA, the industrial land uses will 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, a mix of uses will 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.



Multifamily housing complexes in the Developing Tier provide for a choice of living options for county residents.

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 JBA and designating mixed land use for appropriate areas in the Town of Upper Marlboro and at the gateway to the town on US 301.
4. Ensure that new commercial office and shopping development in the Beechtree community meets high quality design standards and includes the appropriate mix of uses.

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.

Joint Base Andrews Naval Air Facility Washington (JBA) 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 JBA 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 JBA 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 JBA. 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 are⁵:

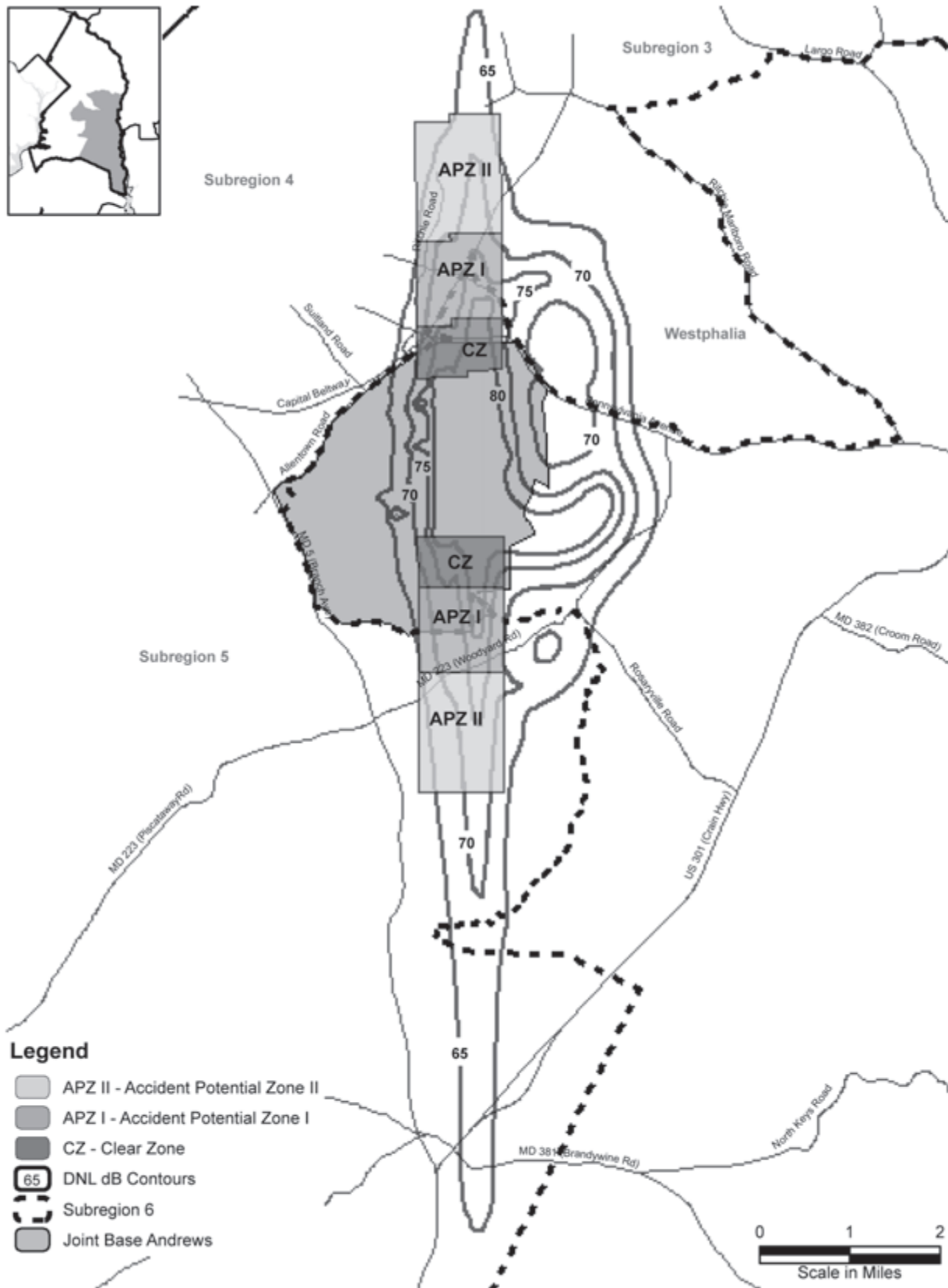
- Structures within ten feet of some of the surfaces
- Uses that would attract birds or waterfowl
- Light emissions that would interfere with pilots
- Noise

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"⁶ decibels (dBA) is the maximum noise level generally acceptable for residential areas.

⁵ 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.

⁶ 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 10: JOINT BASE ANDREWS NAVAL AIR FACILITY WASHINGTON (JBA) NOISE AND ACCIDENT POTENTIAL



Source: Air Installation Compatible Use Zone Study: Andrews Air Force Base, Maryland. December 2007.

Map 11 shows the area within the Day-Night-Level DNL65 dBA or greater noise exposure area for aircraft operations at JBA. 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 either owns or holds restrictive easements for all property in the CZ. The area in the APZ I 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 JBA 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 JBA and minimize conflicts.
2. Continue to work with JBA to promote compatible land development in areas subject to aircraft noise and accident potential.
 - Formalize JBA 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.