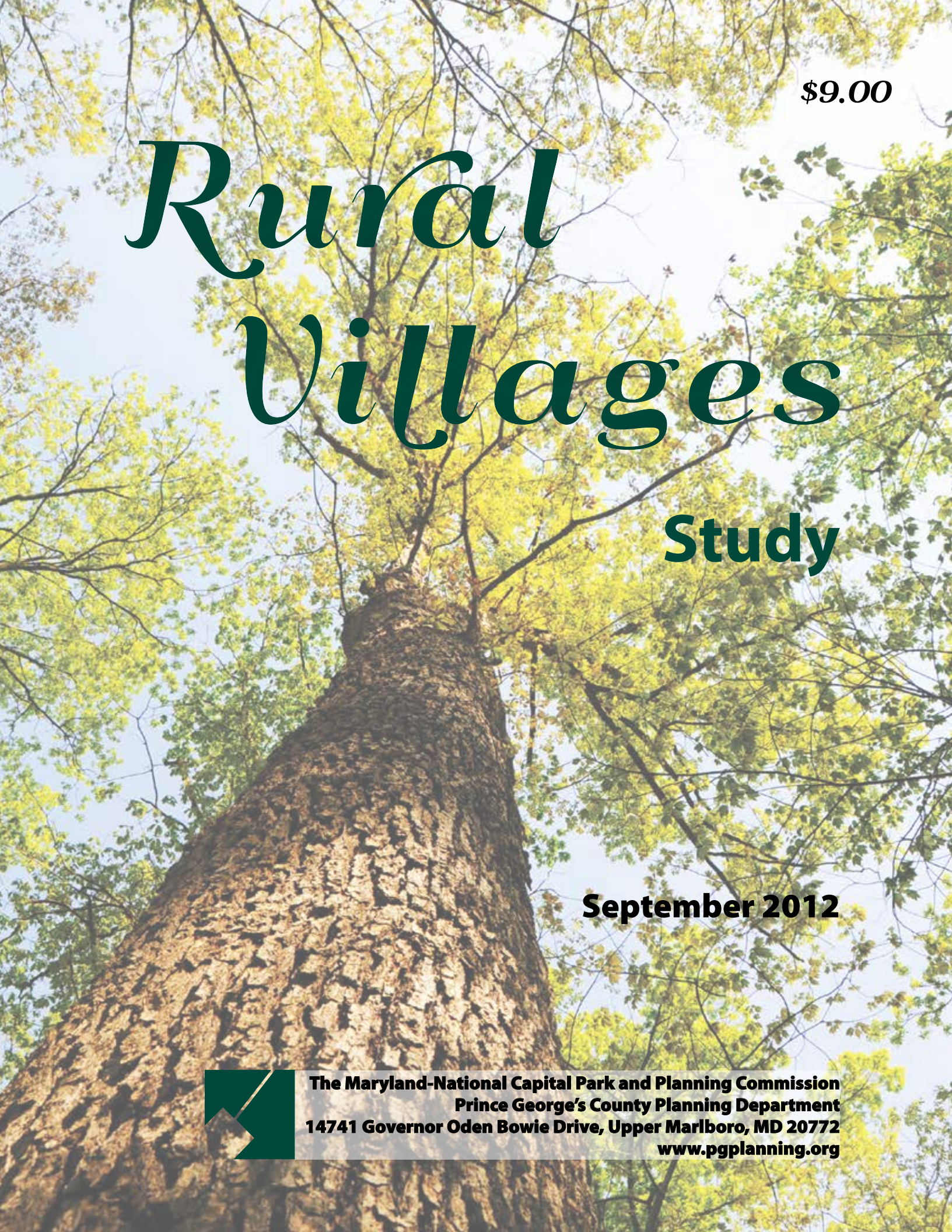

$9.00

Rural Villages

Study

September 2012

The Maryland-National Capital Park and Planning Commission
Prince George's County Planning Department
14741 Governor Oden Bowie Drive, Upper Marlboro, MD 20772
www.pgplanning.org

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Introduction

Prince George's County's rural character is vulnerable. Numerous studies over the years have called for action. Past studies and reports have identified specific tools and offered guidance for rural land management. For instance, the 1988 *Rural Historic Landscapes and Scenic Roads Study : Subregion VI, Prince George's County: Final Report* noted that the Subregion VI Citizens Advisory Committee "were both particularly interested in maintaining rural character of existing areas and concerned that new development 'fit' with the established surrounding environment" (see page 26). State and local officials have wrestled with an array of approaches for rural resource management, ranging from forest conservation strategies to limiting distribution and extension of public water and sewer systems. However, until 2012, no single effort had been successful in addressing the challenges of balancing resource conservation with economic development and the retention and enhancement of rural character in southeastern Prince George's County. The state's Sustainable Growth and Agricultural Preservation Act of 2012 (also referred to as SGA or SB-236) achieved what no previous efforts in the county had accomplished. The act restricts residential development in the portion of the county designated as rural. The act is a statewide effort to reduce the number of new residential lots being developed in rural areas.

The County Council approved the necessary plan and maps to implement the requirements of SGA on November 20, 2012. The Tier Boundary Map designated four growth tiers. The area of the county covered by this study is entirely within Tier IV that restricts residential development to a maximum of seven new lots through the minor subdivision process; no new major residential subdivisions are permitted.

Figure 1. Working rural landscape in southeastern Prince George's County

Intent

The intent of this rural villages study is to better understand the impact of existing regulations for site development and road improvements on rural character as well as the future of alternative development strategies, the insertion of small-scale commercial or service needs in these communities, and conservation of the rural landscape. Changes to existing zoning, and other regulations that shape development, are not included in this study. This study provides additional impetus and recommendations for preservation and conservation strategies. It is focused on three communities in southeastern Prince George's County—Baden, Aquasco, and Croom—and provides the basis for recommendations for incentives and regulations for enhancing and preserving the villages' rural character. The three villages are located in the county's Rural Tier with the exception of the northeastern portion of Croom that is located in the county's Developing Tier.

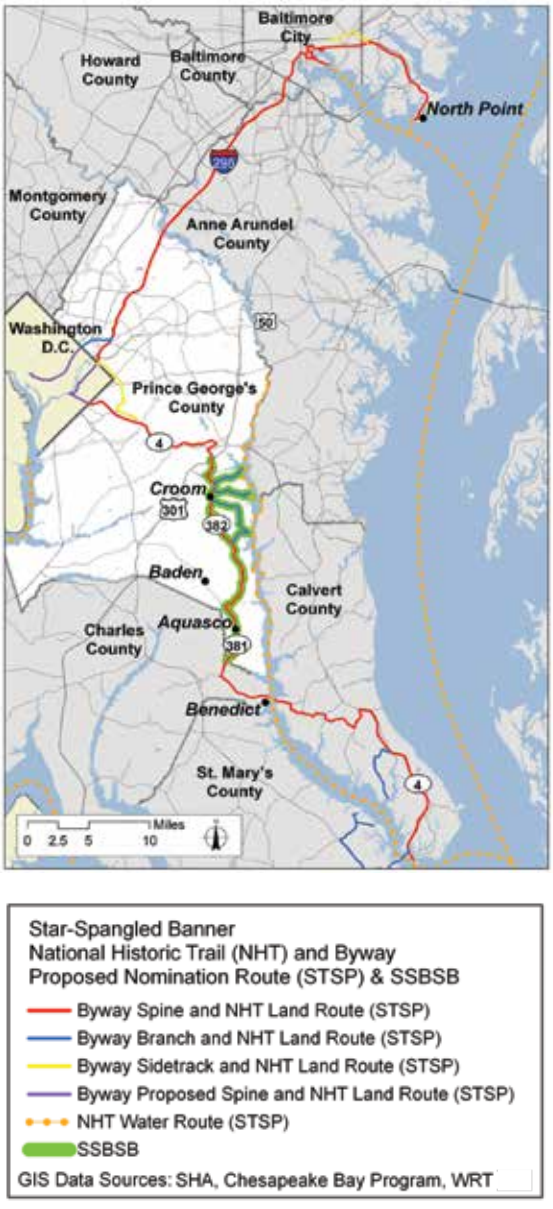


Figure 2. Location map

Study Focus

To implement the recommendations from the Subregion 6 Master Plan, the study proposes strategies to enhance and preserve the rural character of Aquasco, Croom, and Baden. The buildout analysis is based on existing policies and regulations for site development and roadway improvements and estimated the total number of residential units that could be added within each village under current rules. Alternative approaches and development patterns are explored and illustrated, achieving the same residential buildout. The study examines ways to promote the preservation goals of historic rural communities in conjunction with recognizing the implementation tools made available by the adoption of the Star-Spangled Banner Scenic Byway (SSBSB) designation for Croom and Aquasco Roads.

Recommendations include extending and broadening the intent of the conservation subdivision; consideration of concentrating through development transfers' existing buildout within villages; protecting scenic viewsheds—the view from the road—and site characteristics unique to the Rural Tier while improving connectivity and safety for the pedestrian, cyclist, and motorist; and developing design guidelines to guide future development patterns.

Background

Concurrent Planning Efforts

Completed in conjunction with the Prince George's County's development of the *Croom and Aquasco Roads Scenic Byway Plan Elements: A Corridor Management Program for these Roadways and Other Related Star-Spangled Banner Historic Roadways in Prince George's County* (Program) and the National Park Service's development of the Star-Spangled Banner National Historic Trail and Scenic Byway, these efforts share recommendations for the conservation and enhancement of scenic and historic roadways, the rural character of the surrounding landscape, and ways to improve safety and aesthetics in the built environment. The Croom and Aquasco Roads Scenic Byway Plan Elements includes an effort focused on the byway corridor itself. The SSBSB incorporates recommendations and guidelines for improvements within and beyond the scenic byway's rights-of-way. The county's scenic byway study, partially funded through the Maryland State Highway Administration (SHA) from the federally-funded National Scenic Byways Program, completes a project begun in 2007 referred to as the Lower Patuxent Scenic Byway and links the byway corridor with the National Park Service-led effort focused on the Star-Spangled Banner Historic Trail and Scenic Byway.

Figure 3. Cover from Prince George's County's SSBSB Plan

Figure 4. Cover from the National Park Service's Star-Spangled Banner Historic Trail and Scenic Byway (STSP) Plan

Past Planning Efforts

Many studies have addressed issues related to preservation and conservation of the area's rural character and, in particular, the community's tobacco farming heritage and historic properties. A 2007 survey along Croom Road identified 61 tobacco barns in various states of repair and 96 designated historic resources within the road corridor.

The 2010 *Approved Historic Sites and Districts Plan* established countywide preservation policy and guidance on historic preservation. Within the plan's section on the Rural Tier, the category, "Historic Vernacular Landscape," is most appropriately applied to the landscape's rural agricultural character as found in southeastern Prince George's County. The plan's Policy 2 and its three associated strategies recommend that landscapes associated with the county's scenic and historic roads be treated as significant cultural landscape features and that mechanisms be developed to require the preparation of cultural landscape treatment plans for developing properties in order to ensure that defining features of the landscape are protected. However, the directive is policy oriented and recommends further actions to ensure that the rural character is considered in any development.

Figure 5. Tobacco barn

The 2009 *Approved Countywide Master Plan of Transportation* (MPoT) designates all of the SSBSB spine and branch roads as being of scenic and historic importance, making them eligible for additional efforts to conserve and enhance them. MPoT policies (not regulations) require an inventory of features within the right-of-way as well as the properties adjacent to the right-of-way if those properties are located within the road's viewshed. The policies also recommend the formulation of guidelines for development activities within these areas that address setbacks, landscape, scenic easements, and utility clearing.

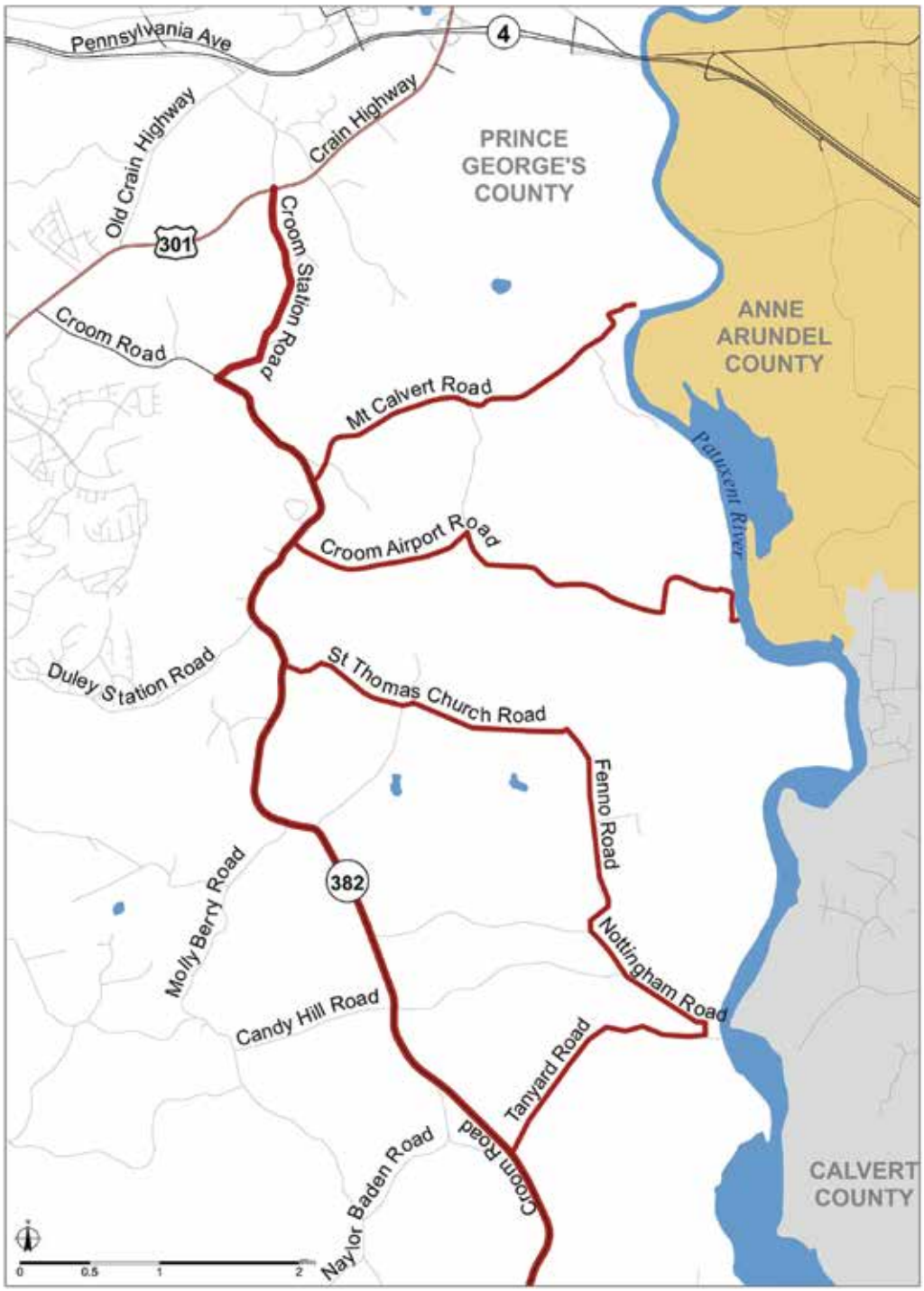


Figure 6. SSBSB spine and branch location

The Subregion 6 Master Plan makes this recommendation: "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." The Subregion 6 Master Plan makes the observation that "rural land near major urban areas is an increasingly valuable resource and commodity for food, energy production, and, potentially, for offsets for development activities, emissions, or pollution." Plan contents are directed toward a more sustainable approach for economic development, land preservation, and residential development in the effort to preserve historic sites, sensitive environmental features, productive land, and other resources. The plan expresses the policy to "protect and maintain rural villages by promoting compatible development and preservation of scenic and historic roads." The Subregion 6 Master Plan reinforces recommendations from previous plans, such as the retention of the prevailing rural character of the southeastern portion of the county. The plan recommends that a finer-grained study and analysis of the rural villages be undertaken.

During the community involvement process of the plan update, a number of concerns related to agricultural preservation and property rights were raised. These concerns led to the development of this study and the Visual Preference Survey, both providing a more in-depth opportunity for community members to discuss the challenges related to rural land conservation and economic development.

Project Area

This study took place in southeastern Prince George's County, primarily within the county's Rural Tier. East Marlton, located within the study area northeast of Croom, is part of the Developing Tier. The surrounding landscape is wooded and intertwined with pasture and farm field. Land cover has shifted since the 1930s from an open, agricultural landscape to a wooded landscape, as seen in a sequence of aerial photographs taken in 1938, 1965, and 2005. Several properties are historically significant. Development consists primarily of residential uses with some commercial and institutional uses.

Three Villages

Three villages within the Rural Tier of southern Prince George's County were identified for further exploration. Boundaries were derived from the existing development pattern, clustered institutional uses, residential structures, and commercial activities. Property boundaries were used as a guide but were not a determinant for inclusion. The initial boundaries were established in 2010 at the onset of the study and later were modified and expanded during the course of the study. If any portion of a parcel fell within the 2010 boundary, it was fully incorporated for purposes of the study and the buildout analysis exercise. None of the villages currently have a center core or defined, pedestrian-friendly main street.

Croom

Croom is a linear village, centered on the intersections of Croom Road (MD 382), Duley Station Road, and St. Thomas Church Road. The village is south of the intersection of Croom Road and US 301 (Crain Highway), a heavily traveled corridor in the area between the Developing Tier and Rural Tier. A partially developed planned community—Marlton—potentially will add 1,330 additional dwelling units in the future. Croom Road serves as the spine for the SSBSB and has four branches that connect the SSBSB spine to historic and natural resource sites along the Patuxent River.

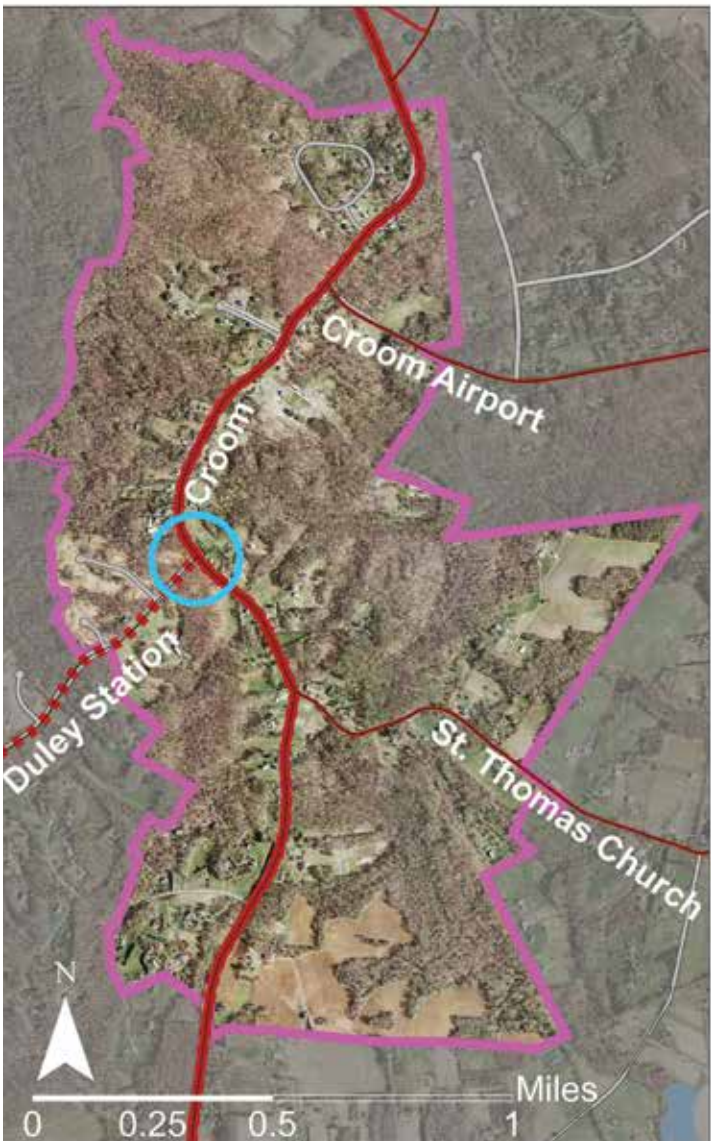


Figure 7. Village boundaries for Croom and Insert photo of Croom Road

Croom Road, supposedly a north-south route established by Native Americans, appeared on a 1794 map of Maryland. The road and its branches linked the tobacco plantations of the area to the major colonial markets in the late 17th and early 18th centuries. The village of Croom grew around St Thomas Church (circa 1745). Later building additions to the village included a post office, blacksmith, miller, and schoolhouse. Today, the buildings reflect a variety of eras primarily reflecting popular and vernacular styles. The area remains largely composed of agriculture, forest, and open space with residential development occurring as Croom and its residential growth are oriented toward the Washington, D.C., expanding suburbs.

Figure 8. St. Thomas Church in Croom

Recognizing the increase in development pressure from suburban growth in this part of the county, most of the village was excluded from public water and sewer service. Residential development has been limited to five-acre or greater residential lots for property within the Rural Tier. There are a number of large, greater than 10-acre parcels within the village.

Aquasco

Aquasco, a crossroads community, known as Woodville in the nineteenth century, is located in far southeastern Prince George's County. Clustered along a segment of MD 381 (Aquasco Road), the village extends almost equally north and south of Aquasco Road's intersection with Doctor Bowen Road/St. Mary's Church Road. Today, the village is primarily a residential development with some small commercial and institutional uses. (Since the study's inception, a new creamery and farm store have opened for business in this village.) Although there are primary streets—Aquasco Road, Doctor Bowen Road, and Saint Mary's Church Road—the community has no clear "Main Street." Unsurprisingly, a review of existing parcels indicates that few parcels of 10 acres or larger abut Aquasco Road in the village. Two of those have historic environmental setting restrictions placed on them.

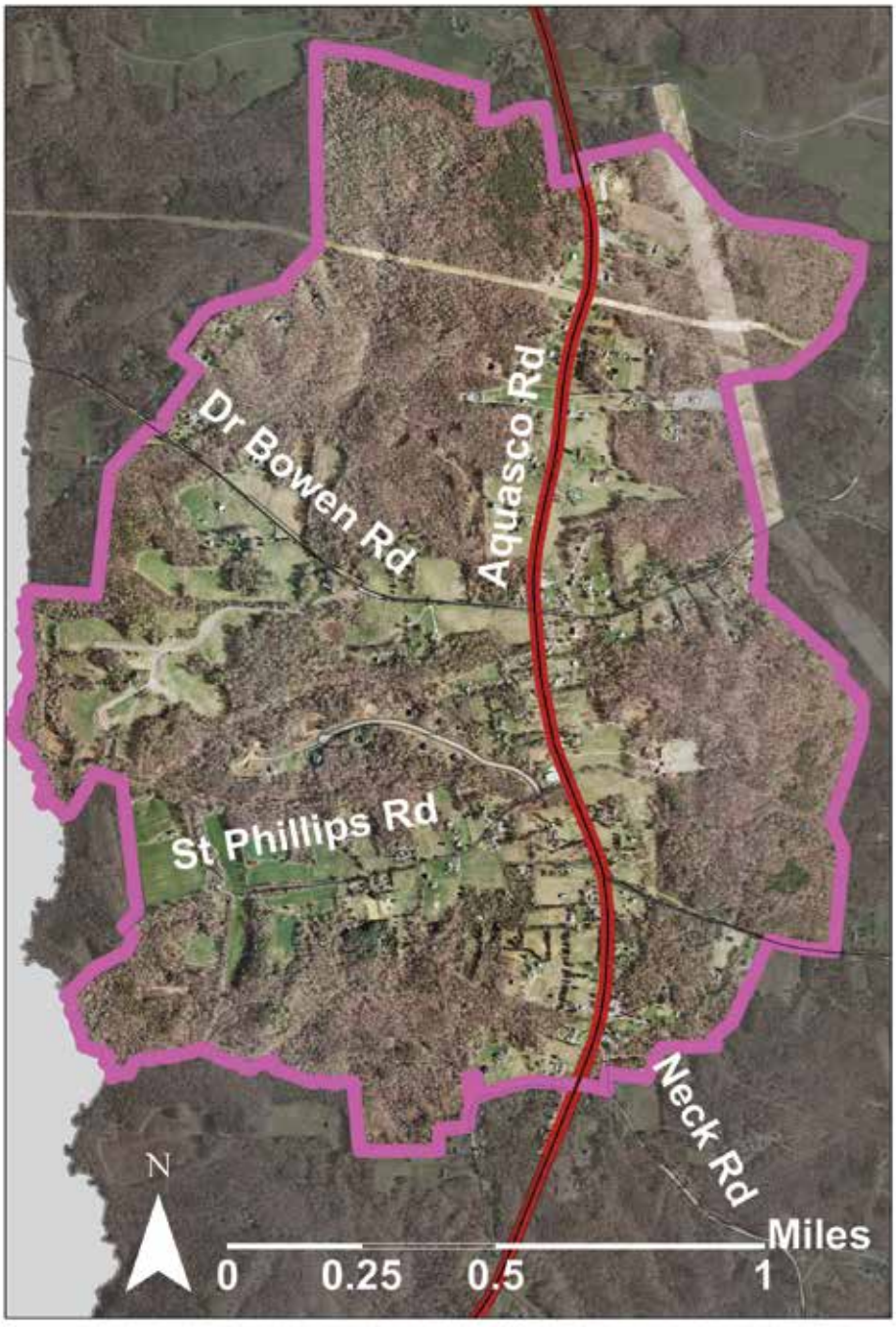


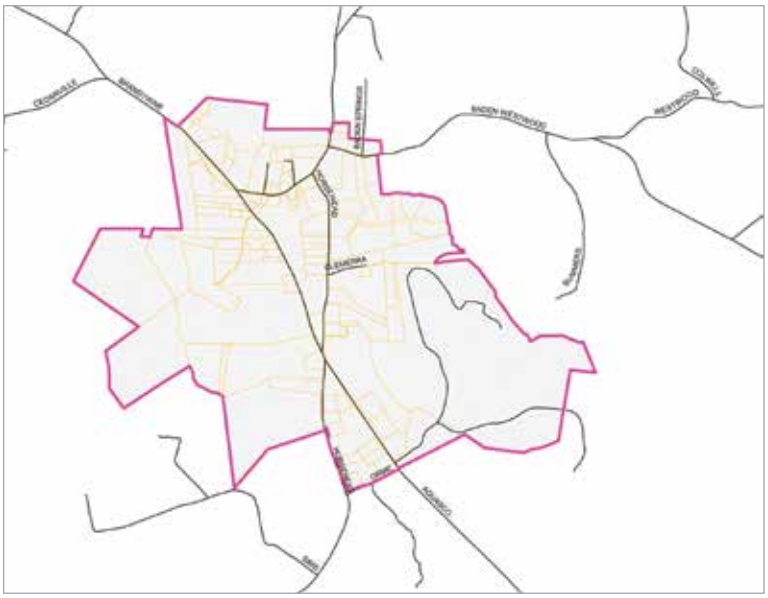
Figure 9. Aquasco Village boundary

Figure 10. View of study site in Aquasco

Aquasco was named for a land tract patented in 1650. The historic community was producing enough tobacco by 1746 that a tobacco inspection warehouse was proposed, although it was never built. Common village uses are documented in an 1861 map and range from a gristmill to a tavern to several churches and a windmill. The 2009 Historic Sites and Districts Plan identifies the historic properties within the village. Most of the buildings date from the mid-nineteenth century to the turn of the twentieth century. Building setbacks vary widely along the roadways, ranging from 10 feet to more than 500 feet and characterize the physical settlement pattern.

Baden

Baden is located along Brandywine/Aquasco Road at the crossroad with Baden-Westwood Road. It is not included in the listing or appendices of the 2009 Historic Sites and Districts Plan documented historic communities unlike the villages of Croom and Aquasco. Today's development pattern reflects Baden's historic role as a small rural village that provided goods and services to local tobacco plantations and farms. The village has three distinct districts. The first, located around the Baden-Westwood/Horsehead Road intersection includes Baden Elementary School, Baden Library, a community center, and Saint Paul's Church and Cemetery that is listed on the National Register of Historic Places. The church is the earliest surviving Anglican Church in the county and dates to 1735. A second district is centered on the intersection of Aquasco and Baden-Westwood Roads near the Baden store and the Baden Fire Hall. The third district, located near the corner of Aquasco and Horsehead Roads, is home to several churches. Located north of Aquasco, Baden is still relatively far from higher-density residential development potential emerging from the Washington, D.C., suburbs. However, unlike Aquasco, there is a larger inventory of undeveloped 10-acre and larger parcels throughout the village, including properties that abut the primary roadways.



Legend

Village Study Boundary

Roads

Properties

Figure 11. Baden Village boundary

Past Land Use Changes

The southeastern portion of Prince George's County has been an agricultural region since European settlement in the 1700s. The prevalence of tobacco farming in the Aquasco, Baden, and Croom areas meant that this part of Prince George's County had the largest ratio of slaves per total population before the Civil War[1]. After emancipation, many freed slaves remained in the area and worked as tenant farmers. Schools and churches serving these families were established in Aquasco and Croom in the late 1800s. In addition, the Croom Industrial and Agricultural Institute opened in 1903 and operated until 1952. This institution was founded to train young African Americans for careers in scientific agriculture and household economics.

None of the villages are served by public transportation. Although called for in planning documents such as the MPoT, none of the villages currently have sidewalks, crosswalks, or other infrastructure that facilitates pedestrian or bicycle use.

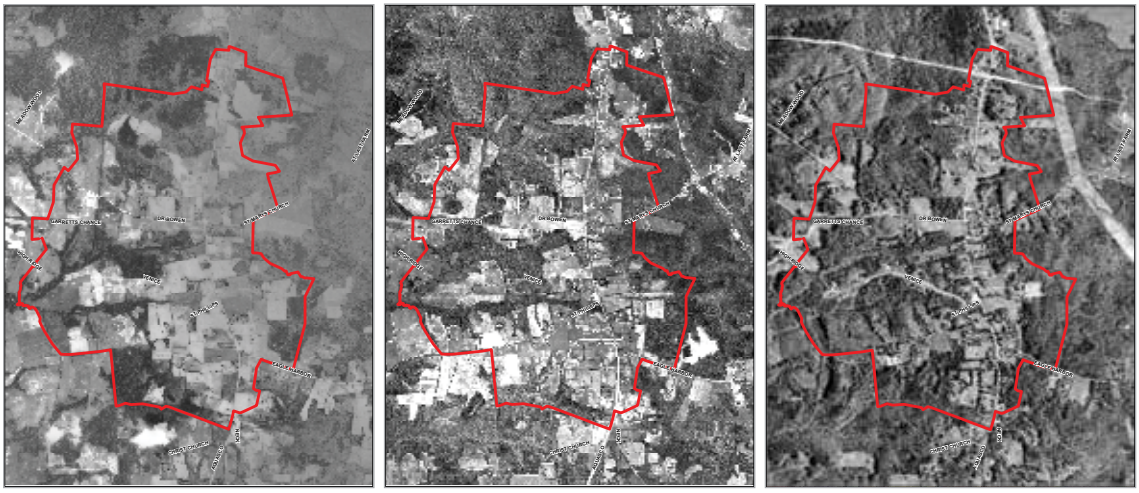
Development patterns are similar in each of the villages, although Croom, located nearest to the burgeoning Washington, D.C., urban area and adjacent to the planned community of Marlton (when complete, Marlton is anticipated to have approximately 4,500 residential units), is experiencing the most new residential growth. Smaller detached single-family

1 Source: Prince George's County staff report "The Rural Village Centers Study, Background Inventory and Analysis of Development Patterns, Opportunities, and Constraints." Staff Internal Working Draft-November 1, 2010. Page 9.

home subdivisions are being, or have been, developed at the edges of Aquasco and Baden in recent years.

As tobacco farming declined, many cultivated fields have reverted to woodlands. The State of Maryland implemented a tobacco buyout program in 2001, which required that participating growers stop producing tobacco but remain in active agriculture for 10 years. The ending of the active agriculture industry may result in additional expansion of forest cover and diminishment of agriculture fields.

A sequence of aerial photographs from 1938, 1965, and 2005 clearly illustrate the change in land cover and land use in the three village areas. Woodland or forestland covered less than a third of the Croom area in 1938. Woodland areas that did exist were primarily located on the periphery of the village. By 2005 the wooded areas had expanded to the village core along Croom Road. Similar transformations, although not quite as dramatic, appear in the aerials of Aquasco and Baden Villages.



Figures 12, 13, and 14. Example sequence of historical aerials for Aquasco—1938, 1965, 2009; Source: Prince George's County

Buildout Analysis—Residential Development Allowed under Current Regulations

A planning exercise, or conceptual buildout analysis, was used to estimate the development potential currently allowed (in gross, high-level terms) that could occur under current zoning and SGA regulations within each village boundary. The yield also was used as a cap in later explorations of various development patterns in Baden. No additional residential density was added to any of the villages as a part of this study and hypothetical development scenario. However, two parcels in Baden—delineated by an asterisk (see Figure 15 on page 14—are or were sand and gravel mining operations and likely have limited development potential. Because their development potential is unknown, due to modifications in soil hydrology that limits septic construction, a development range is assumed for these properties as well as the overall build-out for Baden.

Using current zoning and subdivision regulations, along with general assumptions regarding soil limitations and environmental restrictions, the number of potential residential units

that could be built under current regulations was determined for each village. The buildout analysis assumed no soil limitations for septic systems (all sites were assumed to be served by on-site, single unit septic systems). No parcels were aggregated for this study. Appendix B provides a more thorough discussion of the buildout analysis, using the Village of Baden as an example.

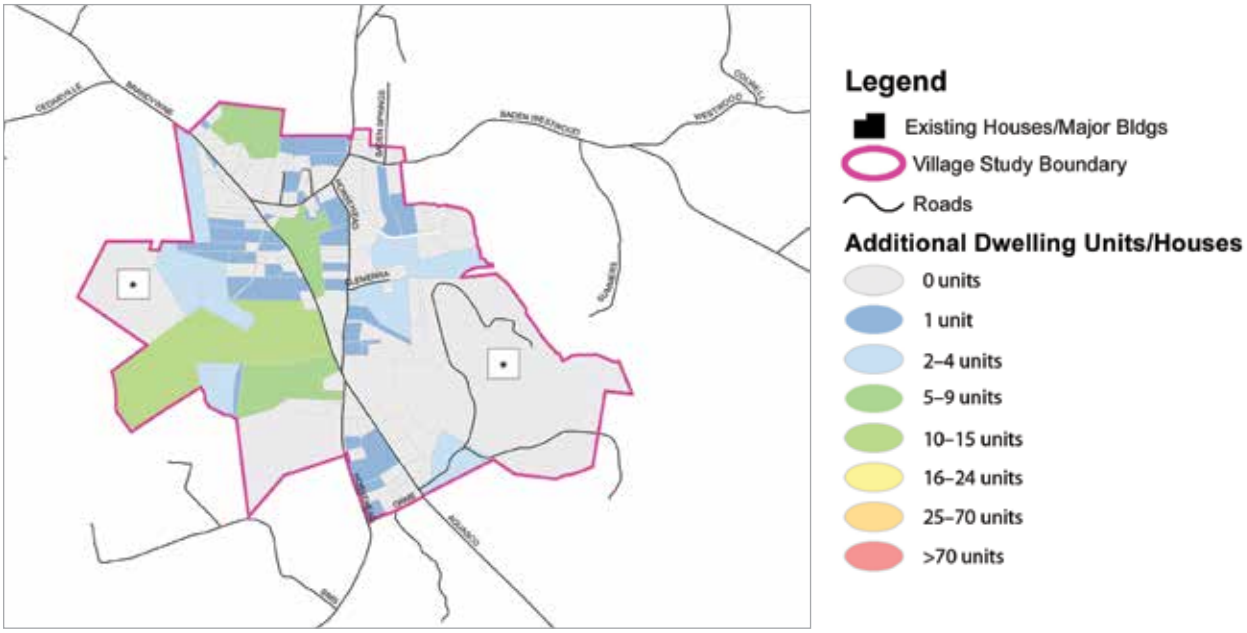


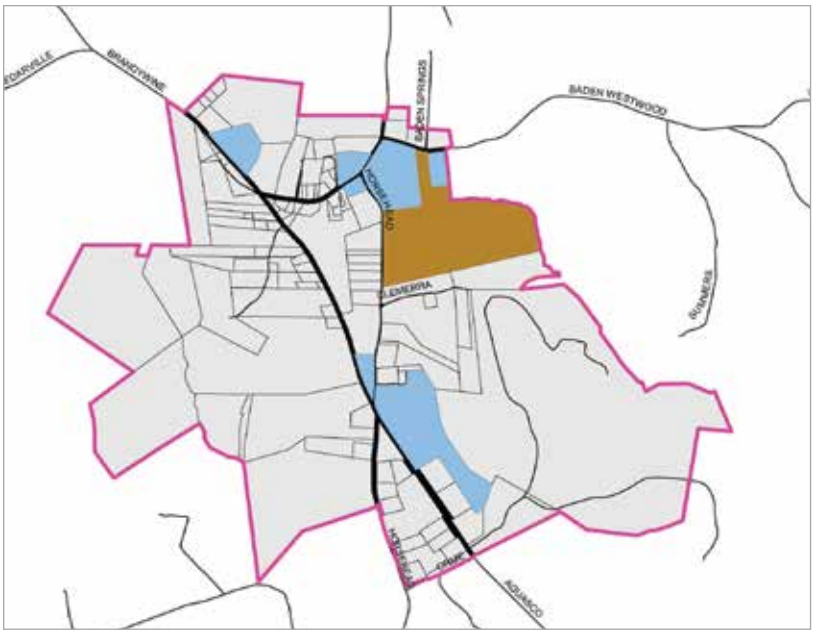
Figure 15. Graphic example of current allowed buildout in Baden at 95-162 units subject to soil suitability for septic systems

Existing Regulations and Development Constraints Zoning

Most of the Rural Tier is currently zoned for one residential dwelling unit per five acres as Open Space (O-S). One area north of the intersection of Baden-Westwood Road and west of Brandywine Road is zoned for commercial use in Baden. The Baden store is located on a portion of this site. A few parcels are zoned for commercial use in Croom. Four areas directly fronting Aquasco Road in Aquasco are zoned for varying intensities of commercial use.

Site-Related Regulations and Assumptions

Lands already committed to specific uses were removed from the buildout calculations. These included lands without additional development capacity such as institutional uses—schools, cemeteries, or churches—and lands where capacity was already determined through a plat or subdivision.



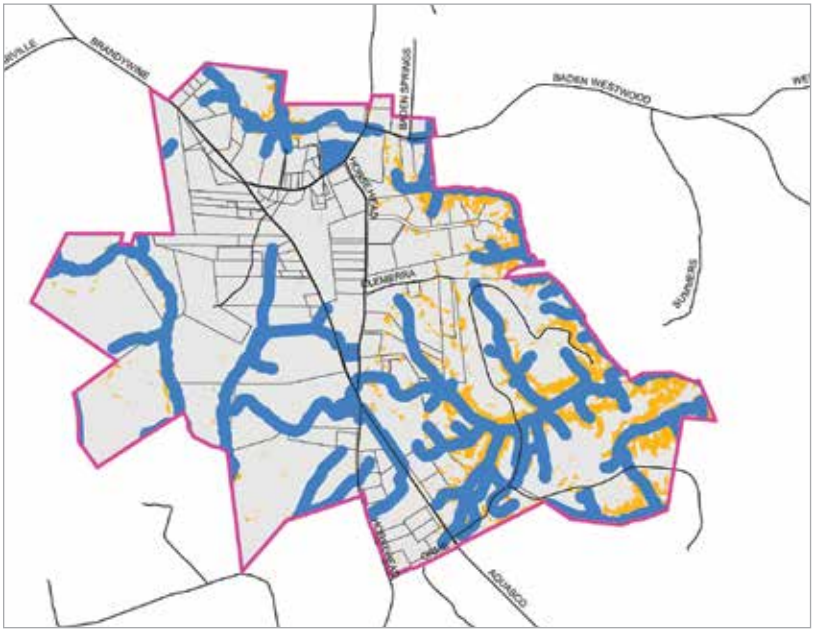
Legend

- Village Study Boundary
- Roads
- Institutional Land/Cemeteries
- Platted
- Master Plan ROW
- Properties

Figure 16. Baden lands removed from buildout consideration due to site regulations—properties with no development capacity (institutional, cemeteries, easements) or where capacity has been determined through a plat or the subdivision process

Field Verification of Regulated Environmental Features

Environmental limitations are generalized for purposes of this study. If this exercise were done for a reason other than a study purpose, the environmental limitations would be subject to site-specific evaluation prior to any development. Regulated environmental areas (stream buffers, wetlands, 100-year floodplains) and steep slopes (15 percent and over) were removed from consideration as buildable property. This assessment was generalized for purposes of the overview.



Legend

- Village Study Boundary
- Roads
- Regulated Environmental Areas*
- Steep Slopes
- Properties

Figure 17. Regulated environmental features not included in Baden buildout analysis—does not impact capacity on all properties, and site investigations are necessary to determine which portions of a parcel are constrained by environmental features

Methodology

After applying the regulatory and environmental constraints, the individual parcels within each village were assessed for the current number of residential units located within each parcel as best as could be determined from aerial photography interpretation. Educated assessments were made for some structures such as a garage or barn versus a residential building. Each parcel is vested with the number of units allowed based upon the current zoning regulations and is affected by other regulatory and environmental conditions. For example, a 35-acre parcel under O-S zoning conceivably could yield seven residential units dependent upon site conditions, the maximum allowed by the SGA. Residential units already built were subtracted from the potential number of units allowed. The difference between those built and those allowed under current regulations resulted in the buildout number. This analysis was performed for each village and is graphically illustrated in Figure 18. Without any changes to current regulations and site conditions, the buildout analysis estimates how many residential units can be added to each village.

Buildout Baselines

A range of 64–162 residential units could have been built within the village of Baden prior to the passage of SB 236. This assessment accounts for the impact of the past sand and gravel mining activities on two sites, potentially reducing suitability for individual septic systems. Approximately 150 units could have been added in the village of Aquasco, and approximately 510 units could have been added in the Village of Croom. The unit estimate in Croom includes 408 residential units to be located in East Marlton, a planned development located in the Developing Tier. The remaining 102 residential units are located in the less intensely planned and developed Rural Tier east of this planned community.

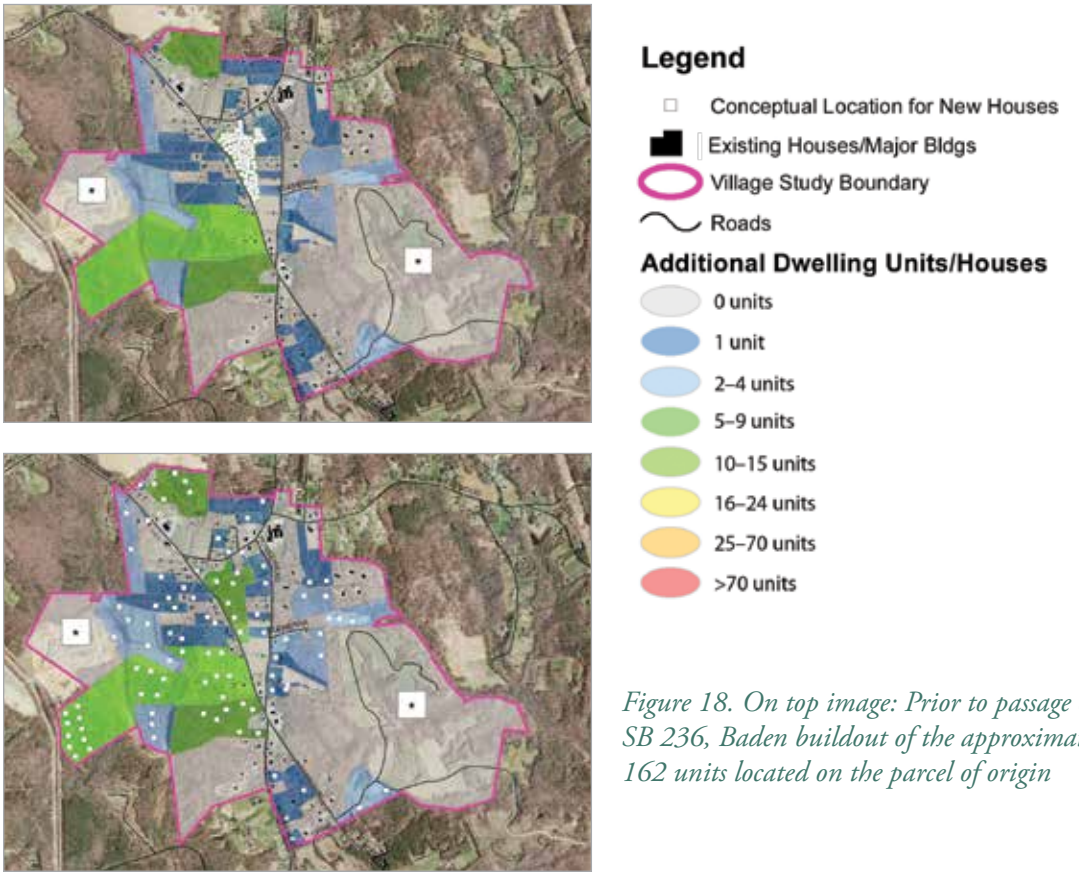
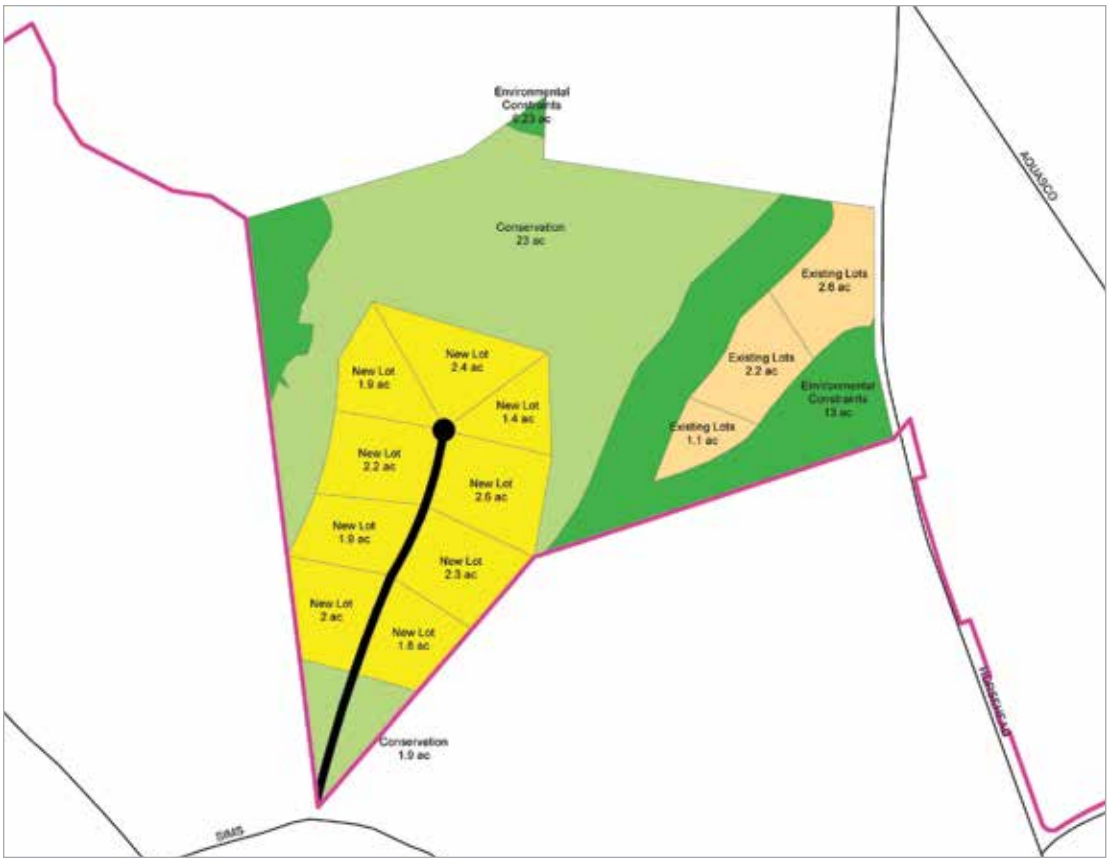


Figure 18. On top image: Prior to passage of SB 236, Baden buildout of the approximate 64–162 units located on the parcel of origin



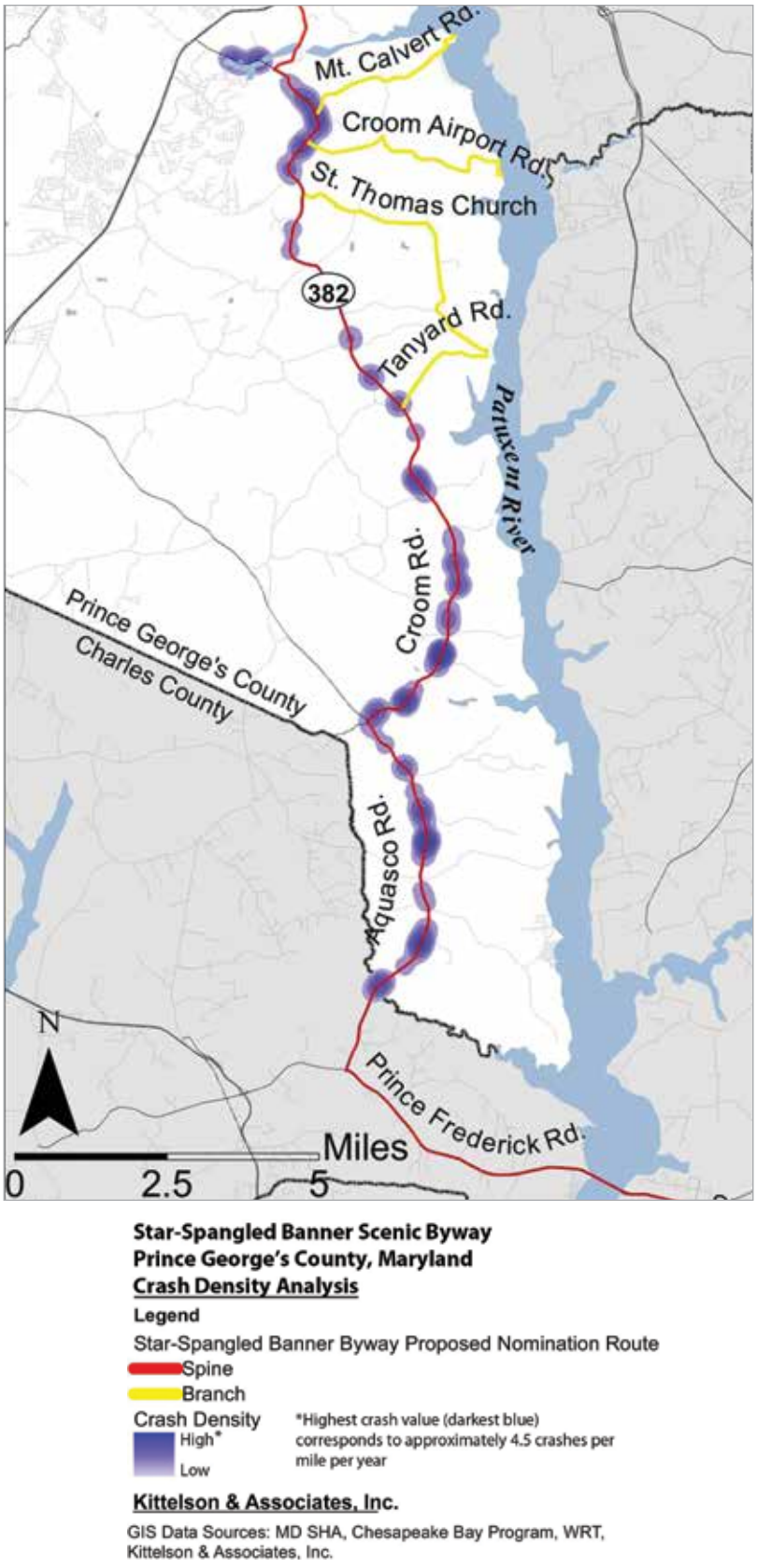
Legend

- Village Study Boundary
- Roads
- Environmentally Constrained
- Conservation
- Existing Lot
- Future Lot
- Road

Figure 19. Example of a subdivision application in Baden

Transportation Issues

As a part of the parallel study for the National Park Service's STSP, a crash density analysis was performed for Croom and Aquasco Roads, the spine for the SSBSB. The highest crash value (darkest blue in Figure 20), corresponds to approximately 4.5 crashes per mile per year between the years of 2006 and 2009 for which the data were available when the analysis was performed.



Star-Spangled Banner Scenic Byway
Prince George's County, Maryland
Crash Density Analysis

Legend

Star-Spangled Banner Byway Proposed Nomination Route

Spine

Branch

Crash Density

High*

Low

*Highest crash value (darkest blue) corresponds to approximately 4.5 crashes per mile per year

Kittelson & Associates, Inc.

GIS Data Sources: MD SHA, Chesapeake Bay Program, WRT, Kittelson & Associates, Inc.

Figure 20. Crash density diagram for segment of Croom Road

Retaining rural character requires sensitivity not always employed in the design and reconfiguration of rural roads and intersections. SHA has authored a book on context-sensitive solutions for Maryland's scenic byways that offers many good, sensitive design solutions. These ideas—solutions appropriate for highway safety, bridge replacement, bicycle safety, and access management—were tested in several scenarios at the intersection of Croom and Duley Station Roads. More discussion of transportation issues can be found in the companion Croom and Aquasco Roads Scenic Byway Plan Elements.

How is "Rural" Currently Defined in Prince George's County?

Rural Tier Policies

The 2002 General Plan established the Rural Tier with a vision for protecting large amounts of land for agricultural pursuits and the preservation of rural character and vistas, recreation, woodland, and wildlife habitat. Policies tied to the Rural Tier are intended to balance pressure for residential development and landowners' equity with the desire to maintain rural environments and character. Southern Prince George's County contains much of the county's remaining undeveloped land—farmland, forested lands, and historic and scenic resources—yet its proximity to urbanized areas continues to put pressure on these lands for new development.

Figure 21. A private driveway composed of a single gravel lane lined with mature deciduous and coniferous trees in rural southeastern Prince George's County, Maryland

What Should Rural Look Like?

The study explored the question, "What should rural look like?", by examining current and potential development practices and conservation measures as well as through conversations with local community members. Agreement was reached on the community's overall desire to preserve rural character and their rural communities. However, the means to achieve this without suburbanizing southeastern Prince George's County was not as easily answered. Initial responses raised additional questions. To attempt to answer this, the study incorporated a visual preference survey, created illustrations of the effect of current zoning and regulations on development—the existing buildout scenarios, and developed examples of alternative development patterns to the currently allowed buildout scenario. All these tools were used in an attempt to help community members better understand and articulate what "rural" means to them and what rural should be in the future. Several techniques were used to generate the answer.

Local History

Oral history interviews focused on rural life along the Patuxent River have been collected by EHT Traceries, Inc. Interview subjects included three women associated with the Nottingham School; a tenant farmer; two men from the Columbia Air Center; a family with a historic home circa 1738; Cliff Jenkins, who has a small collection of artifacts; and the keeper of the Patuxent River. Donald Shomette, a local historian and underwater archeologist, gave a presentation on the War of 1812 at the beginning of the study.

Visual Preference Survey

A visual preference study was developed by The Maryland-National Capital Park and Planning Commission (M-NCPPC) staff to gauge the community's preferences on types and styles of development. Images portrayed new and older residential single-family buildings, commercial strip centers and town centers, rural landscape settings and more suburban landscape settings, building materials, the use of fences or walls, landscaping, sidewalks, street trees, and pedestrian-scaled lighting. Participants ranked images in six categories with the assistance of a mechanized counter, which indicated their likes and dislikes for each of the images from very appropriate to very inappropriate. The survey provided immediate totals with every slide, with additional layers of analysis made possible, for example, by looking at where the respondent lived as tied to their responses.

Survey Participants

Approximately 75 community members participated. Most of the participants, with the greatest number of them identifying with Croom, indicated that they were long-term residents of their community. Rural lifestyle, followed by scenic beauty, was the most popular answer when asked "What do you like best about Aquasco, Croom, and Baden?" Traffic and road safety—speed, congestion, heavy truck traffic—was identified as the biggest infrastructure concern. Opinions favored a broad spectrum of land uses and public improvements. Small-scale commercial/office, agritourism, and recreation predominated.

What Should Future Development Look Like?

The responses indicate a sensibility and definition of community character that residents wish to see, but the responses must be couched with a few qualifications. It is not always

clear what quality the respondent favored. For example, when viewing an image of a single-family home, it is unclear whether it was the color scheme, the building material selection, or a landscape versus a building style that appealed. Similarly, a commercial street was supported by 56 percent of the audience. When a flowering tree was added to the same image, support rose to 80 percent. If the tree were not in flower, would it have been as appealing, or if the sidewalk were removed but the flowering tree remained, would it have been as popular? Many variables within each image can color the respondents' support. At best, the results are useful in drawing broad presumptions and as a starting point to have a discussion with community members as to what they hope future development would look like. A basic premise of the study was that change will occur in the future, and it was worth examining what its character could be to be more supportive of a rural landscape.

83%

77%

69%

Figures 22, 23, and 24. Images from types of commercial development presented (with audience reaction indicated by thumb up/thumb down) in the Visual Preference Study (image source is Prince George's County)

The survey did not demonstrate a consensus on desired commercial or institutional use. Equal numbers of respondents supported the following activities/facilities: baseball or soccer fields; historic/tourism, such as a bed and breakfast; wineries; bike rentals; small-scale village commercial, office, or services; or none of the above. A clear distinction between suburban and rural was made by viewers with store fronts that appeared more like farm stands or one-story shed buildings that appealed to the participants, and the commercial buildings situated in a more formal town square or strip shopping center were not favored. The parking location did not seem to affect the responses; response consistency seemed to be more of a reaction to the type of landscape and development where that model is typically located.

Broad stretches of undefined pavement, such as in front of the Baden store, were unappealing to participants. More than 50 percent of the participants gave positive responses to images that appeared tidy and defined from clearly articulated street crossings with traffic calming elements to an extended lawn turf, reducing the visual width of pavement between a building and the travel lane. Similarly, driveways and entrances that over emphasized their location with large gateways, monuments, or split driveways with gatehouses were panned, while driveways that were lower key with simple signs and fencing, unmarked for the most part, were more appealing. Traffic calming elements, such as demarcated pedestrian crosswalks and bike lanes, appealed to those surveyed.

Community Outreach

An active and participatory outreach process supported this rural villages study. In addition to presentations on the villages study, information on the concurrent planning efforts by the Neighborhood Stabilization Program and the county's scenic byway project was presented.

Table 1. Community Meetings Sequence

Date	Subject	Attendance
November 30, 2010	Kick-off meeting followed by presentation by local historian and underwater archeologist Donald G. Shomette who presented a lecture on the War of 1812 and its related resources in southern Prince George's County.	100+
March 7, 2011	Presentation of buildout scenarios for the Croom, Aquasco, and Baden village areas and presentation of the interactive Visual Preference Survey using instant polling equipment.	70
June 30, 2011	Presentation of existing buildout analysis and alternative Rural Village "explorations" for Croom, Aquasco, and Baden, reallocating the existing buildout findings.	20
July 26, 2011	Project summary presentation at Council Member Franklin's Community Forum.	
October 12, 2011	Presentation of modifications to development explorations.	
Summer 2012	Project Wrap-Up Meeting—in-depth discussion of recommended design concepts present the major points of this study and the Croom and Aquasco Roads Scenic Byway Plan Elements' recommendations for consideration.	

Alternative Development Concepts

Developed prior to the passage of SB 236, these concepts are listed here only to acknowledge the work and public participation process in the development of this study.

Exploration of Concepts

The Rural Tier is currently receiving more development than the 2002 General Plan calls for; less than one percent of new countywide growth should occur in the Rural Tier according to the 2002 General Plan, but actual development has surpassed this percentage. If development is to continue in the Rural Tier, is there a better way to accommodate it than having it pop up throughout the area, leaving little opportunity to conserve the rural landscape? Could the conservation subdivision be expanded to better address issues related to the preservation of rural land? Could a transfer of development rights, limited to the boundaries of a village, offer a way to preserve rural land and character while accommodating growth?

This study focused on exploring what "rural" should look like in southeastern Prince George's County. Examples were used to explore different methods to accommodate growth through conservation subdivisions and through the creation and enhancement of rural village centers. This study did not propose additional development growth but, instead, worked with members of the community to help them better articulate what appealed to community members for future growth in the Rural Tier. Two sites were used to test alternative development concepts in Aquasco and Baden, although the concepts could be applied to any of the three villages. Even though the concepts were preliminary, they were developed thoroughly enough to generate community reaction and comments.

The example concept scenarios assumed that rural residential development should minimize environmental impacts and work closely with the green infrastructure of southeastern Prince George's County. Other assumptions that guided the scenarios were that roads and associated impervious surfaces and stormwater management services (septic or sewer and water) should be compatible with a rural landscape and protect farmland and forests. Rural development should respect existing viewsheds and local architecture as well as offer a sustainable option for residential development in the Rural Tier.

Regulatory Issues

The example explorations closely followed regulations and restrictions that existed prior to passage of SB-236. The concepts were developed with conformance to overall regulations. The drawings illustrate possibilities within a realistic framework. This is a 'what-if' exercise, not a finished site plan.

Some liberty was taken with the current septic system regulations in 2011, which was made clear throughout the project. This exploration preceded the passage of the Maryland Senate Bill 236, Sustainable Growth & Agricultural Preservation Act of 2012. In several of the illustrations, the rural village explorations assumed that a form of shared or packaged septic system was available for use. The shared system allowed for a more densely clustered development, resulting in a greater conservation of undeveloped land.

Example Sites

A series of examples exploring alternative development patterns that could accommodate the estimated development potential generated in the village buildout analysis were developed in Aquasco and Baden. The plans differ from what current regulations require, but no additional density beyond the amount determined in the buildout was added. The examples were presented to the public in a series of public meetings as options while acknowledging that many other configurations and alternatives are possible. Two sites were selected for the example exploration: one in the Village of Aquasco, and the other in the Village of Baden. Both property owners granted M-NCPPC permission to use the property for illustration purposes. There was never an intent to make the illustration an actual development proposal.

Conservation Subdivision Exploration

The exploration at Garretts Chance extended the concept of a conservation subdivision, in the abstract, emphasizing rural design and exploring the impact of an increase in woodland conservation. The site is composed of rolling hills with open vistas and woodlands. The intent of this exploration was to develop a site plan for a conservation subdivision that reflects the surrounding rural character and settlement pattern of small crossroads and small nonfarm lots while recognizing the desired size and footprint of the current market-desired housing product. The layout is less suburban in character with a narrower road that, in the last exploration, connects with an adjacent development and provides connectivity to the road infrastructure. Open space conservation is placed at a premium, and over 80 percent of the site is conserved as woodland in one of the examples.

The conventional subdivision predated the Conservation Subdivision Ordinance adoption in June 2006. The layout of the existing conventional subdivision shares many of the positive physical characteristics of the conservation subdivision's intent. Buildings are clustered in the center of the site, leaving much of the land (although not under common ownership) initially undeveloped and wooded. Since the adoption of the ordinance, a conservation subdivision is required for all major subdivisions with a few exceptions: property zoned R-80 or property with four or fewer lots, provided no additional subdivision for additional lots is permitted for the entirety of the original application and if the original property has not been the result of a previous subdivision. There are no approved or built conservation subdivisions in this part of the Rural Tier.

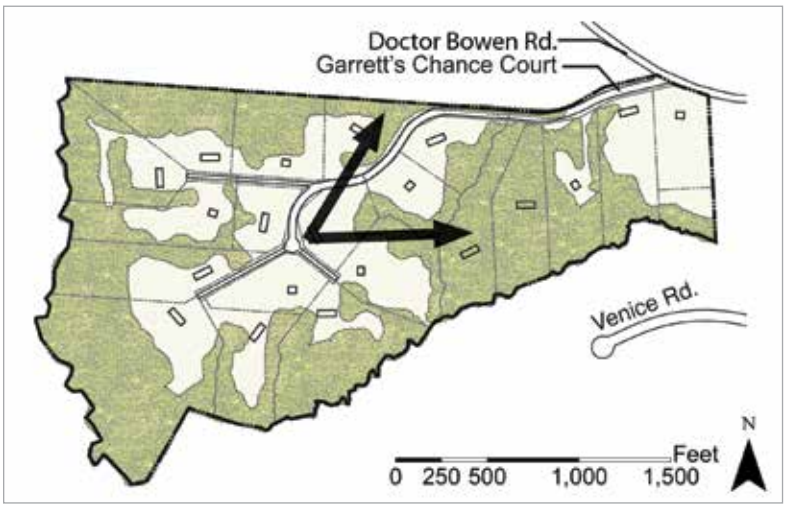
Garretts Chance—Conventional Subdivision

A property in Aquasco, referred to as Garretts Chance and approximately 114 acres in size, is currently under development as a conventional subdivision. The property is subdivided into 21 parcels ranging in size from 1.64 acres to 15.11 acres under the conventional subdivision ordinance. The lots are served by a single entry road accessed from Doctor Bowen Road. The road terminates in a cul-de-sac with three driveways that extend more deeply into the property. The selection of house plans from the builder's catalog average 3,500 square feet in their footprint with each household served by a septic system on its parcel. Sixteen of the residential lots have a minimum street frontage with

the four remaining lots accessed at the end of two driveways providing minimal frontage. As illustrated, the residential unit's location and alignment within each lot appears to respond more to the existing topography than the access road. The resulting layout yields approximately 48 percent tree cover over the entire property.

Figure 25. Panoramic view of Garretts Chance site, located in Aquasco

The residential buildings are the same in size and scale in all the schemes. They differ from the existing development in the selection of building materials and structure massing. Instead of the typical suburban builders brick and stone façade, each house is clad with wood with simpler and more utilitarian detailing to reflect the rural vernacular architecture of the area. Rather than incorporating a two- or three-car garage within a single volume or mass, the building volume is broken into distinct uses and multiple volumes—each a separate and attached volume for a garage, house, or porch, etc.

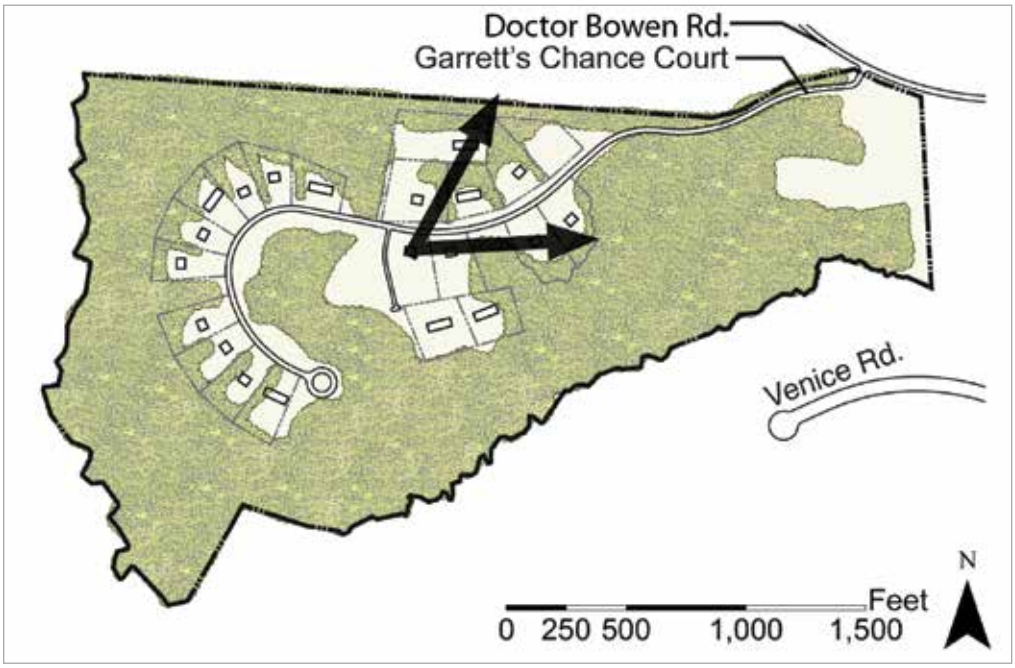


Figures 26 and 27. Conventional subdivision buildout; looking northeast at what buildout under conventional design could look like with residential design guidelines in place

Garretts Chance—UMD's Alternative Development Pattern

University of Maryland graduate students explored a number of configurations for a conservation subdivision on the Garretts Chance property in spring 2010. The Maryland students included 21 lots at an average size of 1.5 acres, accessed by a single entry road from Doctor Bowen Road. The entry road's alignment is somewhat similar to the actual access road, although the conservation subdivision's entry road alignment slightly shifted and is reduced in overall length. This reduction is likely due to the application of the conservation subdivision regulations that allow for smaller residential lot sizes that create a more compact development area. Septic capacity was accommodated on each individual lot. Unlike the earlier noted conventional subdivision, most of the residential units are consistently located within a defined setback of the access. The two lots that do not fit within a consistent setback depth are on flag lots with a narrow 'handle' or strip of land connecting them to the access road.

Students inventoried the site for soils, water resources, and vegetation, including identifying specific tree communities. Based upon this analysis, conservation areas were identified, reflecting the standards in the regulation, to protect the character of the land through permanent preservation of farmland, woodland, sensitive natural features, scenic and historic landscapes, vistas, and unique features of the site. The site layout conserves important site features such as open space networks, blocks of productive farmland, unique characteristics of a site, and contiguous woodland habitats. In addition, public benefit conservation subdivision further encourages connectivity between environmental characteristics of adjacent properties and a continuous open space network between the proposed development layout and the adjacent properties. Once the conservation areas were identified, the road was laid out, and the lots were associated with the road. The plan resulted in an approximate tree cover over the entire property of 66 percent. Students had included a 4-H farm, but it was removed along with reducing the lot total to 20 for comparison purposes in this study.



Figures 28 and 29. UMD conservation subdivision buildout; looking northeast from same viewpoint as conventional subdivision image in Figure 28

Garretts Chance—Conservation Subdivision with Shared Septic

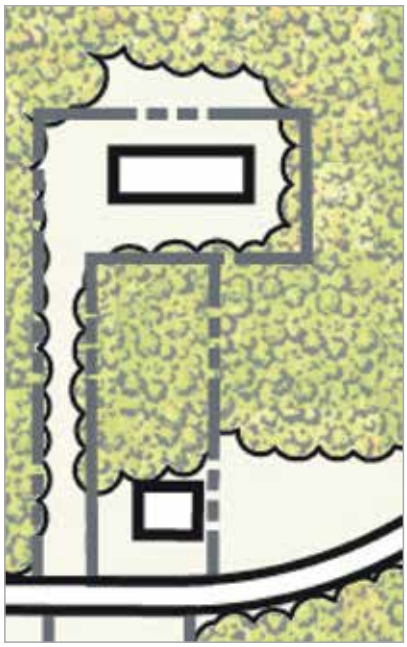
This study further explored the concept of conservation subdivisions. Consideration was given to using a more rural vernacular and historic housing type, but the exploration made use of a building type that reflected current market demand. Given that much of today's building footprint is devoted to the garage, it seemed more realistic to explore how a similarly sized building could fit within the conservation subdivision. The building footprint was modified to better reflect more traditional massing, but the overall footprint remained at approximately 3,500 square feet.

In this exploration, the road alignment is a significant modification from the University of Maryland's layout. The plan looked at linking this subdivision with a neighboring approved-but-unbuilt subdivision through road connectivity instead of terminating an access road internally within the site with a cul-de-sac or stub streets. In lieu of a dead-end access road from Doctor Bowen Road, the site planning effort employed the concept of connectivity and extended the road through the site, connecting it to Venice Road to the south.

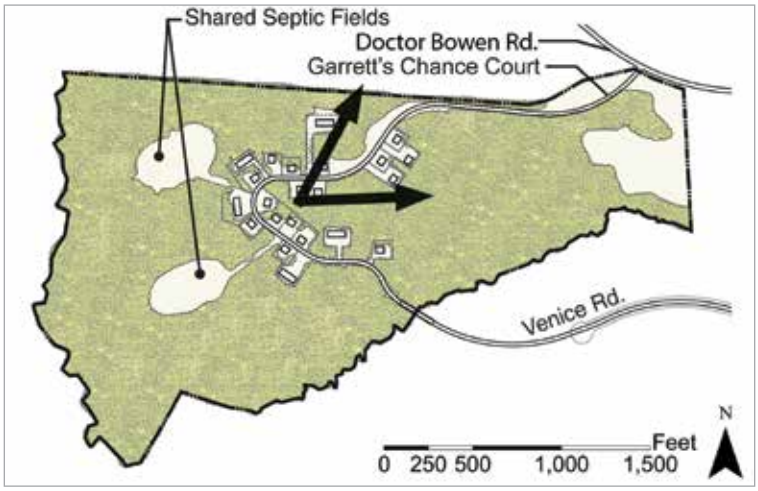
Lot configuration and septic system treatment also varied from the other explorations. Residential lots were clustered along the internal road in the center of the site and averaged 0.25 of an acre in size, because they no longer had to retain septic system capacity. Lots were laid out to reflect the more rural development pattern, making use of flag lots, varied setback depths from the road, and distances from adjacent residential units. As in a rural area, and unlike a traditional subdivision, the residential unit had a less formal relationship with the access road and was sited related to topography and views rather than lining building façades to create a consistent streetwall.

The concept also explored the use of shared septic facilities with 10 dwelling units maximum per shared septic field. The plan assumed 10,000 square feet per dwelling unit was required for septic fields, resulting in two separate fields at 100,000 square feet each. This size was derived per draft regulations in 2011 from the county's health department. The regulations had not been passed and now are affected by the recently signed Senate Bill 236, Sustainable Growth & Agricultural Preservation Act of 2012.

One of the primary goals of this exploration was to expand woodland conservation. By sharing the septic fields, parcel size was reduced, and overall tree coverage of the entire property jumped from 66 percent to 84 percent. Although this exploration focused on preserving and conserving woodlands, similar techniques could focus on conserving farmland, grassland, habitats, etc.



Figures 30 and 31. Flag lot configuration: Figure 30 diagrammatically and Figure 31 as found along Aquasco Road today (just above the Aquasco Road label and to the right of the road itself)



Figures 32 and 33. Conservation subdivision with shared septic and road connectivity; looking northeast from same location as Figures 28 and 29

Internal (within Village) Transfer of Development Rights

This rural land preservation concept is referenced in both the Subregion 6 Master Plan and the Prince George's County Strategic Program for Agricultural Development. The Subregion 6 Master Plan's policy calls for the protection and maintenance of rural villages by promoting compatible development and preservation of scenic and historic roads in the Rural Tier, specifically focused on the historic settlements of Aquasco/Woodville, Baden, and Croom. The plan states that new development should reflect the overall density and intensity of this rural part of the county and that new development standards need to be developed. Furthermore, small area plans with design standards for rural villages identifying uses should be prepared to guide future development so that it strengthens and enhances the existing rural character. The agricultural plan's Recommendation 1 calls for the support of farm-friendly land use policies and programs, including the creation of dedicated funding for county purchase of a development rights program.

Design principles employed to achieve this concept include recognition of the historical development patterns of each village. Croom is a linear village, Aquasco is a crossroads, and Baden has three nodes of development at intersections in proximity to each other. The development pattern for the village concentration should not reflect new urbanism patterns, such as urban street grids, but should be reflective of the historic building pattern in southeastern Prince George's County. A rural village typically does not have sidewalks or pedestrian streetlights. Dark sky initiatives should be adopted.

If possible, no more than a 30 percent increase in overall density should be transferred to the village to avoid overwhelming the existing character of the place. Residential use should be aggregated within the site and buffered from the road by thick vegetation. Commercial uses should be inserted sparingly as narrow slivers of activity reflect the existing informal spatial relationships found in the area in the vegetation patterns, the width and alignment of the roadways, and the overall character of the area.

An internal transfer of development rights (TDR) is intended to focus development in a central village area while preserving agricultural and forested land. The intent of this scenario is to show the impact of a TDR within the village boundaries with the density centered in the village center, leaving the surrounding lands undeveloped beyond the current built environment.

Current Development

The Rural Tier is restricted by a minimum lot size of one acre as each property must have its own septic system. The use of a TDR scenario assumed that a shared septic system or package sewage treatment plant would be used, allowing for smaller lot sizes, an overall development footprint, and village-scaled density. However, this option does not currently exist. Since these concepts were developed during summer and fall 2011, the Maryland legislature has passed Senate Bill 236, restricting septic use in rural areas. Signed by the governor in May 2012, the applicability of the bill is tied to tiers. It is possible that the exploration example site as a village center might be eligible for a shared facility, on-site sewage disposal system, or a community system. SB 236 allows up to 15 new lots on a parcel if a TDR is approved and there is sufficient land per zoning category.

Baden Village Concentration

Three contiguous parcels, totaling 29.8 acres and known as the McPherson property, served as the exploration site for several more densely developed options. The parcels are located between Brandywine Road and Horsehead Road south of the community complex with St. Paul's Church and the Baden Elementary School. As with Aquasco, the explorations did not add any additional density to the village but, instead, looked at what kind of place could exist if some or all of the potential buildout remaining within the boundaries of the Village of Baden—a range between 64–162 residential dwelling units per the existing buildout analysis—were transferred and developed on this property. The parcels that "sent" the transferred development rights to the village center would then be held in preserve as open space or agricultural lands in exchange for compensation through a TDR program.

Figure 34. Panoramic view of the center of Baden site where illustrative examples developed

The Village of Baden exploration is the first in what must be additional explorations of internal development transfers and concepts to enhance a village structure while conserving agricultural and woodlands. There are many ways such a village concentration could be developed. These explorations are not the only way to reallocate density within the boundary of the village. Instead, they demonstrate the intensity of development if single-family detached units were developed and, alternatively, an increased density of single-family detached units mixed with townhouses. Several alternatives included small, village-serving commercial uses.

Two explorations absorbed the low end of the existing buildout total; the first, Alternative A, using the full 30 acres and the second, Alternative B, using 8 of the 30 acres. A third exploration, Alternative C, looked at transferring all of the existing buildout to the 30 acres.

Assumptions Common to all Alternatives

- Incorporation of a community-serving sewage system; individual lots do not have to have septic capacity or minimum square footage.
- Road connectivity—unlike many traditional subdivisions, the internal road network has multiple points of access to the primary road system.
- Environmentally sensitive lands, such as wetlands, protected with a 100-foot building setback.

Baden Village—Alternative A

This exploration examined how a traditional, single-family residential subdivision could be physically accommodated and arranged on the full 30 acres of the site. The low end of the existing buildout, 64 units, was absorbed on the site. Alternatives A and B, in addition to differing density levels, also explored different building orientation patterns. Alternative A played to a more rural and less suburban physical layout. The plan layout has an internal focus with an internal pedestrian path network. The primary road system has a heavily treed buffer in lieu of the more suburban sidewalk prototype. Residential units were given a footprint averaging 2,450 square feet located on lot sizes of one-quarter to a half-acre in size.

Figures 35, 36, and 37. Baden Alternative A as viewed from Horsehead Road near its intersection with Baden-Westwood Road; Figure 35 plan diagram; Figure 36 perspective without landscaping; and Figure 37 with a natural, more native and rural tree buffer along the roadway

Baden Village—Alternative B

This exploration examined how the same number of residential units as in Alternative A could be absorbed in the center of Baden but on less than a third of the acreage that Alternative A consumed. Sixty-four residential units, both single-family detached and attached units, with some small commercial buildings, were placed on approximately 8 acres of the site, leaving 22 acres in open space. Overall density for the full 30 acres was 2.1 dwelling unit (DU)/acre, a similar ratio of lot to open space as is found in the county's Conservation Subdivision Ordinance. This concentration on 8 of the 30 acres enabled a stronger village focus. Alternative B played to a more traditional small town or village layout with sidewalks and pedestrian paths along the primary and internal road systems and greens and open space threaded throughout the residential units.

Figures 38 and 39. Baden Alternative B, a more concentrated absorption of the potential buildout available in the Village of Baden

Baden Village—Alternative C

This exploration examined how the total existing buildout available within the boundary of the Village of Baden could be transferred and absorbed on the 30 acres in the center of the village. A total of 162 units, averaging 5-6 DU/acre across the site with some additional small-scale commercial space would concentrate the village focus on the 30 acres. As with Alternative B, a sidewalk and pedestrian path system was incorporated along the primary and internal road systems, and greens and open space are threaded throughout the overall development. Given the higher density, an acceleration/deceleration lane was added to the entry off of Horsehead Road.

Figures 40 and 41. Baden Alternative C, full accommodation of 162 potential buildout units transferred to center of the Village of Baden

Baden Village "Drive-Through"

The three alternatives were presented to the community in the form of an animated "drive-through," and the schemes elicited many comments, both positive and negative. To better understand the exploration, a drive-through, ground-level view was created that incorporated additional transportation improvements. Alternative C served as the basis for the drive-through with a few modification accommodations, recognizing increased traffic demands such as the insertion of roundabouts, splitter islands, and landscape plantings to calm and direct traffic. Similarly, the traveler experience was modified by the creation of a transition zone, an entry zone, and a village core. Each area was articulated with specific landscape plantings and infrastructure improvements.

Roundabouts

A one-lane roundabout was added near the entrance to the Village on Baden-Westwood Road and on Brandywine Road to slow traffic down while marking the entry to the village. The roundabouts are accentuated with closely and formally planted trees and can be designed to accommodate farm traffic and equipment.

An estimated cost of a single roundabout, as shown in the Croom Road study, is approximately $1.5–$2 million. This figure is for a single roundabout and includes land (assumes land is not premium priced), improvements, and other items necessary to construct the roundabout.

Figure 42. Image of roundabout from illustrated visualization of Village of Baden

Splitters

A splitter island was added both north and south of the village on Brandywine Road. Another splitter island was added to the most southern entrance of the village off of Brandywine Road to limit the traffic movements to right in/right out while also slowing traffic.

Figure 43. Image of splitter island from illustrated visualization of the Village of Baden

Village Zones

The three broad zones—transition, entry, and village—are each marked by different travel speeds, landscaping, pedestrian amenities, and lighting.

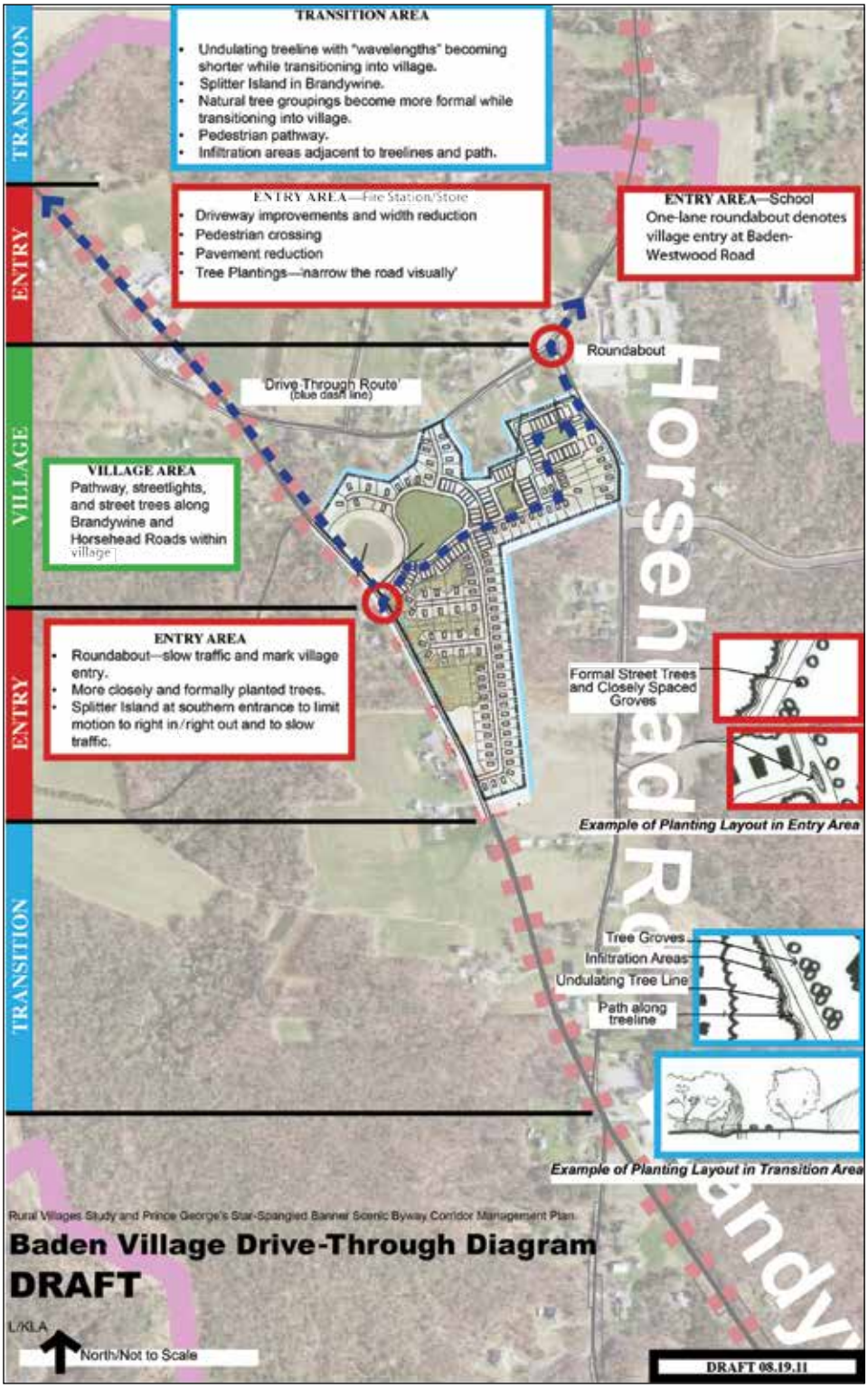


Figure 44. Diagram of Village of Baden Zones

Transition

The transition area marks the initial approach to the village or concentrated residential area. Generally located where speeds are dropped to 35 mph, it is marked by splitter islands in this exploration. Landscape plantings reinforce the speed reduction with an undulating tree line; its wavelengths or natural tree groupings become more formal and ordered in their planting pattern, compressing as the road transitions into the village entry. Infiltration areas are located adjacent to the tree line and pedestrian path.

Entry

The entry zone begins north of the village near the Baden Fire Hall. The existing driveway at the Baden Store is reduced, and a pedestrian crosswalk is added, connecting the store to the fire hall and ballfield. Landscape plantings, in particular trees, narrow the road visually. These plantings denote slower speeds and the point of decision at the village entry. The roundabouts at either entrance to the village mark the entry into the village proper. A splitter island at the southern entry off of Brandywine Road serves as a similar but less powerful entry marker to the secondary vehicular access point.

Village

The core, or village, encompasses the new residential and commercial properties in the heart of Baden. The village's significance is indicated by a pedestrian pathway system and streetlights. Street trees line Brandywine and Horsehead Roads as well as the internal road system.

Croom Road Exploration

This rural villages study dovetailed with the Comprehensive Management Plan for the Star-Spangled Banner National Historic Trail and Byway, completed by the National Park Service, and the Croom and Aquasco Roads Scenic Byway Plan Elements. The traffic assessment compilation portrayed in the crash density diagram reinforced observations by members of the study team and community residents as to the need to improve safety at intersections and address excess speed along Croom Road. The issues at intersections along Croom Road included:

- High crash densities.
- Inadequate sightlines.
- Debris on shoulders that inhibited bike use.
- Inadequate shoulder widths, inhibiting safe bike use.
- Vegetation that encroaches on the shoulders, pavement, and sightlines as well as obscures traffic signs.

Recommended ways to address these issues include:

- Adjustments to the centerlines or narrowing of travel lanes to improve sight distance and provide more shoulder space.
- Provision of adequate shoulder width in high-crash density areas.

- Provision of wider shoulders in uphill segments of the roadway to accommodate cyclists (cyclists generally average only 5–10 mph uphill, making it wobbly and less comfortable overtaking vehicles).

Intersections

Based upon the crash density analysis and other sources, the intersection at Duley Station Road and Croom Road was selected to serve as a test site for potential methods to address safety issues and concerns related to visibility and sightlines, pedestrians, and bike use. The earthen slopes at the intersection illustrate the challenges presented by existing trees and utility lines, cut banks, and mountable asphalt curbs. These physical challenges portray a difficult section of road corridor to widen in order to improve sight distance or drainage.

Two scenarios address the concerns related to sight distance, speed, and the improvement of the road for bicycle safety—a realignment of the intersection and the insertion of a traffic roundabout. Each addressed the issues in a way that is sensitive to the context.

Existing conditions at the T-shaped intersection (Duley Station Road T's into Croom Road) include poor sightlines, narrow shoulders, and noncoordinated utility corridors, a common set of challenges at many of the rural intersections in southeastern Prince George's County. This intersection serves as a site for exploration—perhaps the proposed solutions are not workable there but may be applicable to other areas within the study area.

Figure 45. Existing conditions at Duley Station Road and Croom Road intersection; looking north

Figure 46. Illustration of intersection realignment as diagrammed in Figure 47

Intersection Realignment

The intersection of Croom and Duley Station Roads currently has poor sightlines for traffic approaching Croom Road. One technique is to realign Croom Road, opening the sightlines prior to reaching the intersection and increasing the visibility of pedestrians and bicyclists by shaving off the edge of the existing slopes that block the sightlines for drivers and buttressing the remaining slope with a retaining wall. This realignment may require additional right-of-way. Because the slope of the land is on either side of Duley Station Road, construction of low, crashworthy walls could increase sightline opportunities while also expanding the shoulder space for bicycle use. Cladding the wall in native stone would enhance the rural, character-defining qualities of the new wall. Pigment could also be added to the shoulder, making it more visible to drivers and slowing traffic by narrowing the appearance of the overall roadway. Expanding the shoulder to four feet on uphill segments and three feet on downhill will provide room for bicyclists. Vegetation can be used to emphasize that the intersection is a decision point. Plantings can also enhance the intersection; native understory trees and shrubs can be installed as a buffer for adjacent homes where existing vegetation is removed.

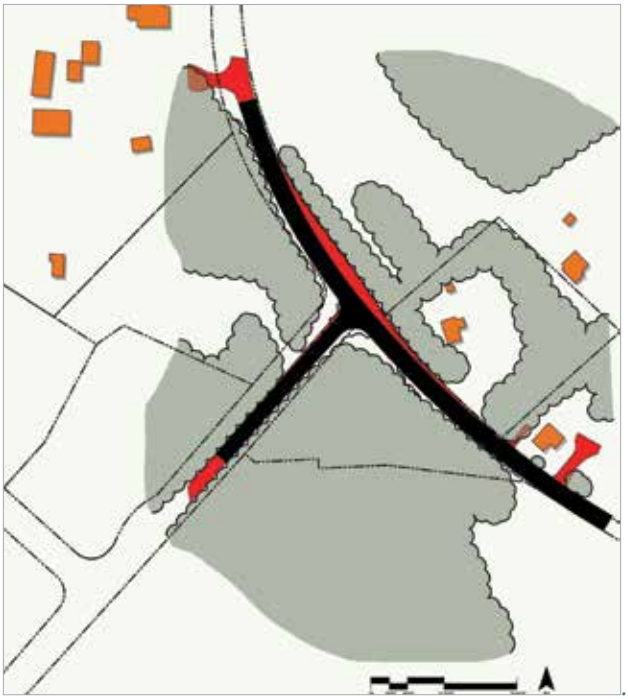


Figure 47. Diagram of potential realignment of the Duley Station Road and Croom Road intersection: red indicates existing road alignment, black indicates potential realignment

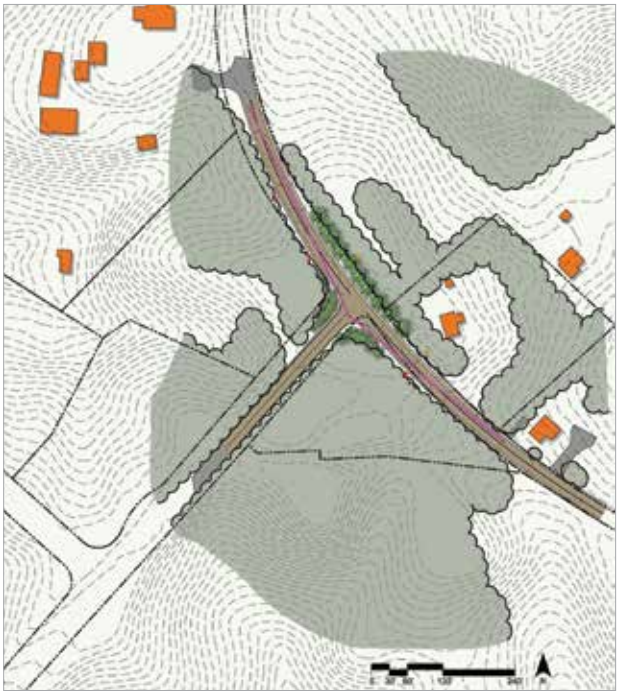


Figure 48. Diagram of landscaped intersection portrayed in Figures 46 and 47

Additional Costs

The addition of a stone veneer or texture treatment to the retaining wall would likely add approximately 10 percent additional cost. The landscape plantings as shown in the sketch would likely cost approximately $60,000 for installation in 2012 dollars. The shoulder treatment as an overlay adds approximately $1 per square foot. The material has been used in Portland, Oregon, for complicated intersection improvements; in Centreville, Delaware, for bike-lane marking; and on US 15 in Virginia in a spot safety study. Other improvements, beyond basic shoulder painting, may increase the square foot cost from $3.50 to $12.00

Roundabout

An alternative to the realignment of the intersection is to insert a traffic roundabout. In addition to enhancing safety for the former left turn movement, a roundabout can also serve as a traffic-calming element. The existing intersection alignment will need to be more significantly modified than in the realignment alone to accommodate a roundabout and to increase the visibility of bicyclists and pedestrians. Additional right-of-way will be required at this particular intersection to accomplish this. The example inserted includes a vegetated central planted island with a mountable brick apron surrounding the island. The brick apron provides additional capacity and room for longer or wider vehicles but is visually distinguished from the primary travel way that is valuable for traffic calming results. As with the realignment, small, crashworthy safety barriers or retaining walls could be added to increase the shoulder widths: shoulders that are expanded to four-foot-wide segments on the uphill side and three feet on the downhill side for bicyclists' use. Landscape improvements are also similar to the realignment approach with native understory and shrubs replacing removed material and additional vegetation planted to better buffer adjacent properties.

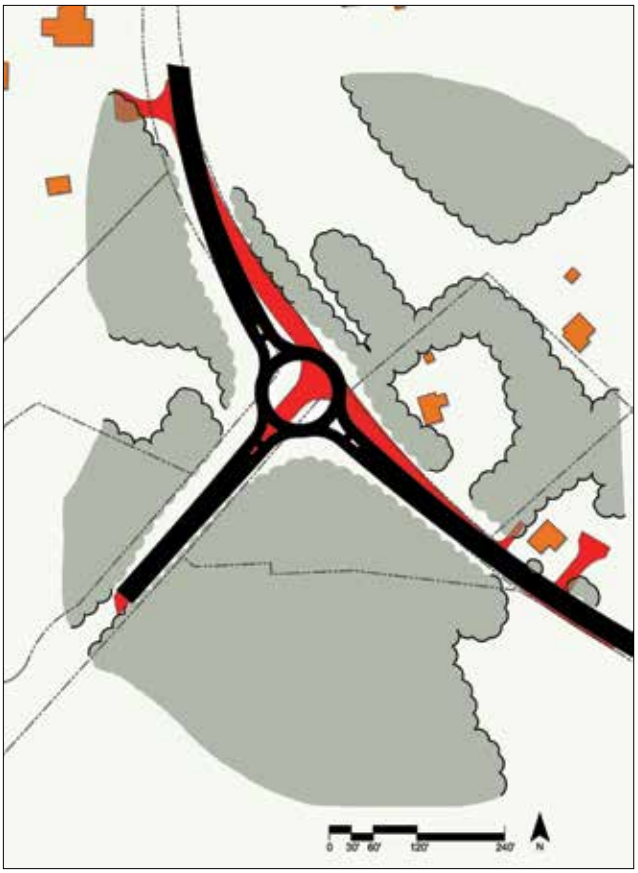


Figure 49. Diagram of potential realignment of the Duley Station Road and Croom Road intersection with a roundabout insertion: red indicates existing road alignment, black indicates potential realignment

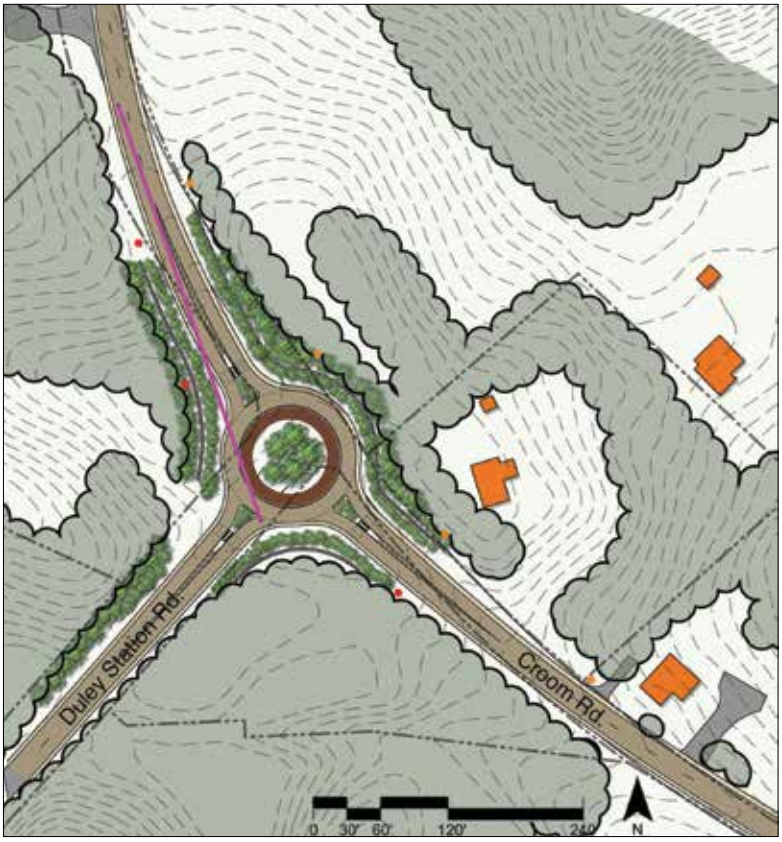


Figure 50. Diagram of landscaped intersection portrayed in Figure 49

Findings and Recommendations

Recommendations to Protect Rural Character

Revisit and Expand the Applicability of the Conservation Subdivision Ordinance

Prince George's County's Conservation Subdivision Ordinance is a useful tool that can be made even more applicable for implementation of the county's policies, encouraging the conservation and enhancement of its rural character. As it is underused, consideration should be given to expanding its guidelines to minor and intrafamily subdivisions—two more commonly employed subdivision practices in the Rural Tier. As the subdivision standard for much of the Rural Tier, the conservation subdivision's influence on rural character and the opportunity to conserve and enhance the rural landscape is profound.

The concept of the conservation subdivision can benefit from further exploration. One of the challenges of the concept is that the typical layout for a conservation subdivision subverts the traditional rural building pattern for nonfarm-related residential buildings that are developed along a road's frontage with open space located behind the buildings away from the road. More similar is the large acreage land holding with its residential structures often located in the center of the property on a rise in the landform and often a significant distance from the road. Lot configuration also was explored. A flag lot was inserted in the example. Although once common, flag lots are not allowed under current regulations. Consideration should be given to allow their use in conservation subdivisions as a means of minimizing infrastructure and preserving additional open space.

Community members expressed interest in expanding the conservation subdivision's concept. Many perceived it as a tool that could also be used for the preservation of farmland, wildlife habitat, and grasslands in addition to the current orientation toward preservation of open space and woodlands. The concept of a shared septic system allowing a reduction below one acre in size of each residential lot was of interest to the community but generated discussion given the consideration of new septic system regulations in Maryland. On a related topic, some attendees were interested in the concept of co-housing although others were not interested in the more communal housing model.

Additional consideration should focus on elements that enhance rural character. Areas for further exploration include:

- Specifying vegetation cover types, habitats to be preserved or enhanced, or agricultural-related activities to be encouraged.
- Encouraging the expansion of priorities for preservation to include the incorporation of woodlands conservation, wildlife habitat, grasslands, open space, and watershed.
- Encouraging the expansion of benefit definition to support rural agricultural activities: conservation of pasture and field lands for agricultural purposes and encouragement of farm supporting business activities such as vineyards, truck farms, and stables.
- Encouraging the expansion of benefit definition for open space and public recreation use.

- Encouraging the consideration of alternative housing concepts that require a shared septic or sewerage system: smaller lot clustering opportunities as shown in Alternative C in exploration at Garretts Chance, co-housing or other alternative housing configurations with common buildings incorporated with private residences.
- Identifying the incentives to encourage housing design and lot organization that better reflect local vernacular style in lieu of a more traditional subdivision style.
- Encouraging the consideration of incentives to increase connectivity between developments, reducing cul-de-sacs and stub streets.

Continue Exploration of Development Rights Transfers to Create Village Centers

Research should continue in the investigation of a more concentrated village center. Other proposals using different layout configurations and in multiple locations should be pursued. During the Subregion 6 planning process, community members mentioned a desire to live in the Rural Tier but expressed interest in housing options not readily available. A village center can provide a variety of housing types, sizes, and styles to accommodate the varying needs of the community, including units for young families that may have fewer resources to invest and would prefer to live in closer proximity to their neighbors as well as units for older residents whose families are grown and would like the option to not use a vehicle for errands.

Some community members stated that they moved to the Rural Tier to avoid suburbanization and density and asked why consideration would be given to increasing density in a village center. The arrangement of the residential dwelling units and, more importantly, their density elicited very mixed reactions from the community. Reactions ranged from outright dislike, to skepticism, to some interest in the concept. Some residents suggested that a more urban, dense living environment would not appeal to people interested in living in an overall rural area. Other residents thought the provision of different sized units with commercial services in walking distance would appeal to young families and empty nesters who, although desiring to live in a rural area, were not interested or able to manage a large rural property's maintenance demands. Of particular concern was that the land from which the density was transferred stay undeveloped in perpetuity. The density of Alternatives B and C seemed to be of most concern with commentators asking why someone would chose to live in the country in an urban development pattern.

Further explorations should take these concepts and employ them on multiple, smaller-sized parcels instead of concentrating all of the transfer of development rights within the center of the village. Consideration must be given to how these scenarios fit or don't fit with the recently signed legislation in Maryland. Investigations to pursue include:

- If a village center was developed at a smaller scale, how would it differ in form and regulation from a conservation subdivision?
- Conversely, if a larger number of units were contained in a village center, how can the pressure for commercial development, particularly strip commercial development, be addressed?

- Concerns were raised as to whether the transfer of development rights would be mandatory or voluntary and, regardless, how the mechanics of the transfer would work.
- If the transfer is made, how can residents be assured that the resulting rural preservation is in perpetuity?
- Must all community members buy into the concept for it to work?
- Which version of buildout would feel less suburban—a concentrated density in a village center or the same density spread within the village boundaries?
- How can a rural area accommodate a person with a nonfarm lifestyle while avoiding transforming the rural center into a more suburban or urban area?
- Can the village center be successful in Croom and Aquasco as well as Baden?

Resolve Traffic Conflicts while Retaining Historic and Scenic Road Character

Much of the work related to the parallel study on the scenic byway addressed safety and traffic concerns on the area's historic and scenic roadways. One of the challenges related to this study is how to better accommodate pedestrian and bicyclists' use of rural roads without transforming their appearance into more of a suburban character. The corridor management program makes recommendations to better accommodate bicyclists and to improve intersections. This study demonstrated how some improvements could be made to commercial parcels such as the Baden store and the insertion of crosswalks to better accommodate pedestrians. There was support, even from nonriders, for improving the roads for bicyclists.

Other suggested actions included:

- Make use of local materials, including local stone for improvements (Naylor Farm–ironstone).
- Use speed cameras and additional policing to control speed on Croom Road.
- Enforce littering rules.

Enhance Agriculture Activities, and Expand Farmland Conservation

In tandem with exploring other ways to accommodate the potential residential buildout within a village, the resulting opportunity to conserve agricultural lands and open space was of great concern. Meeting attendees expressed great concern that much of the farmland is not being actively farmed since the conclusion of the tobacco buyout—no agriculture alternatives were developed to take the place of tobacco. The farming population is aging, and a need exists to attract young people and encourage them to farm.

Potential Strategies for Oversight and Implementation

Form

As not all new residential development is subjected to the same requirements, there is the potential for disparate impacts on rural character. The Croom and Aquasco Road Scenic Byway Corridor Management Program makes a number of recommendations related to incorporating all subdivision review under a form similar in content to a conservation subdivision.

Tools for Implementation

Evaluation tools are needed to better measure and identify outcomes related to these proposals. Prior to developing design guidelines or proposing changes or additions to regulations, it is important to determine what success will look like in conservation subdivisions and rural village concentrations.

Overlay District

The Croom and Aquasco Scenic Byway Plan Elements calls for the establishment of a Development Review District (DRD) related to the SSBSB's viewshed. Covering the view from the road, the DRD could serve as a pilot study for implementation and use of various design guidance tools. It is discussed more fully in the Croom and Aquasco Scenic Byway Plan Elements. The district should prioritize the preservation of pasture and their views and buffer nonrural views with tree buffers as included in the image along Horsehead Road.

Design Guidelines

Some types of design guidelines will be most effective if they are implemented as regulations. Others will be more effective if implemented as advisory or educational tools such as incorporation in a pattern book. Community members expressed concern that if design guidelines were employed, it should not "dress up" the rural character but keep the rural appearance. Interpreted, such sentiment suggests, and was supported by reactions expressed in the visual survey, that new elements and buildings inserted in the landscape should not be suburban in appearance. Monument walls identifying subdivisions were not favored in the survey nor were large, builder-style residential units. Preferences for fencing and sign materials were low key in character.

If a property owner desired to develop in an alternative manner to by-right development, a pattern book or a set of design guidelines could also be valuable in discussions between the owner and staff. The book could provide a common language through the use of diagrams to explain suburban (cul-de-sac, standard setback line, uniform lot frontage, etc.) versus rural site layout patterns (flag lots, varying lot dimensions, irregular setback standards, etc.), as well as architectural design guidelines and others.

A proposed framework for design guidelines was developed in the Croom and Aquasco Scenic Byway Plan Elements and is included in the appendices of this report.

Extend Conservation Ordinance Siting Guidance to Minor and Intrafamily Subdivisions

Some consideration should be given to treating all subdivision actions in the same in terms as siting concerns modeled on the language incorporated within the Conservation Subdivision Ordinance.

Examine Road Standards and Incorporate Recommendations from the SSBSB Study

Road standards for areas within the Rural Tier and, in particular, within new subdivisions should be examined and efforts made to reduce required road widths while encouraging the incorporation of alternative surfacing materials that are more vernacular in character. Can gravel or other materials be substituted for asphalt or concrete in some situations?

Similarly, ensure that any landscapes associated with road improvements are not overly organized. Instead, landscape grading and planting should reflect the native environment, avoiding symmetry in planting layout and the use of nonindigenous plant materials.

Citizen Involvement

The creation of a process to bring together local stakeholders in a sparsely populated rural area to actively work on the strategies and recommendations for the preservation and enhancement of the rural villages area is a challenging task. Achieving agreement among the participants is even more challenging. Trust is fundamental. This study has embarked on a process that actively engaged the community in a discussion on what rural means in southeastern Prince George's County. This open and collaborative process must be continued if any of the study's recommendations are to be achieved. Slow, transparent movements, and leading with voluntary actions rather than regulatory actions is the only way to move the conversation forward.

Next Steps

Short-Term

- Increase SHA, the Department of Public Works and Transportation, and M-NCPPC coordination on improved standards for maintaining and enhancing rural character on scenic byways.
- Draft a dark sky ordinance for county consideration given community support for lighting changes and other supportive policies.
- The county should support changes to the conservation subdivision generated from buildout analysis.
- Establish a byway committee to evaluate the recommendations for protecting rural character as new development occurs within the viewshed of the Star-Spangled Banner Scenic Byway Corridor.

Mid-Tevel

- Support design guide for homeowners
- Support viewshed preservation and protection
- Support exploration of alternative subdivision concepts for villages

Dream Level

- Support increased open space requirements in conservation subdivision
- Support village design and draft zone to achieve this

Appendix A: Visual Preference Survey Methodology and Results

During the March 7, 2011, project meeting at the Baden Fire Department, community members participated in a visual preference survey of 30 questions with the assistance of a mechanized counter. The survey provided immediate totals on every slide with additional layers of analysis made possible by cross tabulating where the respondent lived or for how long with their other responses.

The survey was developed with three distinct sections. A copy of the survey results is included at the end of this appendix. The first eight questions were qualitative in nature. The remaining 23 questions asked participants to rank images in several categories. A subset of the image slides were related to pedestrian and landscaping improvements in existing communities in or near the study area. The remainder of the image slides portrayed different types (and ages) of single-family homes, commercial activities, landscaping, fences and walls, and more. Participants used a scale to indicate how appropriate the development types pictured would be for Aquasco, Baden, Croom, the Scenic Byway, and the surrounding rural context if constructed there in the future.

Qualitative Questions

Participants answered eight qualitative questions to gather basic demographic information about where they lived and for how long and their connection to the study area (e.g., a resident, an employee, etc.). The results of the first question on favorite sports teams is not included in the results as this was a question designed to familiarize the participants with how to use the keypads. Additional questions were designed to gauge what participants most liked about the study area, major concerns, future desired uses and services, etc. Participants were allowed to select more than one response for this portion of the study.

Responses to the qualitative questions included options that could be used to confirm or raise questions about responses to some of the image slides. For instance, Question 8 asked, "Would you like to see any of the following commercial or institutional uses added to the study area?" Large-scale commercial activities such as a mall or hotel were not favored by the majority of responses, nor was this scale and form of commercial activity judged to be appropriate for a rural setting in subsequent slides.

Pedestrian and Landscaping Improvements to Existing Communities

Slides 14 through 21 asked participants to evaluate a set of images to indicate if they liked or disliked the pedestrian and landscaping future improvements shown for Aquasco, Baden, and Croom.

This portion of the survey borrowed images used in the Brandywine Revitalization Study. The project took a cross section of Brandywine Road and used Adobe Photoshop to generate a series of images that showed how this portion of the roadway could be enhanced with landscaping, a sidewalk, lighting, a bike lane, etc. The intent was to see if responses to these images differed significantly between the two adjacent communities.

Some ideas for pedestrian improvements to Brandywine Road in Baden were also shown. Again, this technique was also used in the Brandywine Revitalization Study. The Baden Fire Department and baseball field sits on the north side of the road across from Baden Grocery and the gas station. There is no designated pedestrian crossing in this area where vehicular speeds can be high and community members occasionally cross.

What Should Future Development Look Like?

Slides 12 to 39 showed different types (and ages) of single-family homes, commercial activities, landscaping, fences and walls, and more. Images were generally selected from real-life examples of the county and of formerly rural areas of the Developing Tier as well as the Rural Tier itself. In some cases, examples were taken from adjacent jurisdictions.

The purpose of this portion of the survey was to see if there was consensus on how appropriate the types of development shown would be for Aquasco, Baden, Croom, the Scenic Byway, and the surrounding rural context. Participants used a scale of "very appropriate" to "very inappropriate," instead of "strongly like" to "strongly dislike" as they did in the existing development portion of the survey. (In both cases a "no" opinion or neutral option was also offered.)

During this portion of survey administration, it was emphasized that participants were not being asked if they liked or disliked an image but whether or not they judged the elements and qualities of the home, use, landscape feature, etc. to be appropriate for the study area in the future.

Areas of consensus did emerge on some slides but not for all slides. Some of this is due to reasons mentioned in the text of this study.

Final Notes

Respondents were also given the option to provide written responses for questions on the survey that listed "other" as a response option. Compiled responses from several residents appear following the survey results.

General and Visual Preference Survey—March 7, 2011

Additional information gathered from participants who turned in forms with comments is noted in italics below.

A total of eight forms were received. Responses are listed as received. [?] indicates an illegible phrase or word in the response.

Question #6: What do you like best about Aquasco, Baden, and Croom?

Other Responses:

Response A: Rural character natural beauty and historic resources, safe environments lots of open space and public conservation lands.

Response B: Limit of by laws of a development. Moved from Howard County to Croom. Do not have the [?] to govern by right of choice.

Response C: Stewardship opportunities. Volunteer opportunities.

Response D: Near waterfront—location of property in Eagle Harbor.

Question #7: Are there any infrastructure issues that concern you in Aquasco, Baden, or Croom?

Other Response:

Response A: Lack of adequate infrastructure to support development of certain types.

Response B: No new help for police/fire services with all new houses you can't keep building without expanding services.

Response C: Concerned about sprawl inappropriate development overcoming our chances of reviving and rebuilding a farming, tourism, rural infrastructure.

Question #8: Would you like to see any of the following commercial or institutional uses added to the study area?

Other Response:

Response A: Horticulture, landscape, silvicultural, agricultural. Also would like info on preventing large scale incompatible uses like rubble fills, landfills, gravel washing operations, etc. Would like much more information on how to deal with incompatible commercial uses and extracting industries—gravel mining rubble fill including incompatible public infrastructure.

Response B: Exurban farming [?]—add to your primary list.

Response C: More farming and agricultural businesses. More working landscapes.

Response D: New pavement of existing roads. Fix existing roads.

Response E; Public transportation

Response F: Shopping area question—[Andrews AFB]

Question #9: Would you like to see any of the following public improvements made within the study area?

Other Response:

Response A: Alternate transportation options—light rail, bus, active transportation (bicycle)

Response B: Wider shoulders on roads (including for biking) (with storm drainage)

Response C: Carriage trails that can be used by hikers and equestrians and bikers. Coordinate with state.

Response D: Public transportation

Question #10) Are you interested in receiving information at future community meetings/events on any of the following topics?

Other Response:

Response A: Dark sky ordinances; sustainable energy sources, better options for energy conservation, community gardening.

Question #_____

Other Response:

Question #_____

Other Response:

Any other questions, comments or concerns:

Response A: Major concerns about potential development of Wilmer's Park.

Need to promote agricultural and horticultural business and private farms as a top priority—still strong sentiment in community.

The public voting process, although flawed, was valuable and mostly constructive and productive.

Recommend you do not show percentages for multiple advice questions—percentages add up to more than 100 percent and are misleading—using raw numbers of total voters gives better picture.

Response B: In pictures of houses—add newer green housing—2,500–3,500-square-foot houses are very different from what will be built in 20–30 years.

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