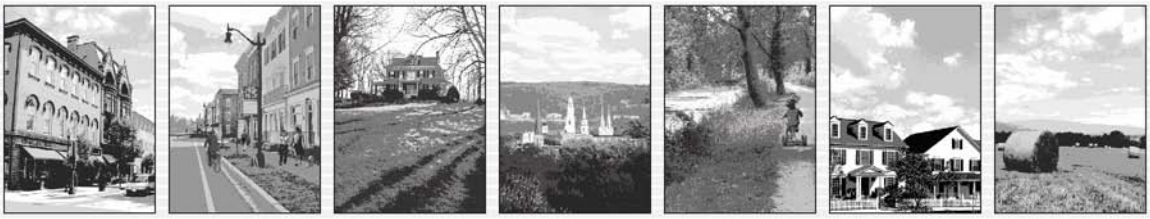
FREDERICK COUNTY'S FUTURE



MANY PLACES, ONE COMMUNITY

A COMPREHENSIVE PLAN FOR FREDERICK COUNTY, MARYLAND

ADOPTED APRIL 2010

FREDERICK COUNTY'S FUTURE

MANY PLACES, ONE COMMUNITY

A COMPREHENSIVE PLAN FOR FREDERICK COUNTY, MARYLAND

ADOPTED APRIL 8, 2010

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David P. Gray, Vice President

Kai J. Hagen

John. L. Thompson, Jr.

Charles A. Jenkins (through January 2010)

Blaine R. Young (since March 2010)

Planning Commission

Catherine Forrence, Chair

Robert L. White Jr., Vice Chair

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Joseph F. Brown III

Richard Floyd

Audrey L. Wolfe

Kai J. Hagen - BOCC Liaison

Frederick County Division of Planning

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Amber DeMorett, Manager Mapping/GIS
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RESOLUTION NO. 10-06

Re: Adoption of the 2010 Countywide Comprehensive Plan for Frederick County, Maryland

PREAMBLE AND LEGISLATIVE FINDINGS

WHEREAS, State law, Article 66B, § 3.05 of the Annotated Code of Maryland, provides that the Planning Commission shall make and approve a plan which the Planning Commission shall recommend to the local legislative body, the Board of County Commissioners, for adoption; and

WHEREAS, by Resolution 2009-1, the Frederick County Planning Commission certified to the Board of County Commissioners of Frederick County, Maryland ("BOCC" or "County Commissioners"), pursuant to § 3.07 of Article 66B of the Annotated Code of Maryland, as amended, the approved and recommended Countywide Comprehensive Plan on August 19, 2009; and

WHEREAS, the Board of County Commissioners, after providing the required public notice, conducted public hearings on January 19th and 21st, 2010, concerning the Countywide Comprehensive Plan; and

WHEREAS, the comprehensive plan review and hearing process conducted by the Board of County Commissioners also included the review of the areas designated for public water and sewer service within the County, with the intent that changes made to the water and/or sewer service area boundaries and property classifications would also change and hereby amend the Frederick County Water and Sewerage Plan; and

WHEREAS, the Board of County Commissioners considered all of the recommendations of the Frederick County Planning Commission, the Planning Staff,

those public comments received as part of the public hearings of the Planning Commission and before the Board of County Commissioners, and also reviewed written correspondence which was submitted concerning the Plan by adjoining planning jurisdictions, municipalities, affected State and local agencies and interested persons, and the Board of County Commissioners conducted this review process in sessions open to the public; and

WHEREAS, as a result of the various public hearings, comments and correspondence received on this matter, the Board of County Commissioners made certain limited changes to the Planning Commission's Recommended Countywide Comprehensive Plan; and

WHEREAS, the County Commissioners find that this Plan is made in accordance with Article 66B of the Annotated Code of Maryland with the general purpose of guiding and accomplishing the coordinated and harmonious development of Frederick County, and which will, in accommodating present and future needs, promote the health, safety, morals, order, convenience, prosperity and general welfare of the County and its citizens; and

WHEREAS, adoption of this Comprehensive Plan and maps implements the Visions provided in Article 66B, § 1.01; and

WHEREAS, Maryland Annotated Code Article 66B, § 14.06 provides that the Board of County Commissioners may overrule an action of the Frederick County Planning Commission under §§ 3.05, 3.06, 3.07 and 3.08 of Article 66B; and

WHEREAS, the Board of County Commissioners recognizes that numerous parcels of land have been incorporated into what is known as the Lake Linganore Planned Unit Development (PUD) and have been classified in the PUD floating zone classification beginning in 1968. (This PUD has been identified by various names over its history including "Lake Linganore at Eaglehead," "Lake Linganore," "Eaglehead," and "Eaglehead-on-the-Lakes." All of these refer to the same PUD. In this Ordinance "Lake Linganore" is used to identify this PUD); and

WHEREAS, the Board of County Commissioners finds that 40 years is sufficient, adequate and more than ample time for a PUD to complete its planned development and build out; and

WHEREAS, all of the Lake Linganore PUD has not been developed in 40 years; and

WHEREAS, the development of the Lake Linganore PUD as proposed in prior Comprehensive Plans would have a substantial detrimental impact on public facilities including (by way of example and not limitation) roads, transportation, public schools, public water, public sewer, public parks, and law enforcement; and

WHEREAS, the public facilities (including those listed in the previous "Whereas" paragraph) are not adequate to serve the Lake Linganore PUD if developed as proposed in prior Comprehensive Plans; and

WHEREAS, development of the Lake Linganore PUD as proposed in prior Comprehensive Plans would not serve the purposes of state law (particularly Md.

Annotated Code Article 66B and the Smart Growth Initiatives articulated in the 12 Visions in Article 66B, § 1.01); and

WHEREAS, no building permits have been requested and no construction pursuant to a validly issued building permit has commenced on any of the approximately 657 acres of the Lake Linganore properties which are being designated as Agricultural/Rural or Natural Resource; and

WHEREAS, no vested rights have been obtained for the properties being reclassified to the Agricultural/Rural or Natural Resource Designations as the term "vested rights" has been defined by the Maryland state courts; and

WHEREAS, the Board of County Commissioners finds that the Lake Linganore PUD as designated in this Comprehensive Plan can proceed as a single, integrated project even though some portion of the land is being designated Agricultural/Rural or Natural Resource; and

WHEREAS, following the designation of a portion of the property to Agricultural/Rural or Natural Resource, the properties constituting the entire Lake Linganore PUD (including the properties remaining Low Density Residential as well as the properties designated Agricultural/ Rural or Natural Resource) continue to have a reasonable economic value and a reasonable use and are not denied all reasonable use of the property; and

WHEREAS, the BOCC adopted Ordinance 06-30-426 effective September 28, 2006 granting the PUD Floating Zone Classification for 402.04 acres of land (more or

less) identified as the "Application of 75-80 Properties LLC and H.F. Payne Construction Co., Inc." (This property is hereinafter referred to as the "75-80 Property."); and

WHEREAS, a substantial portion of the 75-80 Property is in agricultural use; and

WHEREAS, a Comprehensive Plan designation of Agricultural/Rural for the 75-80 Property implements the Visions stated in the Md. Annotated Code Article 66B § 1.01 and a Low Density Residential designation does not implement the Visions; and

WHEREAS, the water resources and other infrastructure are not adequate to accommodate the extent of residential growth previously anticipated on the 75-80 Property; and

WHEREAS, a well-maintained, multimodal transportation system for a residential project on the 75-80 Property is not available or planned and, in particular, Md. Rt. 75 is not adequate to serve a residential project on the 75-80 Property because, among other things, since the Low Density Residential Comprehensive Plan designation was placed on the 75-80 Property, the State Highway Administration (SHA) has made no significant progress on Md. Rt. 75 improvements between I-70 and I-270; and

WHEREAS, improvements to Md. Rt. 75 between I-70 and I-270 by SHA are not reasonably probable of fruition in the foreseeable future; and

WHEREAS, the Agricultural/Rural Comprehensive Plan designation for the 75-80 Property best provides environmental protection such that land and water resources, including the Chesapeake and coastal bays, are carefully managed to restore and maintain healthy air and water natural systems and living resources; and

WHEREAS, the Agricultural/Rural Comprehensive Plan designation for the 75-80 Property conserves resources, agricultural areas, open space, natural systems and scenic areas; and

WHEREAS, the Agricultural/Rural Comprehensive Plan designation for the 75-80 Property promotes the Goals and Policies of the Countywide Comprehensive Plan.

NOW THEREFORE, BE IT RESOLVED, BY THE BOARD OF COUNTY COMMISSIONERS OF FREDERICK COUNTY, MARYLAND, as follows:

1. The 2010 Countywide Comprehensive Plan for Frederick County is hereby approved and adopted, containing the text, titled:

"A Comprehensive Plan for Frederick County"

2. The Comprehensive Plan map atlas pages 1 through 113 (scale 1" = 1200') are hereby adopted, containing the specific land use plan designations for the subject parcels for Frederick County as shown thereon.

3. The 2010 Countywide Comprehensive Plan including the Comprehensive Plan Map replaces all previous region plans and maps the BOCC has adopted pursuant to Article 66B, of the Annotated Code of Maryland.

4. To the extent of any inconsistency between the Countywide Comprehensive Plan and maps as approved by the Planning Commission and the Countywide Comprehensive Plan and maps as hereby approved and adopted by the Board of County Commissioners, the Countywide Comprehensive Plan and maps adopted in this Resolution by the Board of County Commissioners shall govern and to

this extent the Planning Commission Countywide Comprehensive Plan and maps are hereby overruled as provided in Article 66B § 14.06.

5. The atlas pages 1-113 designated Water and Sewer Service Areas, and the "LIST OF WATER AND SEWERAGE PLAN CATEGORY CHANGES" (attached) are hereby approved pursuant to the Ann. Code of Md., Environment Art. § 9-501 et seq., and shall be forwarded to the Maryland Department of the Environment as required.

6. The Preamble and Legislative Findings contained in this Resolution are specifically adopted as a part of this Resolution and are Legislative Findings of the Board of County Commissioners supporting this Resolution.

7. This Resolution shall take effect on April 8, 2010.

The undersigned hereby certifies that this Resolution was approved and adopted on the 8th day of April, 2010.

ATTEST:

Ronald A. Hart
County Manager

BOARD OF COUNTY COMMISSIONERS
OF FREDERICK COUNTY, MARYLAND

Jan H. Gardner
President

THE EFFECTIVE DATE OF THIS ORDINANCE IS APRIL 8, 2010

ORDINANCE NO. 10-05-540

Re: Comprehensive Zoning Map for Frederick County

PREAMBLE AND LEGISLATIVE FINDINGS

WHEREAS, the Board of County Commissioners of Frederick County, Maryland ("BOCC") directed the Planning Commission to prepare an update to the Comprehensive Zoning of the County, in accordance with the requirements contained in Article 66B, of the Annotated Code of Maryland; and

WHEREAS, the Comprehensive Planning and Zoning update process for the Countywide Comprehensive Plan was initiated by the Planning Commission in March of 2008, and

WHEREAS, requests from property owners seeking to change the zoning classifications on their properties were received and considered and changes initiated from the Division of Planning staff and the Board of County Commissioners were made in the preparation of the Board of County Commissioners Draft Zoning Map released in December of 2009; and

WHEREAS, the County Planning Commission and the Board of County Commissioners having held joint public hearings on January 19 and 21, 2010 and public work sessions to review comments and testimony, the Planning Commission approved a Recommended Comprehensive Zoning Map on February 17, 2010; and

WHEREAS, the Board of County Commissioners was presented with an approved and recommended Comprehensive Zoning Map from the Planning Commission; and

WHEREAS, after the public hearings, the Board of County Commissioners considered all of the recommendations of the Planning Commission, the Planning Staff, those comments received as part of the joint public hearings of the Planning Commission and the Board of County Commissioners, and also reviewed written communications which were submitted concerning the Comprehensive Zoning by the adjoining planning jurisdictions, affected State and local agencies and interested persons, and the Board of County Commissioners conducted this review process in sessions open to the public; and

WHEREAS, as a result of the various public hearings, comments and correspondence received on this matter, the Board of County Commissioners made certain limited changes in the Planning Commission's recommended Comprehensive Zoning Map; and

WHEREAS, the Board of County Commissioners finds that the Comprehensive Zoning Maps were prepared in accordance with the Countywide Comprehensive Plan and designed to secure the public safety, to promote health, morals and the general welfare, to promote the conservation of natural resources, to prevent environmental pollution, to avoid undue concentration of population, and to facilitate the adequate provision of transportation, water, sewerage, schools, parks and other public facilities and services; and

WHEREAS, the Board of County Commissioners finds that the Comprehensive Zoning Maps were prepared in accordance with the goals and policies of the Countywide

Comprehensive Plan related to development outside of Community Growth Areas wherein key goals include: reducing non-rural development outside of Community Growth Areas while maintaining opportunities for compatible agricultural support services and uses in the Rural Communities; preserving the County's prime agricultural lands for continued production, and maintaining a safe and adequate drinking water supply to accommodate current and future needs, and in furtherance of the goals are policies that: prohibit further expansion of the Rural Residential areas into surrounding Agricultural/Rural and Natural Resource areas; encourage and facilitate redevelopment within Community growth areas; and minimize new development utilizing individual well and septic systems to protect the quality and quantity of ground water resources; and

WHEREAS, the Board of County Commissioners finds that the Comprehensive Zoning Maps were prepared in accordance with the goals and policies of the Countywide Comprehensive Plan related to development within Community Growth Areas and municipalities wherein key goals include: developing a consensus with municipalities to determine how much new residential growth is desired in municipal-centered Community Growth Areas; ensuring that adequate infrastructure is provided – concurrently with development in order to accommodate long-term land use plans; and emphasizing reinvestment in our growth area by encouraging infill and redevelopment project and in furtherance of the goals are policies that: provide incentives to develop within a municipality by placing the Agricultural zoning designation on the land; and pursue redevelopment strategies to minimize the need to expand existing Community Growth Areas or establish new Community Growth Areas; and

WHEREAS, the Board of County Commissioners recognizes that numerous parcels of land have been incorporated into what is known as the Lake Linganore Planned Unit Development (PUD) and have been classified in the PUD floating zone classification beginning in 1968. (This PUD has been identified by various names over its history including "Lake Linganore at Eaglehead," "Lake Linganore," "Eaglehead," and "Eaglehead-on-the-Lakes." All of these refer to the same PUD. In this Ordinance "Lake Linganore" is used to identify this PUD); and

WHEREAS, the Board of County Commissioners finds that 40 years is sufficient, adequate and more than ample time for a PUD to complete its planned development and build out; and

WHEREAS, all of the Lake Linganore PUD has not been developed in 40 years; and

WHEREAS, the development of the Lake Linganore PUD as proposed in prior zoning approvals would have a substantial detrimental impact on public facilities including (by way of example and not limitation) roads, transportation, public schools, public water, public sewer, public parks, and law enforcement; and

WHEREAS, the public facilities (including those listed in the previous "Whereas" paragraph) are not adequate to serve the Lake Linganore PUD if developed as proposed in prior zoning approvals; and

WHEREAS, development of the Lake Linganore PUD as proposed in prior zoning approvals would not serve the purposes of state law (particularly Md. Annotated Code Article 66B and the Smart Growth Initiatives articulated in the 12 Visions in Article 66B,

§ 1.01), County law (particularly the Zoning Ordinance Chapter 1 – 19 and the Adequate Public Facilities Ordinance Chapter 1 - 20) and the County Comprehensive Plan; and

WHEREAS, the Board of County Commissioners has fully considered all of the applicable criteria for establishing the density and land use intensity for a PUD specifically including the following statutory criteria for setting the density of a PUD as established in § 1-19-10.700.2(E) of the Frederick County Code:

(1) Existing and planned availability of public services;

(2) Access to existing or planned major thoroughfares and transportation systems;

(3) The physical characteristics of the site with particular emphasis on restraints to development including steep slopes or floodplains;

(4) The shape of the tract of land;

(5) The proposed design of the PUD; and

(6) Any other relevant information which may have a bearing on the development capacity of the PUD; and

WHEREAS, no building permits have been requested and no construction pursuant to a validly issued building permit has commenced on any of the approximately 657 acres of the Lake Linganore properties which were previously zoned PUD and are being reclassified as Agricultural by this Ordinance; and

WHEREAS, no vested rights have been obtained for the properties being reclassified to the Agricultural or Resource Conservation Zoning District as the term "vested rights" has been defined by the Maryland state courts; and

WHEREAS, the Board of County Commissioners finds that the Lake Linganore PUD as reclassified in this Ordinance can proceed as a single, integrated project

consistent with the County Zoning laws even though some portion of the land is being reclassified to the Agricultural or Resource Conservation Zoning District; and

WHEREAS, following the reclassification of a portion of the property to Agricultural or Resource Conservation, the properties constituting the entire Lake Linganore PUD (including the properties remaining PUD as well as the properties reclassified to Agricultural or Resource Conservation) continue to have a reasonable economic value and a reasonable use and are not denied all reasonable use of the property; and

WHEREAS, the BOCC adopted Ordinance 06-30-426 effective September 28, 2006 granting the PUD Floating Zone classification for 402.04 acres of land (more or less) identified as the "Application of 75-80 Properties LLC and H.F. Payne Construction Co., Inc." (This property is hereinafter referred to as "75-80 Property"); and

WHEREAS, the BOCC finds that PUD zoning on the 75-80 Property is not consistent with the newly adopted Comprehensive Plan for Frederick County; and

WHEREAS, the BOCC finds that PUD zoning on the 75-80 Property:

- does not secure the public safety;
- does not promote health, morals and general welfare;
- does not promote the conservation of natural resources;
- does not prevent environmental pollution;
- would cause an undue concentration of population in an area in agricultural use; and
- does not facilitate the adequate provision of public facilities.

WHEREAS, the 75-80 Property does not satisfy the requirements for a PUD floating zone as set forth in the Frederick County Code § 1-19-10.700 and following; and

WHEREAS, the PUD floating zone requirements that the 75-80 Property does not satisfy include:

- The 75-80 Property is no longer delineated as a residential area in the adopted County Comprehensive Development Plan.
- The 75-80 Property is no longer classified at least S-5, W-5 on the master plan for water and sewer.
- The available and planned transportation facilities are not adequate for the PUD Zone. In particular, since the time of the adoption of Ordinance 06-30-426, the State Highway Administration has made no significant progress on improvements to Md. Rt. 75 between I-70 and I-270. These Md. Rt. 75 improvements are no longer reasonably probable of fruition in the time frame required for a PUD on the 75-80 property. Without these Md. Rt. 75 improvements, the existing and proposed road network is not adequate to serve the PUD on the 75-80 Property; and

WHEREAS, water and sewer facilities are not available and not adequate to serve the PUD on the 75-80 property and the BOCC specifically finds that any proposed arrangements to provide water and sewer facilities for the PUD on the 75-80 Property are not adequate to protect the interests of the County and its residents; and

WHEREAS, significant portions of the 75-80 Property are currently in active agricultural use and this agricultural use should be preserved; and

WHEREAS, Agricultural Zoning is the most appropriate zoning for the 75-80 Property; and

WHEREAS, the BOCC determines that the PUD project concept for the PUD for the 75-80 property is not feasible and desirable.

NOW, THEREFORE, BE IT ENACTED AND ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF FREDERICK COUNTY, MARYLAND as follows:

1. The zoning map atlas pages 1 through 113 (scale 1" = 1200') are hereby adopted, containing the specific zoning classifications for the subject parcels for Frederick County as shown thereon.

2. For only those areas classified in the Planned Unit Development (PUD) floating zone in the Lake Linganore PUD as shown on the zoning map atlas pages adopted by this Ordinance, the following terms and conditions adopted in the 2008 Comprehensive Zoning Ordinance for the New Market Region (Ordinance 08-23-449) shall continue to apply:

a. The maximum land use density shall be 3.0 dwelling units per gross acre for those properties that have <u>not</u> been subdivided by recorded plat or developed pursuant to a validly issued building permit as September 2, 2008, the effective date of the 2008 Comprehensive Zoning Ordinance for the New Market Region (Ordinance 08-23-499); except for

i) In the Town Center, where a maximum land use density of up to 5.0 dwelling units per gross acre shall be permitted; and

ii) In parcels comprising the Westwinds Golf Course, where no additional dwelling units are permitted as this area must be retained with a use consistent with open space approvals and to maintain the open space requirements of the Lake Linganore PUD.

b. Any residential development of the Lake Linganore PUD shall provide for a mix of housing types and shall meet the following minimum (Min.) and maximum (Max.) requirements:

i) In the Town Center village/land bay, a minimum of 12.5% single-family detached units, a minimum of 17.5% single-family attached units, and a maximum of 60% condominium units which include two-over-two type units, and

ii) In all other villages/land bays, dwelling unit types shall be in keeping with the existing development pattern of the respective villages. The developer must establish that the proposed housing types are compatible with and in keeping with the character of the village and the existing dwelling units.

3. That 'Golf Course and Country Clubs' and 'Outdoor Recreation Centers' in the Agricultural zoning district, and 'Zoo/Botanical Gardens/Arboretums' in the Highway Service Zoning District in existence or with final site development plan approval as of the date of this ordinance shall be deemed conforming uses in the zoning districts which they are designated on the zoning map as part of this ordinance. Those properties deemed conforming as a part of this ordinance may continue under the provisions of the zoning law in effect for 'Golf Course and Country Clubs' in the Agricultural zoning district, and 'Zoo/Botanical Gardens/Arboretums' in the Highway Service Zoning District as of June

14, 2009. 'Outdoor Recreation Centers' deemed conforming as a part of this ordinance may continue under the provisions of the zoning law in effect for "Golf, Driving Range' in the Agricultural zoning district as of June 14, 2009 to include the use of property for golf driving range, chip and putt, miniature golf, batting cage/range, or putting green or any combination of these uses.

4. Those parcels which were rezoned prior to the date of this Ordinance and which have retained that prior zoning classification as part of this comprehensive rezoning, shall remain subject to any and all conditions which were imposed at the time of the prior zoning change.

5. The Preamble and Legislative Findings contained in this Ordinance are specifically enacted and ordained as a part of this Ordinance and are Legislative Findings of the Board of County Commissioners supporting this Ordinance.

6. This Ordinance shall take effect on April 8, 2010.

The undersigned hereby certifies that this Ordinance was approved and adopted on the 8th day of April, 2010.

ATTEST:

Ronald A. Hart
County Manager

BOARD OF COUNTY COMMISSIONERS
OF FREDERICK COUNTY, MARYLAND

Jan H. Gardner
President

RESOLUTION NUMBER 2009 – 01

A Resolution to Recommend Adoption of the
Countywide Comprehensive Plan

WHEREAS, the Frederick County Planning Commission, under the provisions of Section 3.07 of Article 66B of the Annotated Code of Maryland may recommend adoption of a whole plan or any amendment to the County's Comprehensive Plan; and

WHEREAS, the Board of County Commissioners directed the Planning Commission to prepare an update of the Countywide Comprehensive Plan in accordance with requirements contained within Article 66B of the Annotated Code of Maryland; and,

WHEREAS, the Division of Planning worked with the County Planning Commission over the course of 30 public workshops held between March 2008 and April 2009 to prepare the Public Hearing Draft Plan. Four public open houses to introduce the plan update process were held on May 8th, 12th, 15th, and 22nd 2008; and,

WHEREAS, after careful and comprehensive surveys and studies of present conditions and projections of future growth of Frederick County, and with due regard to its relation to neighboring areas, a Public Hearing Draft Plan was prepared with the general purpose of guiding and accomplishing the coordinated, adjusted, and harmonious development of the County which will, in accordance with present and future needs, best promote health, safety, morals, order, convenience, prosperity, and general welfare, as well as efficiency and economy in the process of development; this includes among other things, adequate provisions for transportation needs, the promotion of public safety, conservation of natural resources, the prevention of environmental pollution, the promotion of a healthful and convenient distribution of population, the promotion of good civic design and arrangement, the wise and efficient expenditure of public funds, and the adequate provision of public utilities and other public requirements; and,

WHEREAS, at least sixty days prior to the public hearing the Frederick County Planning Commission did provide a copy of this Public Hearing Draft Plan to all adjoining county jurisdictions, all of the municipalities within Frederick County and to all county and state agencies that have responsibility for financing or constructing public improvements necessary to implement the Plan. Four public open houses were held on June 4th, 9th, 11th and the 15th, 2009 to present maps and information about the Public Hearing Draft Plan. The agency and public comments received and various presentations presented by these agencies were considered by the Planning Commission in its review of the Public Hearing Draft Plan; and,

WHEREAS, following notice of the time and place in a newspaper of general circulation in the County, the Frederick County Planning Commission held a public hearing on the Public Hearing Draft Plan on July 15, 2009; and,

WHEREAS, on August 5, 2009 and August 19, 2009 the Frederick County Planning Commission held public work sessions to review public hearing testimony and written correspondence on this Public Hearing Draft Plan to discuss changes and make adjustments to the Public Hearing Draft Plan text and maps; and,

WHEREAS, on August 19, 2009 the Frederick County Planning Commission, on a unanimous vote, moved to direct Planning staff to prepare a recommended plan incorporating both map and text revisions approved to date and to prepare a report to the Board of County Commissioners reflecting those changes; and,

NOW, THEREFORE, BE IT RESOLVED by the Planning Commission of Frederick County, Maryland, that the **Recommended Plan** text and Plan Map are hereby made and approved and are recommended for adoption by the Frederick County Board of Commissioners.

The undersigned hereby certify that the foregoing Resolution was made and approved this ninth day of September 2009.

Frederick County Planning Commission

Audrey L. Wolfe

By: Audrey Wolfe, Chair

Attest: Robert White, Secretary

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01 Introduction

This Plan builds on 50 years of planning history of the County dating to the County's first land use plan, which was adopted in January 1959. Frederick County has experienced numerous changes and transitions during the past 50 years that have taken the County from its predominantly rural, small town, agricultural roots to a suburbanizing bedroom community, to a maturing county with an established employment base and a prominent community in the City of Frederick. Throughout these transitions Frederick County has remained rooted in its rural and agricultural heritage that continue to support its rural communities, its small but growing towns, and a very dynamic historic downtown in the City of Frederick.

Looking ahead 50 years, Frederick County faces the challenge of maintaining its rural and agricultural heritage and its sense of community while balancing its growing role as an employment center. As a maturing suburban/urban community the County will have opportunities to accommodate and focus growth in a manner that maintains our rural areas and strengthens our communities.

	Amendment Status
Goals, Policies, Action Items	**04/08/2010**
Maps and Graphics	**04/08/2010**
Background Information	**04/08/2010**

MANY PLACES...

As the name of this Plan implies, Frederick County is composed of many distinct places ranging from small, rural communities such as Creagerstown, Burkittsville, and Ijamsville, to municipalities such as Middletown, Emmitsburg, and Brunswick, to the City of Frederick. These and other communities in the County have roots dating to the initial settlement of the County in the mid 1700's to early 1800's and continue to serve as viable and growing communities. More recently the County has experienced development of more urban communities such as Urbana, Linganore, and Ballenger Creek that will create the next generation of places that define the County.

ONE COMMUNITY

The focus of this Plan is how we are able to maintain the distinct places of the County in the context of the continuing transitions and challenges that the County is facing. The diversity of the County's communities comprising 12 municipalities also presents a challenge in developing a consensus on how the County will maintain these distinct places as part of a growing community.

PURPOSE OF THE PLAN

- Provide a framework for maintaining the County's places with a distinct and common sense of community.
- Maintain the general premise of the Community Concept from the County's 1972 Comprehensive Plan with revisions to better address current conditions and issues.
- Work toward a consensus between the County and the municipalities that recognizes the distinct policies and circumstances of the municipalities within a context of a common direction for the County.
- Address the recent State mandates from HB 1141 including the Water Resources Element, Priority Preservation Plan, and the Workforce Housing Element.
- Incorporate the new State Planning Visions as result of the Smart and Sustainable Growth Act of 2009 adopted by the State of Maryland.
- Establish a new planning process that will allow this Plan to be dynamic and better maintain consistency with municipal plans and State mandates.

STATE PLANNING FRAMEWORK

Maryland has a very long history of state level planning dating back to the 1920's with the establishment of a State Planning Commission and the adoption of Article 66B, which provides local governments that implement planning and zoning with guiding legislation. Since the 1990's the State has taken a proactive role in implementing smart growth principles on a statewide level and mandating the inclusion of new comprehensive plan elements.

Within each chapter there is a section titled State Planning Mandates and Vision that will document the State Visions addressed by that chapter and the comprehensive plan elements mandates.

PLANNING ACT OF 1992

The Economic Growth, Resource Protection and Planning Act, or Planning Act, amended Article 66B of the Annotated Code of Maryland, to encourage economic growth, limit development sprawl, and protect the State's natural resources and environment. The Planning Act also established a requirement that local governments review and if necessary update their plans on a six-year cycle. The Planning Act and a subsequent amendment in 2000 required local governments to incorporate and implement Eight Visions through the Comprehensive Plan.

THE SMART AND SUSTAINABLE GROWTH ACT OF 2009

This package of amendments to Article 66B of the Annotated Code of Maryland, was geared toward protecting Maryland's environment and natural resources and to promote sustainable growth in Maryland. In addition, the new Planning Visions law modernizes the State's eight existing planning visions with 12 new visions that reflect more accurately Maryland's ongoing aspiration to develop and implement sound growth and development policy.

State Visions

- **QUALITY OF LIFE AND SUSTAINABILITY:** A high quality of life is achieved through universal stewardship of the land, water, and air resulting in sustainable communities and protection of the environment;
- **PUBLIC PARTICIPATION:** Citizens are active partners in the planning and implementation of community initiatives and are sensitive to their responsibilities in achieving community goals;
- **GROWTH AREAS:** Growth is concentrated in existing population and business centers, growth areas adjacent to these centers, or strategically selected new centers;
- **COMMUNITY DESIGN:** Compact, mixed-use, walkable design consistent with existing community character and located near available or planned transit options is encouraged to ensure efficient use of land and transportation resources and preservation and enhancement of natural systems, open spaces, recreational areas, and historical, cultural, and archeological resources;
- **INFRASTRUCTURE:** Growth areas have the water resources and infrastructure to accommodate population and business expansion in an orderly, efficient, and environmentally sustainable manner;
- **TRANSPORTATION:** A well-maintained, multimodal transportation system facilitates the safe, convenient, affordable, and efficient movement of people, goods and services within and between population and business centers;
- **HOUSING:** A range of housing densities, types, and sizes provides residential options for citizens of all ages and incomes;
- **ECONOMIC DEVELOPMENT:** Economic development and natural resource-based business that promote employment opportunities for all income levels within the capacity of the State's natural resources, public services, and public facilities are encouraged;
- **ENVIRONMENTAL PROTECTION:** Land and water resources, including the Chesapeake and Coastal Bays, are carefully managed to restore and maintain healthy air and water, natural systems, and living resources;
- **RESOURCE CONSERVATION:** Waterways, forests, agricultural areas, open space, natural systems, and scenic areas are conserved;
- **STEWARDSHIP:** Government, business entities, and residents are responsible for the creation of sustainable communities by collaborating to balance efficient growth with resource protection; and
- **IMPLEMENTATION:** Strategies, policies, programs, and funding for growth and development, resource conservation, infrastructure, and transportation are integrated across the local, regional, State, and Interstate levels to achieve these visions.

1997 Priority Funding Areas Act

The Maryland General Assembly passed the Neighborhood Conservation and Smart Growth initiatives in 1997. This legislation enhances the Planning Act passed in 1992 that established the seven visions to guide growth and development throughout the State. The Smart Growth initiatives go much further by establishing a variety of State programs and fiscal tools in an effort to protect sensitive areas, plan for better growth, and direct resources. The State's Smart Growth toolbox includes a wide range of policies and programs that address land preservation, economic development, neighborhood revitalization, transportation, environmental protection, historic preservation and other initiatives. Some of the more significant initiatives affecting Frederick County are described below.

Priority Funding Areas

Priority Funding Areas (PFA) define geographical areas within each county where the State wants to target its programmatic efforts and infrastructure funding to support economic development and new growth. Existing or new developments located outside of a State certified PFA would not be eligible to receive state funding for infrastructure improvements such as roads, water, or sewer. Generally the PFA criteria require a property to be within a designated growth area, have appropriate zoning, and be classified in a 10-year water/sewer service area.

Rural Legacy Program

This program provides funding to identify and protect the State's most valuable farmland and natural resource areas. The funding is used to either purchase development easements on property through a voluntary application process from the property owner or for fee-simple of land by the State. The funding can only be used in State designated Rural Legacy Areas.

2006 State Planning Initiatives

The 2006 Maryland Legislative session produced several planning related requirements that will affect the way Maryland's counties and municipalities exercise planning and zoning authority. The specific legislation came out of House Bill 1141 and House Bill 2 described below.

Water Resources Plan Element (WRE)

Addresses the relationship between water and wastewater capacities with planned growth. The three components of the WRE include: drinking water supply; wastewater treatment and disposal; and non-point source and storm water management.

Municipal Growth Element

Required of municipalities to identify areas for future growth consistent with a long-range vision. This element also requires coordination with the County and recommends the use of joint planning agreements between the municipality and the County.

Priority Preservation Element

This element came out of HB 2 and is required for counties with certified agricultural land preservation programs. Priority Preservation Areas may designate several connected or

unconnected parcels of land with the goal of creating larger contiguous blocks of parcels in agricultural preservation.

Work Force Housing Element

House Bill 1160 established a Work Force Housing Grant Program, which can be used by local jurisdictions that have a Work Force Housing element in its comprehensive plan. This element would assess workforce housing needs and goals to address the needs.

PLAN UPDATE PROCESS

The task to update the County's 1998 Countywide Comprehensive Plan was born from the Growth Management Initiatives announced by the Board of County Commissioners in January 2008. These initiatives included a review of the County's Adequate Public Facilities Ordinance, a countywide comprehensive zoning update, and the comprehensive plan update. The County's Division of Planning has been given the responsibility for conducting the update of the comprehensive plan and the comprehensive zoning update, which is a component of the Plan.

PUBLIC PARTICIPATION PROCESS

- Open Houses – A series of four public open houses were held in May 2008 at locations throughout the County. These open houses provided an opportunity for the public to get introduced to the Plan update process and to view the trends and issues data and background maps.
- Survey – An online survey was open for a 60-day period from mid May to mid June. The survey had a total of 37 questions and generated 1,171 responses. A Community Survey Results report, documenting the results was issued in June 2008.
- Agency and Community Group Meetings – The Planning Division staff held facilitated meetings with 14 Boards and Commissions that are under the County government's jurisdiction and 10 community organizations. Staff presented a series of questions to solicit feedback on what makes Frederick County special, what are the issues and challenges facing Frederick, and what opportunities or solutions are available. These comments are documented in the Community Issues Report issued in June 2008.
- Frederick County Planning Commission (FCPC) Public Workshops and Hearings – Beginning in March 2008 the FCPC held 32 public workshops as well as a public hearing in July 2009 for the preparation of their Recommended Plan, released in August 2009.
- Board of County Commissioners (BOCC) Public Workshops and Hearings – Beginning in August of 2009, the BOCC held 13 public workshops in preparation of the BOCC Draft Plan, released in December 2009. Another series of open houses were held in early January 2010 followed by a joint public hearing with the County Planning Commission and the Board of Commissioners on January 19 and 21, 2010. The Board held an additional 7 work sessions in February and March in addition to joint meetings with those municipalities upon request.. In total approximately 100 public meetings were held over a 2-year period in preparation of this plan.

02 Planning Framework and Background

This Plan presents a new structure and organization of the Comprehensive Plan document to provide a clearer framework for its implementation. This chapter provides an overview of the Plan's structure, including vision statements, themes, goals, policies, and action items. The framework of the Plan introduces General Plan Components and mapping that will illustrate community growth areas, green infrastructure, and the agricultural lands.

Further supporting the framework for planning in the County is a description of the County's context in the larger metropolitan region and a summary of the background trends that will influence growth and development in the County over the next 25 years. This chapter concludes with a vision for the County that sets the stage for the story of how Frederick County will meet the future challenges.

	Amendment Status
Goals, Policies, Action Items	**04/08/2010**
Maps and Graphics	**04/08/2010**
Background Information	**04/08/2010**

ORGANIZATION AND STRUCTURE OF THE PLAN

The organization of this Plan departs from the traditional list of comprehensive plan elements (environmental features, community facilities, transportation, and land use) that typically define the individual chapters of a plan. Both the format of this Plan as well as the injection of new and revised planning concepts has established this Plan as a new benchmark rather than merely updating the previous 1998 Countywide Plan.

The format of this Plan is organized around nine themes that serve several purposes. The nine themes provide an opportunity to focus on significant aspects of the County that have, in previous plans, been given very little attention and have been buried within traditional plan elements. A second purpose of the themes is to create a more dynamic Plan document where the individual themes can stand alone in terms of page numbering to facilitate periodic amendments. The first page of each theme includes an Amendment Status block that will be used to document subsequent amendments to the goals/policies/action items, maps, and/or background information for that theme. This will also facilitate the insertion of new theme/chapters in response to either new state requirements or as otherwise identified by the County.

Each theme has a list of goals, policies, and action items that have a numbering reference using letters (G – goal, P – policy, A – action item) and numbers proceeded by an abbreviation for each theme. In this way each goal, policy, and action item will have a unique reference that will

facilitate their implementation and allow for subsequent amendments to a theme. The following references for each theme will be used:

- NR – Conserving our Natural Resources and Green Infrastructure
- HP – Protecting and Preserving our Heritage
- AG – Preserving our Agricultural and Rural Communities
- TR – Providing Transportation Choices
- SC – Serving our Citizens
- PU – Public Utilities
- HO – Housing
- ED – Supporting a Diversified Economy
- WR – Assessing our Water Resources
- DW – Drinking Water
- WW – Wastewater
- SW – Stormwater
- MG – Managing our Growth
- CP – Community and Corridor Plans

Another departure from the organization of previous County comprehensive plans is the elimination of the reference to a Volume I (Countywide Comprehensive Plan) and a Volume II (Region Plans), which has been used by the County since its 1984 Plan update. For the detailed land use plan mapping, this Plan includes a countywide land use plan map that consolidates what has been previously identified within eight separate region plans. This update further proposes a Community and Corridors Planning process that will allow subsequent updates to the land use plan to be focused on individual community growth areas or corridors within a community growth area. In addition, as each municipality updates their respective comprehensive plans the County would update and amend this Plan to maintain consistency.

PLAN STRUCTURE

This Plan includes several components that define the structure of the Plan starting at a broad, general perspective and leading to the specific. The following components are organized in a way to provide more defined guidance for elected officials, the County's appointed boards and commissions, and staff in their review and decision making processes. This structure should also aid in illustrating to the general public the direction and focus of the County for the next 20 years.

Vision Statement

The purpose of the Vision statement for this Plan will focus not so much on the desired end state for the County but on how we can achieve the desired end state. Following the description of the County's regional context and background is a very broad vision statement that sets the stage for the more detailed vision statements within each theme.

Themes

While providing for the structure of the Plan as chapter headings, the themes also serve as very broad goal statements. Generally, these themes incorporate the goals from the 1998 Plan that have been carried forward since the County's 1972 Plan.

Goals

Each theme will have a list of supporting goals. While some of these goals are derived from the objectives and policies in the 1998 Plan, many are new. A goal can be defined, as a broad desired result, a general direction for action, or a desired future state or condition.

Policies

Also organized for each theme are policies. The 1998 Plan had an extensive list of policies, some of which are included in this Plan and some have been listed more appropriately either as goals or action items. A policy may be defined as a strategy or a means for achieving the goal.

Action Items

The final and most specific part of the Plan are Action Items that can also be described as an objective in that they identify a specific key result that is measurable or achievable. The responsibility and accountability for achieving an Action Items can also be assigned to a particular agency or division of the County. The Action Items will be the primary means for implementing the Plan and will define specific projects and work program tasks to be carried out following adoption of the Plan.

GENERAL PLAN COMPONENTS

A new mapping component of this Plan illustrates three general plan components as a way to provide a general version of the traditional land use plan map. This map clearly defines the community growth areas and in particular differentiates the municipal growth areas from the unincorporated growth areas controlled by the County. Also illustrated is the relationship between Community Growth Areas, Priority Preservation Areas and the Green Infrastructure.

AGRICULTURAL AND RURAL COMMUNITIES PLAN

This component seeks to emphasize the importance of agriculture and the general rural character of the County that is not necessarily in agricultural use. Too often comprehensive plans identify agricultural areas as whatever is left over after the growth areas have been designated. The features of this component include:

- Agricultural/Rural Areas – This encompasses a broad area of the County including active agricultural uses, fallow lands, and scattered residences that have been developed from larger farm parcels.
- Priority Preservation Areas – There are five (5) areas delineated in the County. The focus of these areas is to create larger contiguous areas of preservation easements that also protect the significant prime agricultural soils.
- Rural Communities – These are cross road communities located throughout the Agricultural/Rural area and have historically supported the surrounding agricultural community. Where appropriate some of these communities may experience limited growth in the context of supporting the local agricultural community.

GREEN INFRASTRUCTURE PLAN

This component focuses on the County's network of natural resources and protected lands. It focuses on both natural resource protection including the identification of gaps in the network or hubs and corridors and as a way to identify linkages within and connecting the community growth areas. These linkages may accommodate opportunities for recreational use including pathways.

- Natural Resource Areas – Delineates the primary environmental features including the mountain areas (encompasses forestland and steep slopes) and major stream corridors.
- Parks and Protected Lands – Highlights the state and federal parks and the County's regional parks. Other protected lands include municipal watershed properties and Sugarloaf Mountain, which is privately owned.

COMMUNITY PLAN

This component continues to implement the basic structure of the County's Community Concept first described in the County's 1972 Comprehensive Plan. The Community Concept described a hierarchy of communities, regional, district, and rural that was defined by a number of parameters including population, residential density, intensity of commercial and employment uses, and level of community facilities. The Community Concept also supports the following:

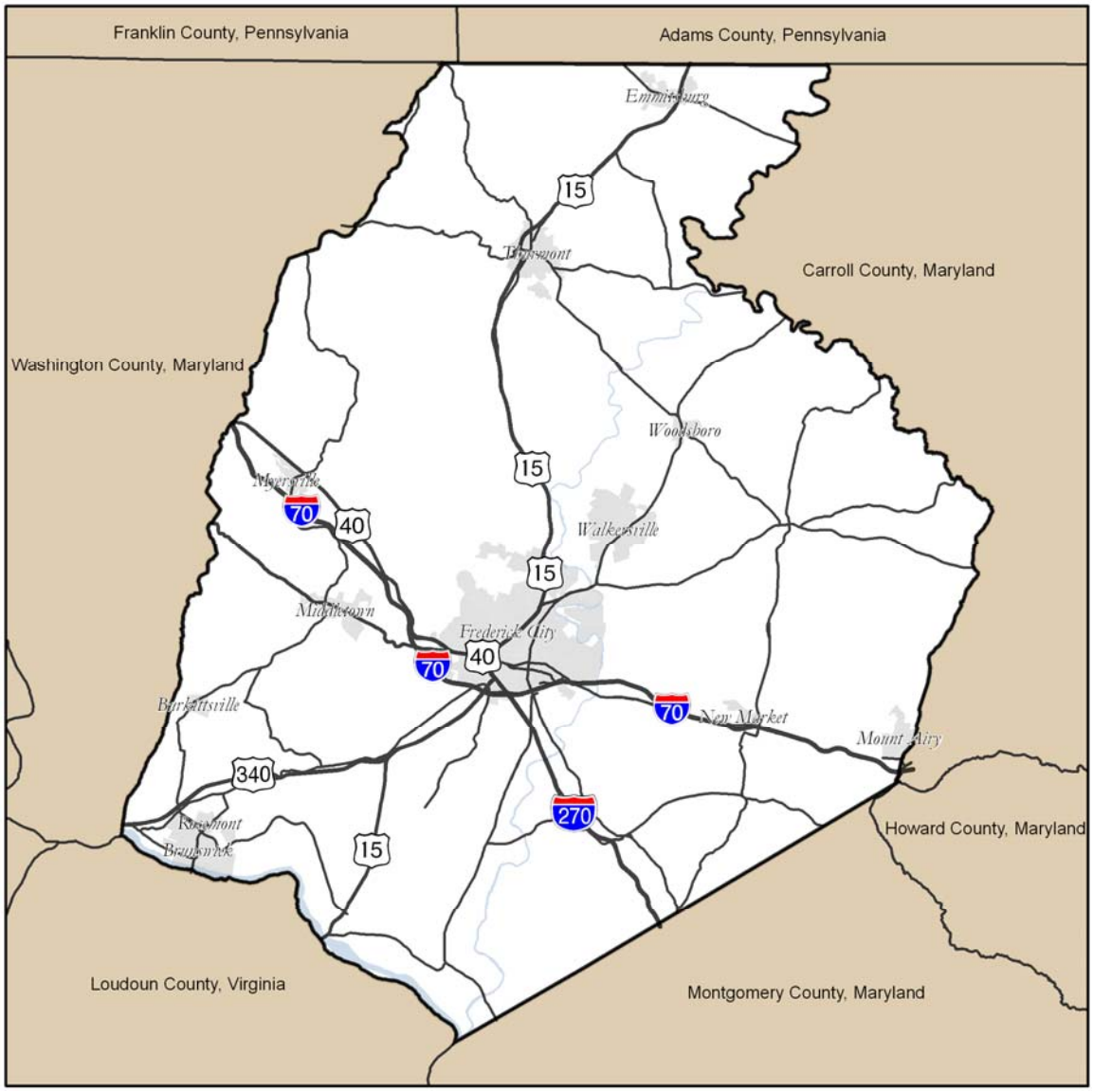
- Encourages compact growth areas to preserve agricultural lands and allow for more efficient provision of community facilities.
- Support the ability to maintain distinct and identifiable communities.

The new Community Concept that supports a framework for this Plan will continue to carry on the strategies of encouraging compact growth areas and supporting identifiable communities. The primary change from the original Community Concept is the focus on a broader definition of Community Growth Areas (CGA's) rather than a strict hierarchical structure.

- Municipal Growth Areas – Most of the County's municipalities continue to provide a logical location for managed growth both within their existing municipal borders and in surrounding lands for future annexation. The General Plan highlights the existing municipal boundary and the future growth area that would be controlled by the municipality through the annexation process. The limits of a Municipal Growth Area (MGA) on the County Plan may be different from a growth area identified on a respective municipal plan. The MGA's in the County Plan represent those areas the County has recognized as appropriate for future growth given the limitations and constraints on County public facilities and services during the timeframe of the comprehensive plan.
- Unincorporated Growth Area – There are several existing communities under the County's jurisdiction that have served as a foundation for growth. These communities have a historic "downtown" core, schools, and water/sewer infrastructure to support additional growth. Several of the unincorporated growth areas delineate newer communities, which are focused on an older historic core.

FREDERICK COUNTY AT A GLANCE

Map 02-1: Frederick County at a Glance



Land Area	*Population Density*	*Av. Household Size*	*Municipalities*
424,960 acres or 664 sq. mi.	354 persons per square mile	2.72 persons per household	2 Cities, 9 towns, 1 village
Population	*Existing Dwellings*	*Existing Jobs*	*Municipal Population*
235,364 (Jan. 2010)	Approx. 88,006 (Jan. 2010)	122,162 (2005)	95,497 (Jan. 2010)

REGIONAL CONTEXT AND BACKGROUND

An example of the transitions taking place in Frederick County is the incorporation of the County into the Washington metropolitan region's economic and cultural community. Frederick County, once securely located in the agricultural economy and political alliances of Western Maryland, is now more closely linked than ever before to the employment centers and housing markets of the Washington metropolitan region.

These linkages have also contributed to Frederick County's establishment as an employment center in its own right. Understanding the future of Frederick County can only occur with understanding the direction and magnitude of growth taking place in the Washington metropolitan region. With Frederick's location just 50 miles from downtown Washington D.C. the employment and population growth occurring within the region has and will continue to directly influence growth and development within the County.

The following background information provides historical, current, and projected data for some of the significant growth indicators for the County. This information will also help to illustrate the affects of the Washington region on Frederick County.

EMPLOYMENT

The Washington metropolitan region has been one of the most dynamic regions in the country in terms of job growth. The continuing influence of the federal government and the spinoff of consultants and contractors that prefer to locate in proximity to the federal agencies will result in continued job growth for the region and Frederick County.

- Frederick County continues to maintain strong job growth, which is influenced by its proximity to the Washington metropolitan area.
- Since 2003 Frederick County's job growth has increased an average of 3% per year or about 2,522 new jobs per year.
- Fort Detrick with approximately 7,900 jobs (includes military and civilian agencies/jobs) is the County's largest employer. With Base Realignment and Consolidation (BRAC) and the biodefense campus Fort Detrick is expected to add approximately 1,400 jobs.
- In the private sector, the industries that experienced the greatest job growth since 2003 were: Professional and Business Services (31%), Leisure and Hospitality (17%), and Education and Health Services (17%).
- The County's current policy is to maintain a minimum jobs-to-housing ratio of 1.2:1. Even with a projected decline in this ratio through 2030 it will still exceed the current policy ratio.

Figure 02-1: Employment and Jobs to Housing Ratio

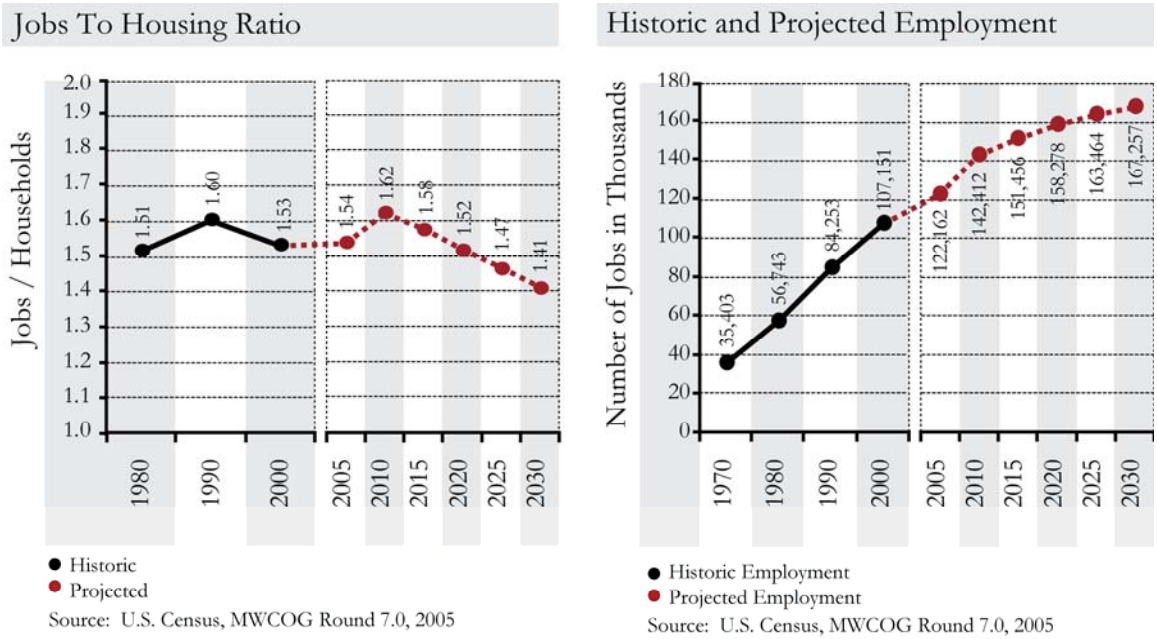
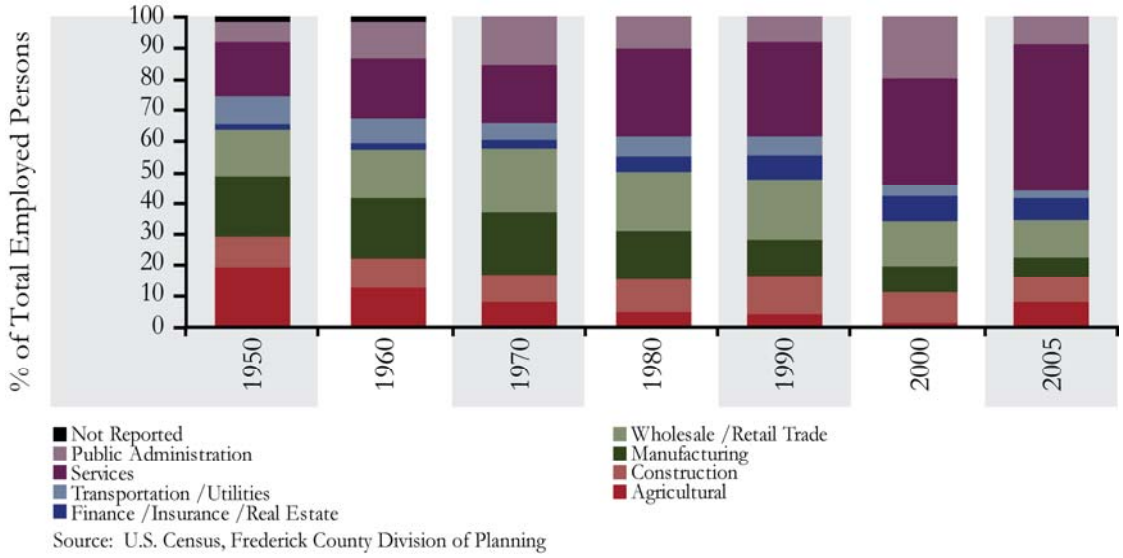


Figure 02-2: Employment by Sector



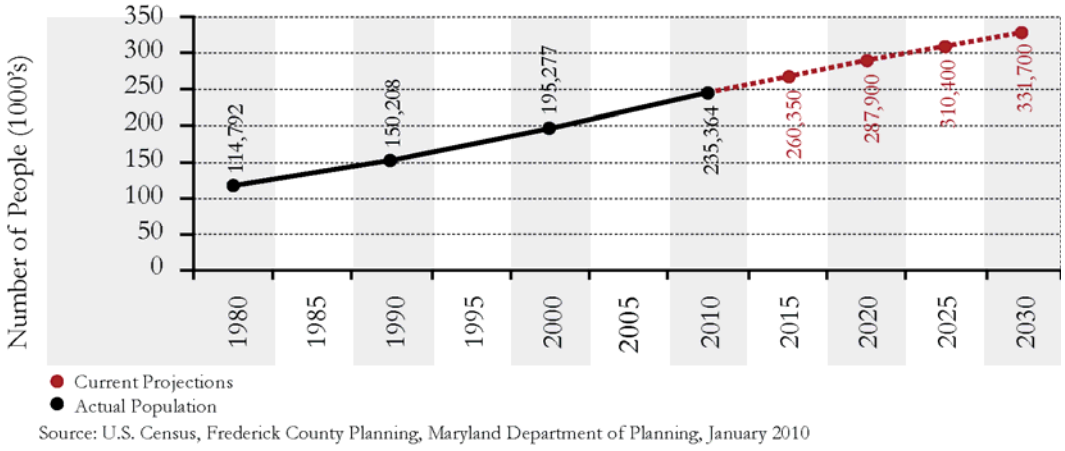
POPULATION

Fueled by the region's economic growth will be continued population and housing construction growth especially in the region's outer suburbs, which includes Frederick County. On a percentage basis the outer suburbs will experience higher rates of population growth than the central and inner jurisdictions.

Actual and Projected Population

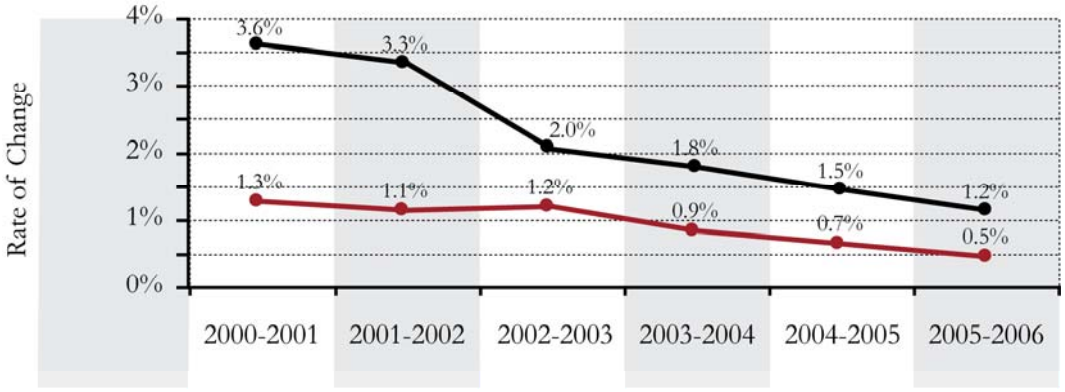
- Since 2000 the County's population has increased an average of 4,240 people/year.
- For the 25-year period from 1980-2005 the population increased by 106,084 and for the next 25 years to 2030 is projected to grow by approximately 93,500 people.
- In 1990, the population projection for 2010 was 243,600 people. This is on track with current trends. However, the projected rate of population growth in the current population projections has increased, resulting in a higher population number in 2020 of 287,900 than was projected in 1990, which were 267,100.

Figure 02-3: Historic and Projected Population



Source: U.S. Census, Frederick County Planning, Maryland Department of Planning, January 2010

Figure 02-4: Annual Rate of Population Change

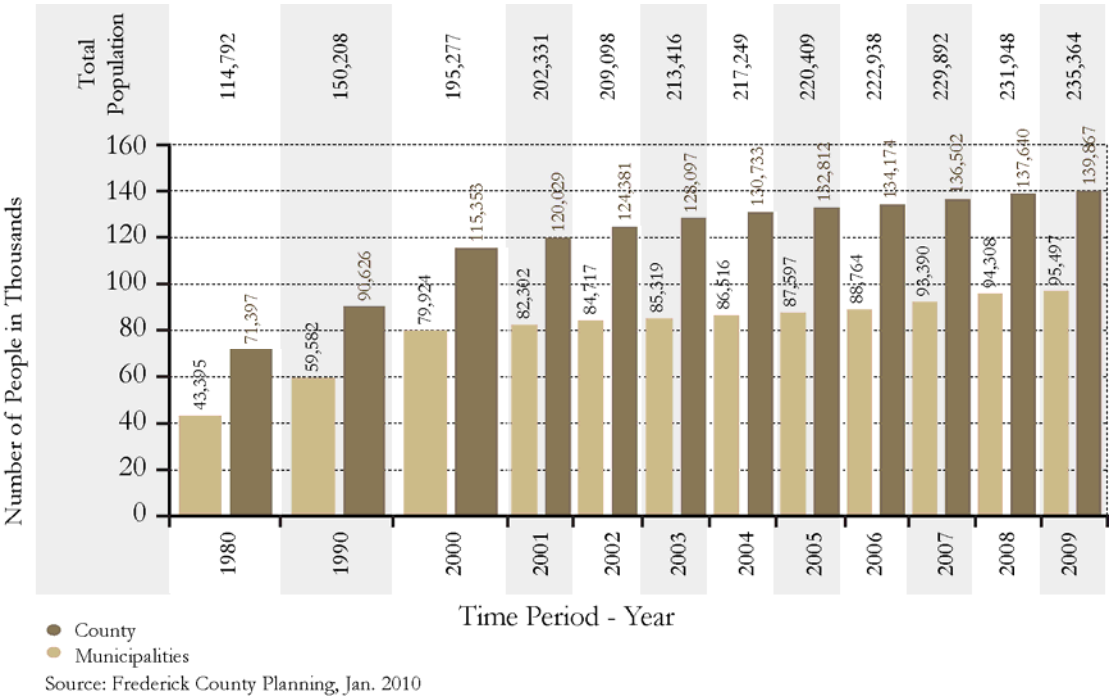


Source: Frederick County Division of Planning, U.S. Census, Maryland Department of Planning

Municipal/County Distribution of Population

The percentage of the County's population within all of the municipalities increased from 38% in 1980 to almost 42% in 2000. However, since 2000 the proportion of the population within the municipalities decreased slightly to 40% by 2009.

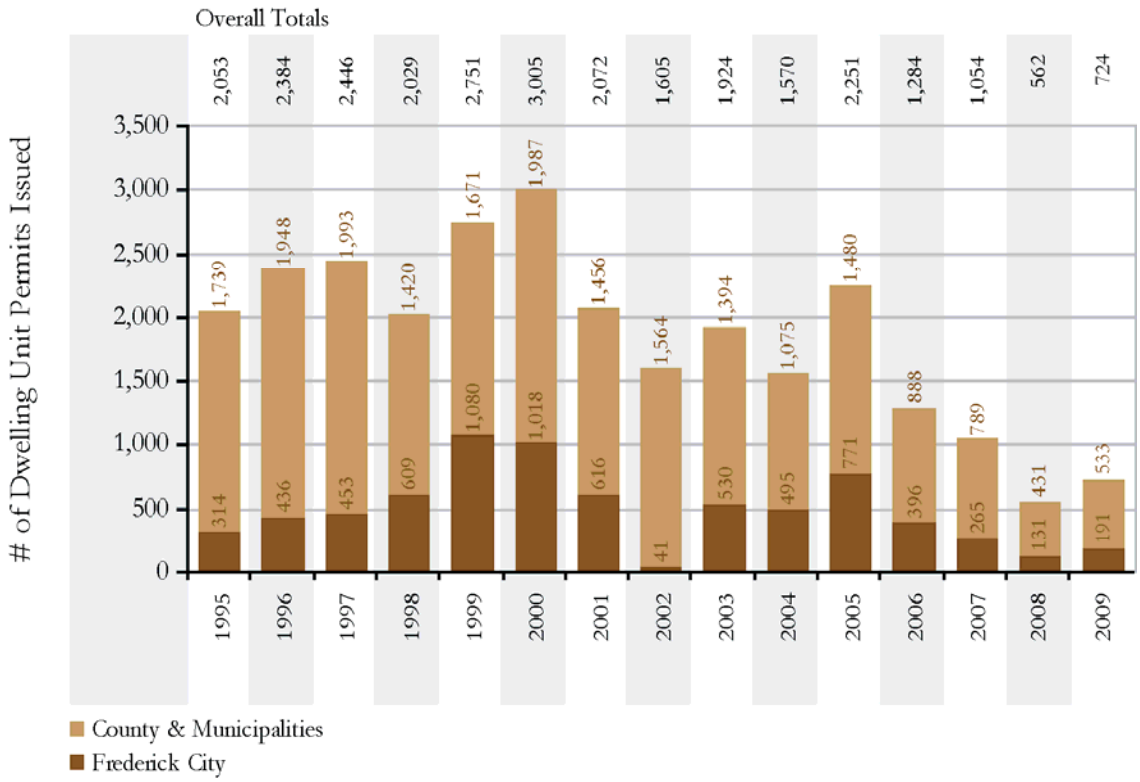
Figure 02-5: County Versus Municipal Population



HOUSING CONSTRUCTION

- Since 2000 the County has averaged approximately 1,700 new dwellings per year. This is a decline from an annual average of 2,000 dwellings/year during the 1990's.
- Since 2005, housing construction has further declined significantly, averaging 970 dwellings/year. In 2008 the 562 permits is the lowest number of permits issued since the 1960's. In 2009, the 724 dwelling units maintained a trend that continues to be significantly below historical averages, although higher than 2008 totals.
- Some of the continuing decline in housing construction since 2005 is attributable to residential market conditions that are expected to continue perhaps through 2010.
- The predominant housing type constructed in the County continues to be single-family detached. Historically, 60% of all new dwellings constructed were single-family detached.
- The projected trend for the near future reveals that the relative amount of single family detached dwellings will decline, resulting in an estimated housing mix of 50% single family detached dwellings, 30% townhouse and duplex dwellings, and 20% multi-family dwellings for new construction.

Figure 02-6: Total Dwellings Permitted



Source: Frederick County Division of Planning - Dwelling Unit Breakdown Permit Reports

Residential Development Pipeline

The following information describes how many residential lots/dwelling units have already received some level of development approval but are not yet built. These lots/dwellings units are commonly referred to as the "pipeline". The pipeline data captures residential developments approved under the County's jurisdiction as well as by the municipalities.

- Under the County's jurisdiction the pipeline includes any lot created for residential use including those zoned Agricultural and Resource Conservation in addition to developments zoned residential, Planned Unit Development (PUD), or Mixed Use Development (MXD).
- Pipeline data is also provided for the municipalities with a breakdown between the portions of the pipeline just within the City of Frederick compared to the other eleven municipalities.
- The 17,550 lots/dwellings in the traditional pipeline could accommodate the County's residential growth for approximately 12 - 15 years based on a construction rate of 1,200 - 1,500 dwellings/year. The pipeline figures in Table 02-1 are based changes to community growth areas from this Plan.
- Municipalities account for nearly 43% of the County's total residential pipeline.

Table 02-1: Residential Development Pipeline Summary – December 2009

Jurisdiction	Traditional Pipeline	Recorded Lots / Dwellings Available	Unrecorded Pass APFO	Pending APFO[1]
City of Frederick	5,296	1,078	4,218	0
Other Municipalities	2,245	274	1,880	91
Subtotal Municipalities	**7,541**	1,352	6,098	91
Subtotal County	**10,009**	2,756	4,274	2,979
Total	**17,550**	4,108	10,372	3,070

Source: Frederick County Planning, City of Frederick Planning as of December 2009.
Municipalities with APFO's include: Frederick, Thurmont, Brunswick, Walkersville, Mt. Airy, and Myersville
Note: Frederick City data not available for detailed breakdown, County data based on BOCC 2009 Draft Zoning which may affect current development status for certain properties in any prior pipeline development list.

TRANSPORTATION

Frederick County's location at the junction of four primary highways, US 340, US 15, I-70, and I-270 has facilitated commuting to jobs in the inner jurisdictions and has also burdened the County with the increasing commuting from Pennsylvania and points west of Frederick.

Commuting to Work

Of Frederick's 102,318 resident workforce (as of 2000), 42,046 (41%) worked outside of the County. This is a slight increase from 40% in 1990. Of these 42,046 out-commuters over half (22,867) worked in Montgomery County.

For the approximately 84,731 jobs in Frederick County 29% (24,459) are filled by in-commuters who reside outside of the County. The greatest source of in-commuters is Washington County with 7,150 followed by Montgomery County with 4,104, and Pennsylvania with 3,978.

With Frederick County's location at the junction of two interstates, I-70 and I-270 and two primary highways, US 15 and US 340 it bears the brunt of the increasing amount of commuting between the western and northern jurisdictions and points east of Frederick. The following table and maps highlight the level of commuting specifically from Pennsylvania, West Virginia, and Washington County, Maryland.

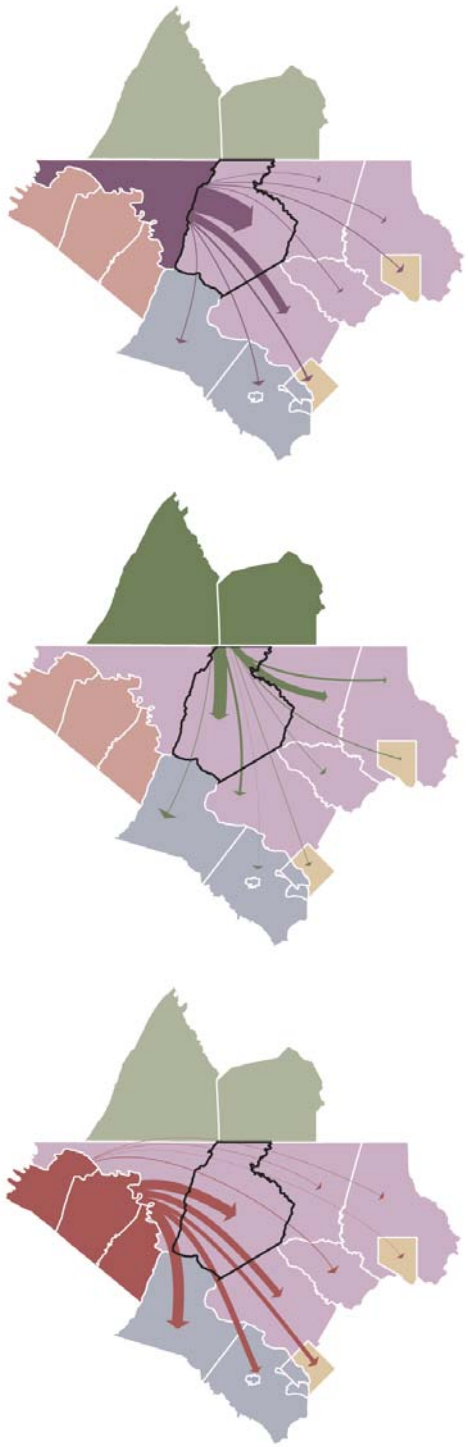
The predominant mode of travel to work continues to be the automobile with a lone driver. The percentage of Frederick's workers driving alone increased from 73% in 1990 to 79% in 2006. Workers using alternative means of commuting including carpooling, transit, walking, and bicycling continues to decline from 23% to 17%.

Table 02-2: Frederick County Transportation Characteristics

Working Population	1990	2000	2006
Total Population	150,208	195,277	228,364
Total Population 16 or Older	114,419	147,144	173,622
Total Commuters[1]	80,850	102,318	118,660
Means of Transportation to Work	**Percent of Total Working Population**		
Car, Truck, or Van (drove alone)	72.9%	79.3%	79.1%
Car, Truck, or Van (carpooled)	17.1%	12.4%	12.6%
Worked at Home	3.6%	4.0%	3.5%
Walked	3.6%	2.4%	1.9%
Public Transportation2	2.0%	1.4%	1.6%
Other Means (inc. bicycle)	0.8%	0.6%	1.2%
Number of Vehicles Per Household	**Percent of Total Households**		
No Vehicle	5.7%	5.0%	4.3%
1 Vehicle	24.5%	25.2%	26.6%
2 Vehicles	42.6%	43.5%	41.1%
3 or more Vehicles	27.2%	26.4%	28.0%
Mean Travel Time to Work (minutes)	27.3	31.9	33.8

Source: US Census 1990 & 2000, American Community Survey 2006
(1) Workers greater than 16 years old (2) Excluding taxicab

Figure 02-7: Commuting Patterns Through Frederick from Surrounding Counties



ORIGIN

PA	WV	MD
Adams County Franklin County	Jefferson County Berkeley County Morgan County	Washington County

DESTINATION

MD	VA	
Montgomery County Howard County Frederick County Carroll County Baltimore County Baltimore City	Loudoun County Fairfax County	D.C.

A VISION FOR FREDERICK COUNTY

The Frederick County that will greet the citizens and leaders of this community in twenty or fifty years is being shaped *today*. In the decades to follow, our community will continue to adapt itself to the ever-changing forces of nature, culture, and commerce, much as it has in decades past. The spirit of Frederick County – influenced by its own history and by the dynamic forces from its proximity to Washington – remains firmly seated in this unique place, unspoiled by outside influences, but always willing to embrace and incorporate change that serves the greater community. Above all, tomorrow's Frederick County will be a recognizable and distinct *place* in a nation of indistinct communities. Returning from a lengthy voyage, a workday commute, or a walk around the neighborhood, tomorrow's Frederick County citizen will never doubt that they have arrived *home*.

ONE COMMUNITY, MANY PLACES

In a world of communities united by heritage, profession, economic status, or knowledge, Frederick County residents share a common interest through the oldest of these community bonds – geography. The Frederick community is defined by its physical location and in this way its residents share common advantages, common interests, and common challenges. The County's many places - rural villages and towns, historic neighborhoods, farms, mountains and rivers, and institutions – each contribute to the vitality and identity of this community and provide structure and value in our lives. This vision of Frederick County sees these many places not as *escapes* from the challenges that face us, but as potential *solutions* as we grapple with maintaining our heritage, natural resources, and foremost our identity as a community.

03 Conserving Our Natural Resources and Green Infrastructure

The County strives to provide a high quality environment in which to live and work includes the protection and conservation of our Green Infrastructure, our natural resources: forestlands, mountains, streams, rivers, and wetlands. The County's Green Infrastructure concept will help shape the pattern, location, and type of new development in Frederick County and seek opportunities to establish or enhance connections between natural areas.

This chapter attempts to identify, designate and protect key natural resources, sensitive environmental elements, and unique habitats, while still recognizing the economic value of land as a development asset. Included are sections on Green Infrastructure, streams and their buffers, wetlands, floodplains, the Monocacy River, forestlands, steep slopes, habitats of rare or threatened species, and areas of limestone rock.

	Amendment Status
Goals, Policies, Action Items	**04/08/2010**
Maps and Graphics	**04/08/2010**
Background Information	**04/08/2010**

A vision for conserving our natural resources and green infrastructure…

To many residents, the agricultural fields, forests, and waterways of Frederick County are the defining features of their community. Ecologically-rich, sensitive, protected, natural areas will continue to stretch across the breadth of the County from Sugarloaf Mountain to the Pennsylvania state line and from the Monocacy River in the east to Catoctin Mountain in the west. Vast areas of undeveloped forests in the mountains, and along rivers and streams, will serve to protect both the native wildlife, and our own precious water supplies. A comprehensive network of trails and paths will connect these natural assets to our built communities helping to form critical physical connections to these places, as well as cultural and emotional bonds. Our parks and open spaces, treasured by children and residents alike, will flourish in future years through a coordinated reinvestment in resource protection, new and improved recreational facilities, and programs serving residents of all ages.

GOALS

NR-G-01 Protect natural resources and environmentally sensitive areas in Frederick County.

NR-G-02 Encourage the use of local, non-polluting, renewable and recycled resources (water, energy, food, material resources).

NR-G-03 Manage growth and land development in Frederick County in a manner that is in harmony with the conservation and protection of our natural environment.

NR-G-04 Promote a reduction in per capita consumption of energy in Frederick County.

POLICIES

NR-P-01 Promote the use of conservation/open space easements within cluster developments and discourage~~s~~ random-pattern and sprawl development

NR-P-02 Support efforts that promote education and outreach about our collective responsibility for protecting natural resources.

NR-P-03 Balance public infrastructure and utility capacity needs with physical impacts to environmental features

NR-P-04 Encourage inter-agency and inter-jurisdictional cooperation and coordination of environmental protection plans and actions.

NR-P-05 Establish stream valley parks for preservation as a component of the Green Infrastructure Plan in urban and residential areas.

NR-P-06 Promote the establishment and protection of forested buffers along streams and the Monocacy River.

NR-P-07 Protect public water impoundments and intake areas from development impacts on the quality and quantity of water.

NR-P-08 Encourage Best Management Practices to control flooding, erosion, stream sedimentation and thermal impacts to waterways.

NR-P-09 Actively encourage and support the efforts of private, non-profit organizations in addressing such issues as litter control and water quality in the streams.

NR-P-10 Support the application of Resource Conservation zoning to steep slopes, forested lands, wetlands, and habitats of threatened and endangered species along the Monocacy River and its tributaries.

NR-P-11 Ensure that all available measures are taken to protect the natural environment from all sources of pollution that result from mineral extraction activities.

NR-P-12 Encourage private landowners to preserve their wetlands.

NR-P-13 Focus a higher proportion of development within Community Growth Areas to protect green infrastructure land.

NR-P-14 Consider wildlife and its habitat as a primary component in the County's approach to its overall land use planning process and development decisions.

NR-P-15 Promote and practice invasive and exotic species (flora and fauna) control to help maintain the diversity and health of forestlands and native plant and animal populations.

STATE VISION AND PLANS

This chapter supports the following State Visions:

- *Quality of Life and Sustainability*
- *Environmental Protection*
- *Resource Conservation*
- *Stewardship*

In addition, this chapter includes the Sensitive Areas Element with descriptions of the specific sensitive features and the protection measures in place.

RELATED COUNTY PLANS

2004 Frederick County Hazard Mitigation Plan

A Hazard Mitigation Plan was prepared for Frederick County and its municipalities. The Plan is reviewed/updated on a five year basis, with the latest review and update initiated in late 2008. The Plan establishes an ongoing hazard mitigation planning program to identify and assess potential natural hazards that may pose a threat to life and property, evaluate local mitigation measures that should be undertaken, and outline procedures for monitoring the implementation of mitigation strategies. The plan also provides guidance to county and municipal officials, and encourages activities that are most effective and appropriate for mitigating the effects of the identified natural hazards.

2006 Frederick County Land Preservation, Parks and Recreation Plan

The Land Preservation, Parks, and Recreation Plan (LPRP) provides the necessary framework from which to develop an integrated and coordinated approach to three primary elements, parks and recreation, agricultural land preservation, and natural resource conservation. The State requires the plan to be updated every six years in order for the County to remain eligible for Program Open Space (POS) funding. All land acquisition and park development funded through POS must be consistent with the approved State and County LPRP.

1990 Monocacy Scenic River Study and Management Plan

The River Management Plan was prepared by the Maryland Department of Natural Resources to provide a blueprint for restoring the water quality of the Monocacy River and managing this riparian resource wisely. The Plan includes detailed information on the River's ecology, geology, its exploration and settlement history, plus cultural and other historical elements. Water quality and land uses in the River's watershed are also a main focus of the management plan. The following issues are identified in the management plan along with specific objectives and recommendations to address them:

- Land use compatibility and attention to environmentally sensitive areas
- Water quality protection and environmental restoration in the watershed
- Agriculture and implementation of Agricultural Best Management Practices
- Open space/recreation
- Ecological, historical and cultural resources
- Public awareness and education
- Need for additional studies

GREEN INFRASTRUCTURE PLAN COMPONENT

The Green Infrastructure Plan will identify a network of natural resources in the County to provide a framework for their protection. The Green Infrastructure Plan will also compliment the State's efforts to identify a statewide network of green infrastructure. This component will support the Community Plan Component by identifying green infrastructure features both within community growth areas and as linkages between community growth areas.

WHAT IS GREEN INFRASTRUCTURE?

Green Infrastructure describes an area's natural resources—the mountains, forestland, wetlands, and stream valleys—and the connections between them. The Conservation Fund defines Green Infrastructure as an interconnected network of natural areas and other open spaces that conserves natural ecosystem values and functions, sustains clean air and water, and provides a wide array of benefits to people and wildlife. Green Infrastructure areas are environmentally rich and valuable areas, providing multiple ecosystem benefits, such as:

- Storing and cycling nutrients
- Filtering and cooling water in streams and aquifers
- Conserving and generating soils
- Pollinating crops and other plants
- Sequestering carbon and purifying the air
- Protecting areas against storm and flood damage
- Providing wildlife habitat

Green Infrastructure is defined as more than just open space, agricultural land, land not yet developed or parks. Green Infrastructure emphasizes the linkages and connections between natural resources features and promotes the ecological processes of the natural environment. Conservation Biology principles and their application to the identification, design and protection of Green Infrastructure hubs and corridors emphasize that interconnected blocks of habitat are better than isolated blocks.

GREEN INFRASTRUCTURE NETWORK COMPONENTS

A green infrastructure network is composed of two types of components that aid in the mapping of a network and also provide an indication of the function of the natural resource feature.

Green Infrastructure Hubs

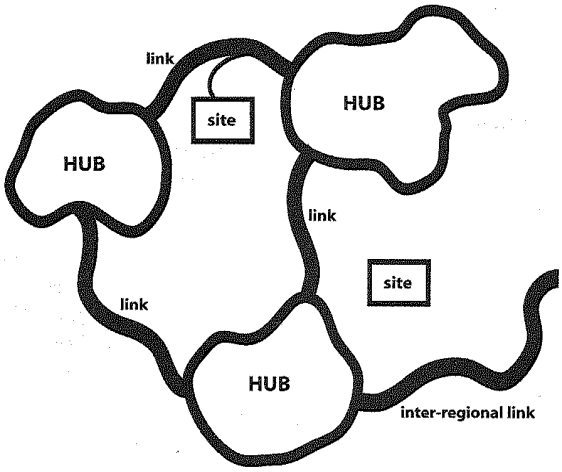
Hubs are large, ecologically significant natural areas that provide habitat for animal and plant species that cannot thrive in small patches of forest or meadow, common in highly fragmented landscapes. They are typically large enough to help fulfill many of the requirements of species that forage over large areas and heterogeneous enough to satisfy the unique habitat requirements of species that are specialized to particular environmental niches.

Green Infrastructure Links/Corridors

Green Infrastructure corridors or links are linear remnants of natural lands such as forested stream valleys and mountain ridges that allow animals, seed, and pollen to move from one area

to another, linking hubs together. Corridors have long been considered an effective means of linking isolated "islands" of wildlife habitat that have been fragmented by development, agriculture, or some other impediment.

Figure 03-1: Green Infrastructure



The term "greenway" is often used to describe a linear open space corridor such as stream valleys, mountain ridgelines or abandoned railroad lines. Greenways may either be publicly owned and developed as parkland or privately owned natural resource corridors. A Green Infrastructure link or corridor can be considered a greenway; however, protecting biodiversity and natural systems is the broader goal of Green Infrastructure. Examples of greenways that are also components of Frederick County's Green Infrastructure include the Appalachian Trail, C&O Canal, and the connected trails through Gambrill State Park, Cunningham Falls Park and Catoctin Mountain Park.

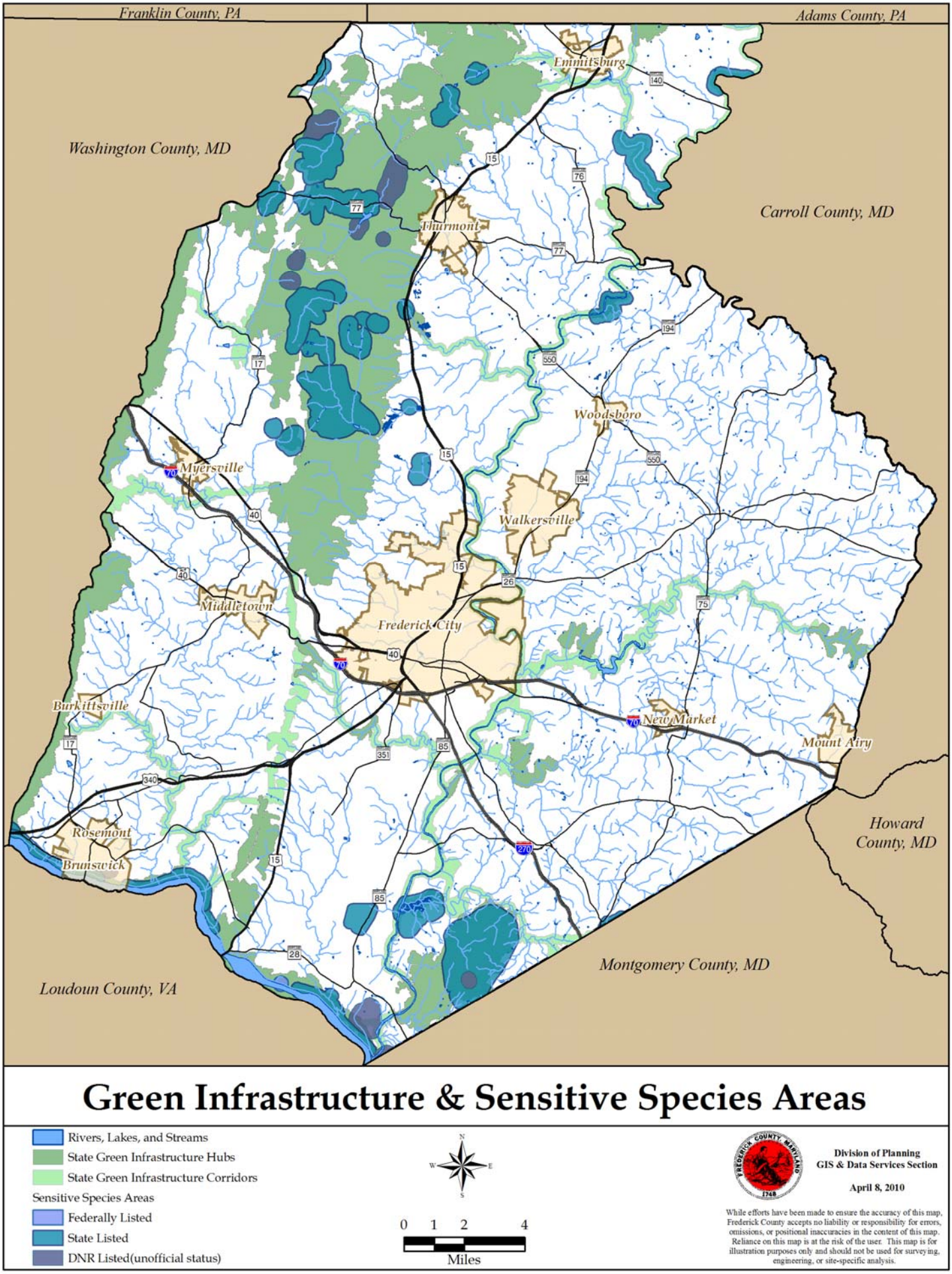
MARYLAND'S GREEN INFRASTRUCTURE

The Maryland Department of Natural Resources (MD DNR) prepared a Green Infrastructure Atlas in 2000 and a Statewide Green Infrastructure Assessment in 2003. These plans identified large, contiguous blocks of ecologically significant natural areas (Hubs) and natural corridors to create a statewide network of natural resource lands. An important component of the State's plan is the identification of gaps in the links/corridors that create impediments to the ecological systems.

The State, through its Green Infrastructure network, has attempted to identify the best remaining ecological lands in Maryland as well as potential restoration areas. The purpose of Maryland's Green Infrastructure Assessment is to:

- Systematically identify and protect ecologically important lands;
- Address problems of forest fragmentation, habitat degradation and water quality;
- Emphasize the role of a given place as part of a larger interconnected ecological system;
- Consider natural resource and ecosystem integrity in the context of existing and potential human impacts to the landscape;
- Maximize the influence and effectiveness of public and private conservation investments;
- Promote shared responsibilities for land conservation between public and private sectors;
- Guide and encourage compatible uses and land management practices.

Map 03-1: Green Infrastructure and Sensitive Species Areas



A State Green Infrastructure Hub contains one or more of the following:

- Large blocks of contiguous interior forest, containing at least 250 acres
- Large wetland complexes
- Important plant and animal habitats of at least 100 acres, including rare, threatened and endangered species locations; unique ecological communities and migratory bird habitats
- Relatively pristine stream and river segments and their associated riparian forests and wetlands that support trout, mussels and other sensitive aquatic organisms
- Existing protected public or private natural resource lands which contain one or more of the above characteristics.

The State Plan has identified several Green Infrastructure hubs in Frederick County:

- The Catoctin Mountain Range north of I-70 (includes The City of Frederick Municipal Forest, Gambrill State Park, Cunningham Falls State Park, Catoctin Mountain Park plus other land under private ownership adjacent to these public holdings)
- South Mountain
- Sugarloaf Mountain and the Monocacy Natural Resources Area
- South Fork of Linganore Creek
- Bush Creek near the County's landfill
- Bennett Creek at the Monocacy River

The State Plan identifies the following waterways and their associated riparian areas in Frederick County as Green Infrastructure corridors:

- Monocacy River
- Tom's Creek
- Hunting Creek (US 15 to the Monocacy River)
- Middle Creek (Washington County line to Spruce Run Road)
- Ballenger Creek (headwaters to the Monocacy River)
- Linganore Creek (South Fork to the Monocacy River)
- Broad Run (Washington County line to Catoctin Creek)
- Catoctin Creek (Broad Run confluence to the Potomac River)

In 2001, the Maryland General Assembly passed legislation that established the GreenPrint Program, a targeted land protection program to preserve the most ecologically valuable natural lands in Maryland—its Green Infrastructure hubs and corridors—by purchasing land from willing sellers. The GreenPrint Program contained a sunset provision and no longer exists though three properties within Frederick County were acquired through GreenPrint:

- Ridenour Swamp, an 82-acre forested area with Wetlands of Special State Concern in the Catoctin Mountains.
- Forested lands (520 acres) surrounding the Town of Emmitsburg's reservoir along Turkey Creek.
- A 382-acre area containing a Wetland of Special State Concern with rare and endangered plant species around Buzzard Branch, a tributary to Little Hunting Creek in the Catoctin Mountains.

FREDERICK COUNTY GREEN INFRASTRUCTURE PLAN

As the amount of land developed has increased, natural areas have not only decreased in area, but have undergone a significant increase in fragmentation. As development pressures increase it becomes increasingly important to have a plan to maintain the integrity and functionality of Green Infrastructure.

The Green Infrastructure Plan will complement and enhance the Community Plan Component and the Agriculture/Rural Communities component of the Countywide Comprehensive Plan. Frederick County's Green Infrastructure Plan seeks to:

- Identify a Countywide network of existing natural resource links and hubs that support and complement the statewide network.
- Assist in identifying gaps in a green infrastructure network and identify strategies to fill in the gaps.
- Highlight the County's natural resources to garner support for protective measures.
- Support the achievement of state and county natural resource conservation goals as expressed in the County's Land Preservation, Parks and Recreation Plan.
- Support the desired development pattern of the County in the Comprehensive Plan and to facilitate Smart Growth.

GREEN INFRASTRUCTURE PLAN ELEMENTS

Frederick County's Green Infrastructure elements include large contiguous blocks of ecologically significant natural area and the linkages and connections between them. Public parkland, other protected forested lands, plus certain stream valleys are the broad components of the Green Infrastructure. Examination and analysis of these features, through GIS technology, with future refinement or enhancement of the State's Green Infrastructure delineations are needed to identify the desired contiguous Green Infrastructure Hub and Corridor network in Frederick County.

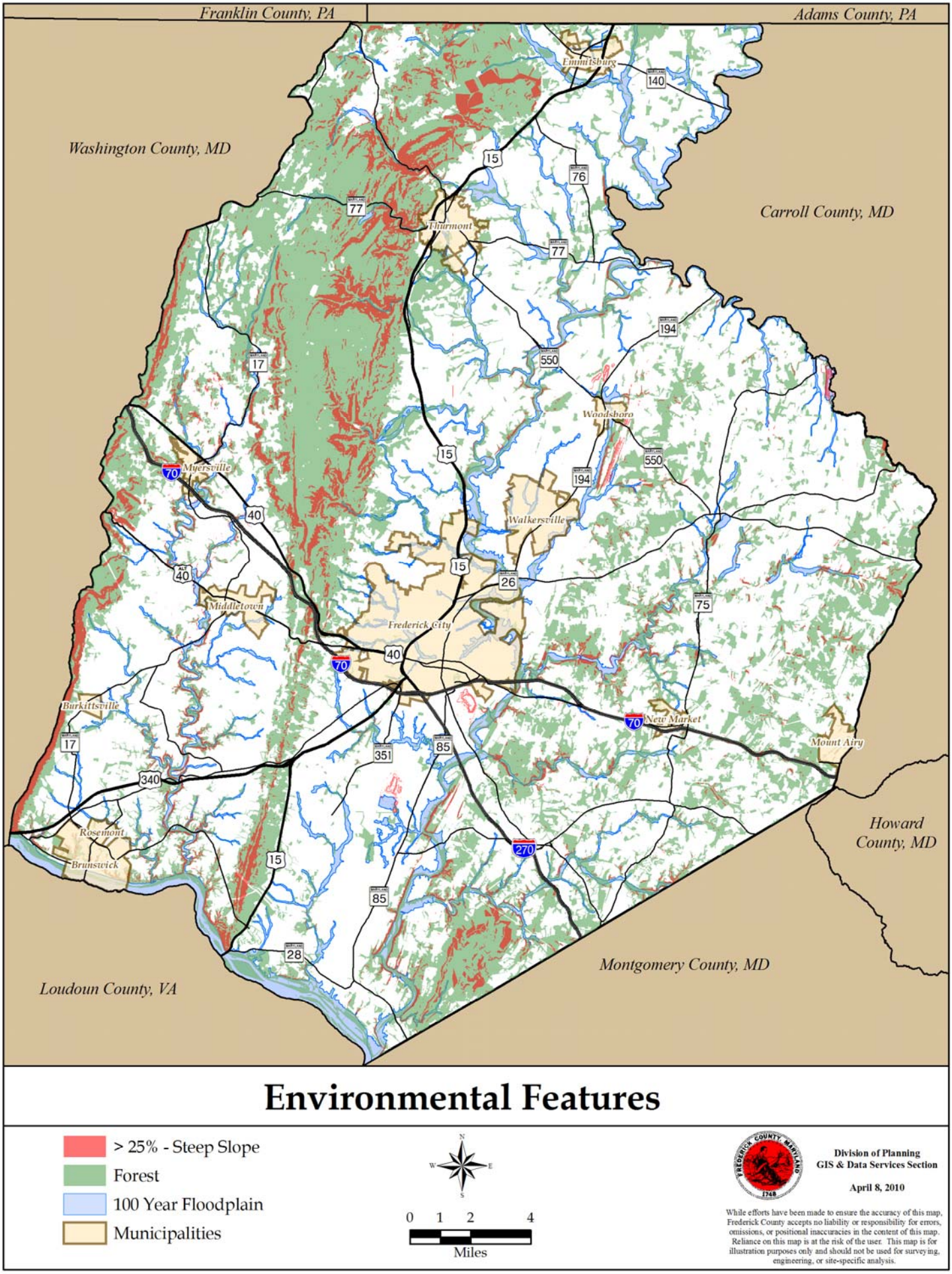
Forest Resources

Currently, there are approximately 151,085 acres of forestland in Frederick County, which represents 35% of the County's total land area. The majority of the forest is located on Catoctin Mountain, South Mountain and Sugarloaf Mountain and the adjacent Monocacy Natural Resources Management Area, in addition to other areas identified on the State's Green Infrastructure Atlas. However, many other much smaller forested tracts exist in isolated patches scattered throughout the County and are not listed on the State's Green Infrastructure Atlas. Some of the County's forest cover is located on certain stream corridors, and is also not on the State's Atlas.

Mountain Resources

There are three mountain areas in Frederick County. They are Catoctin Mountain, South Mountain, and Sugarloaf Mountain. The Catoctin Mountain runs north south in the west-central part of the County and South Mountain runs along the boundary with Washington County. Sugarloaf Mountain is located in the southern part of the County at Montgomery County.

Map 03-2: Environmental Features



The Catoctin Mountain range is a predominately wooded stretch of steeply sloping land with significant areas of public ownership and extends from the Potomac River near Point of Rocks through the County to the Pennsylvania State Line west of Emmitsburg. While the southern portion of the mountain range is predominately in private ownership, public land to the north of US 40 up to the Pennsylvania line includes Gambrill State Park, Frederick City Municipal Forest, Cunningham Falls State Park and Catoctin Mountain Park. The northern stretch of Catoctin Mountain broadens to merge with South Mountain, which extends south to the Potomac River. Like the Catoctin range, South Mountain retains large areas of undeveloped woodland and publicly owned land. The Appalachian Trail crosses through Maryland along South Mountain. Nearly all of the public land in South Mountain is State owned.

Sugarloaf Mountain is located in the southern portion of the County. Unlike Catoctin and South Mountains, Sugarloaf Mountain is a Monadnock, an isolated mountain formed by erosion-resistant rock surrounded by low-lying land. While Sugarloaf Mountain is a forested recreational area open to the public, it owned by Stronghold, Inc., a private non-profit conservancy group.

Stream Valley Resources

Three major stream valley systems comprise this portion of the County's Green Infrastructure; the Potomac River, the Monocacy River, and Catoctin Creek. Other stream valley resources include the streams that define the County's 20 sub watersheds.

Parkland/Protected Lands

Frederick County has over 28,000 acres of land under public ownership in various park and open space uses. The following types of protected lands are highlighted as part of the County's Green Infrastructure:

- Federal parks
- State parks and natural resource lands
- County Regional/District parks
- Municipal owned watershed properties
- Privately owned lands with MET easements, which are adjacent to other resources
- Significant privately owned lands with protection i.e. Sugarloaf Mountain

GREEN INFRASTRUCTURE PLAN IMPLEMENTATION STRATEGIES

Identification of a Frederick County Green Infrastructure network is the first step towards protection, consolidation and, in the long term, the restoration of natural ecosystems. The fragmentation of undeveloped natural lands can be reduced and retention of the ecological potential of the landscape can be maximized, once the key components and gaps have been geographically identified. A Countywide Green Infrastructure map will identify existing natural areas of countywide significance. Implementation strategies of the Green Infrastructure Plan to protect, connect, and restore these important natural resource lands include:

- Apply Open Space and Conservation Subdivision Design Principles to development projects to maintain and enhance Green Infrastructure corridors/links.
- Expand the application of the Natural Resource Area land use designation and Resource conservation zoning to environmentally sensitive areas identified in the Green Infrastructure network.

- Address the protection and restoration of the Green Infrastructure network during the Countywide Comprehensive Plan update, and the preparation of Corridors and Communities Plans.
- Emphasize forest connectivity when Forest Resource Ordinance easements are proposed during the land development process.
- Establish stream valley parks as a component of the County's park system. Focus water quality BMPs, specifically riparian restoration (buffer plantings), on Agriculture Preservation properties that fill in Green Infrastructure corridor gaps.
- Link water quality monitoring data to the Green Infrastructure map and database as a framework to guide efforts to both protect areas with high water quality and to help improve areas with lower water quality.
- Maximize use of federal, state, and local programs to increase funding for fee simple acquisition or easement purchase of land in the Green Infrastructure network.

HAZARD MITIGATION ELEMENT

Hazard mitigation is any action taken to permanently reduce or eliminate long-term risks to people and their property from the effects of natural hazards. Natural hazards come in many forms: tornadoes, floods, hurricanes, severe storms, winter freezes, droughts, landslides, or dam failures resulting from natural disaster crises. Communities can take steps to prepare and implement mitigation techniques for almost any type of hazard that may threaten its citizens, businesses, and institutions.

The Frederick County Hazard Mitigation Plan includes hazard identification, a vulnerability assessment and loss estimation for the entire county, an assessment of mitigation capability, and identification of goals and objectives for countywide mitigation efforts. Lastly, an action plan provides recommended mitigation actions/projects, identifies responsible parties, and provides completion dates for implementation of the projects. With any future Federal Emergency Management Agency (FEMA) funding for mitigation projects contingent upon plan approval and adoption, any jurisdiction that does not participate in the planning process and adopt the plan will not be eligible for pre- and post-disaster FEMA Hazard Mitigation Assistance funds.

HAZARD IDENTIFICATION

The Frederick County Hazard Mitigation Plan identifies and assesses the following hazards. The Hazard Mitigation Plan provides an expanded discussion on these identified hazards including an overview of the specific hazard and historic activity within the County.

Noted for each of the hazards is the relative risk for the County.

Hazard	Priority	Hazard	Priority
Extreme Wind	High	Lightening	Medium
Flooding and Flash Flooding	High	Tropical Storm/Hurricane	Medium
Severe Winter Storms	High	Wildfire	Medium
Land Subsidence: Sinkholes/Karst	High	Urban Interface Wildfire	Medium
Thunderstorms	High	Earthquake	Low
Tornados	High	Extreme Summer Heat	Low
Drought	Medium	Land Subsidence: Landslides	Low
Hailstorms	Medium		

VULNERABILITY ASSESSMENT/LOSS ESTIMATION

The vulnerability assessment for each of the identified hazards includes a discussion of mitigation measures and loss estimation. An assessment determines the impact that hazards have on the built environment and the effect on the safety of residents. The Loss Estimation portion of the plan estimates potential losses from hazard events, based on available data.

The vulnerability assessment and loss estimation portion of the plan provides detailed information on several topics including a listing of the number of structures and their vulnerability to various hazards. A number of site-specific and structure-specific characteristics have a direct impact on vulnerability. These characteristics include: exposure to hazards, first-floor elevation, number of stories, construction type, foundation type, age and condition of structure, as well as use and contents of structure.

Further vulnerability analysis is provided for several of the hazards with a high or medium hazard identification priority ranking: Severe Winter Storms, Flooding and Flash Floods, Tornadoes, Extreme Wind Events, Land Subsidence: Sinkholes/Karst, Wildfires, and Drought. A listing has also been provided of critical facilities within the county and municipalities as well as the number and location of these facilities within a floodplain. In addition, the plan provides information about utility system location/segments (i.e. highway, railways, bus, airport, potable water, wastewater, natural gas, electrical, and communication) inventory and replacement value, details on flood insurance policy statistics (claims, number of policies, amount of coverage, repetitive loss structures), and fires. A review of existing County and municipal plans and ordinances recommends changes to better address mitigation of hazards in future updates and revisions of these plans and ordinances.

SENSITIVE AREAS ELEMENT

The Planning Act of 1992 mandated the inclusion of a Sensitive Areas Element as part of a jurisdiction's comprehensive plan. At a regional and state level the ability for Frederick County to protect its environmentally sensitive areas will benefit the Potomac River and the Chesapeake Bay. In addition to describing the individual sensitive areas this chapter includes a description of the various protection measures currently employed by the County. As amended in 2006 the following sensitive areas are required:

- Streams and their Buffers
- 100-Year Floodplain
- Habitats of Endangered and Threatened Species
- Steep Slopes
- Agricultural and forest lands for resource protection and conservation

Jurisdictions may also include additional sensitive areas that are unique to their jurisdiction. This Plan addresses the following additional sensitive areas:

- Monocacy Scenic River
- Limestone/Karst Areas
- Wetlands

STREAMS AND THEIR BUFFERS

Streams are grouped into a hierarchal system—first order, second order, third order, etc.—from the smallest headwater stream to the Monocacy and Potomac Rivers in Frederick County. Streams and their buffers perform a wide variety of functions and have numerous environmental benefits. The buffer or riparian area of a stream is part of the stream ecosystem whose boundaries often depends on conditions of slope, soil, ground cover, and hydrology. The buffer encompasses parts of the stream ecosystem that are often dry, yet are integral to the stream's health. Stream buffers include:

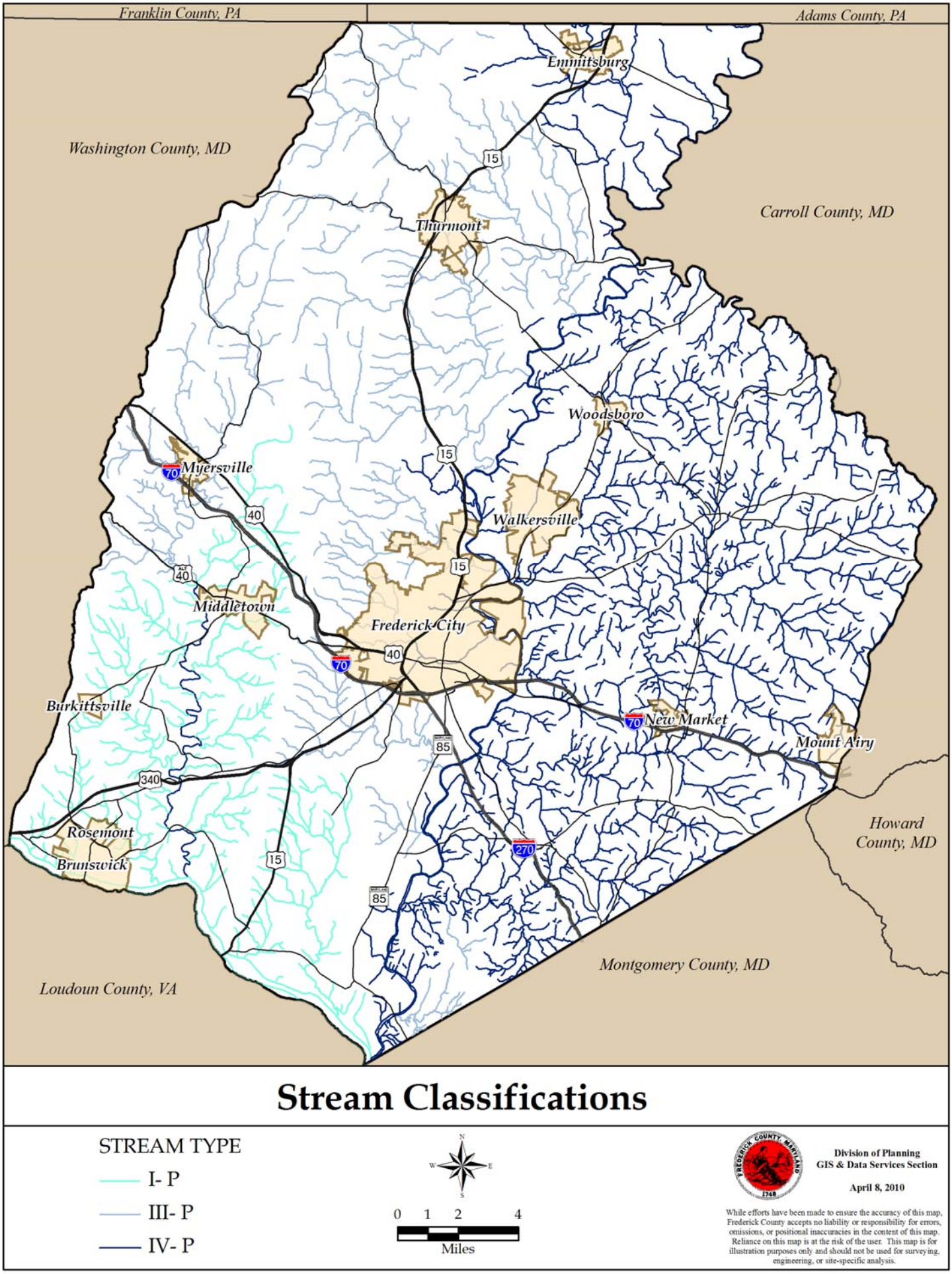
- Floodplains where most stream wetlands are located and where energy dissipation, natural filtration, floodwater storage occur.
- Stream banks and adjoining steep slopes that help to prevent erosion from clogging the streambed and provide plant and animal habitat.
- Streamside forests, which provide habitat, stabilize banks, provide shading, control temperatures, filter pollutants and produce leaf-litter, which supports a variety of aquatic organisms.

Stream Use Designations

The Clean Water Act requires states to develop water quality standards to protect and improve surface waters. These standards are based on a particular water body use, function, goal or "designated use," such as supporting trout populations or protecting public water supplies. Criteria to support these designated uses include specific limits or amounts of dissolved oxygen, bacteria, temperatures, toxics, and turbidity (clarity) in the particular stream. The State of Maryland has defined designated uses of surface waters as shown in Table 03-01.

Table 03-1: Stream Use Designations	
Use Class I	Water Contact Recreation and Protection of Nontidal Warm water Aquatic Life
Use Class I-P	Water Contact Recreation and Protection of Nontidal Warm water Aquatic Life and Public Water Supply
Use Class II	Support of Estuarine and Marine Aquatic Life and Shellfish Harvesting
Use Class III	Nontidal Cold Water-Natural Trout Waters
Use Class III-P	Nontidal Cold Water-Natural Trout Waters and Public Water Supply
Use Class IV	Recreational Trout Waters (these waters have the potential for or are capable of holding or supporting adult trout for put and take fishing)
Use Class IV-P	Recreational Trout Waters and Public Water Supply

Map 03-3: Stream Classification



HIGH QUALITY (TIER II) WATERS

Tier II waters indicate exceptional water quality, in-stream and riparian habitat conditions as measured by the health of the biological community—fish and insects—in a stream. In order to be classified as Tier II, waterways must have high values in the following measures of biological health:

- Fish Index of Biotic Integrity (FIBI) – a measurement of the composition, diversity, pollution tolerance, habitat and feeding characteristics of fish.
- Benthic Index of Biotic Integrity (BIBI) – a measurement of the composition, diversity, pollution tolerance, habitat and feeding characteristics of stream insects, called benthic macro invertebrates.

Four stream segments and their watersheds in Frederick County have been identified by the State as high quality Tier II waters:

1. Big Hunting Creek
2. High Run
3. Weldon Creek
4. Un-named tributary to Talbot Branch

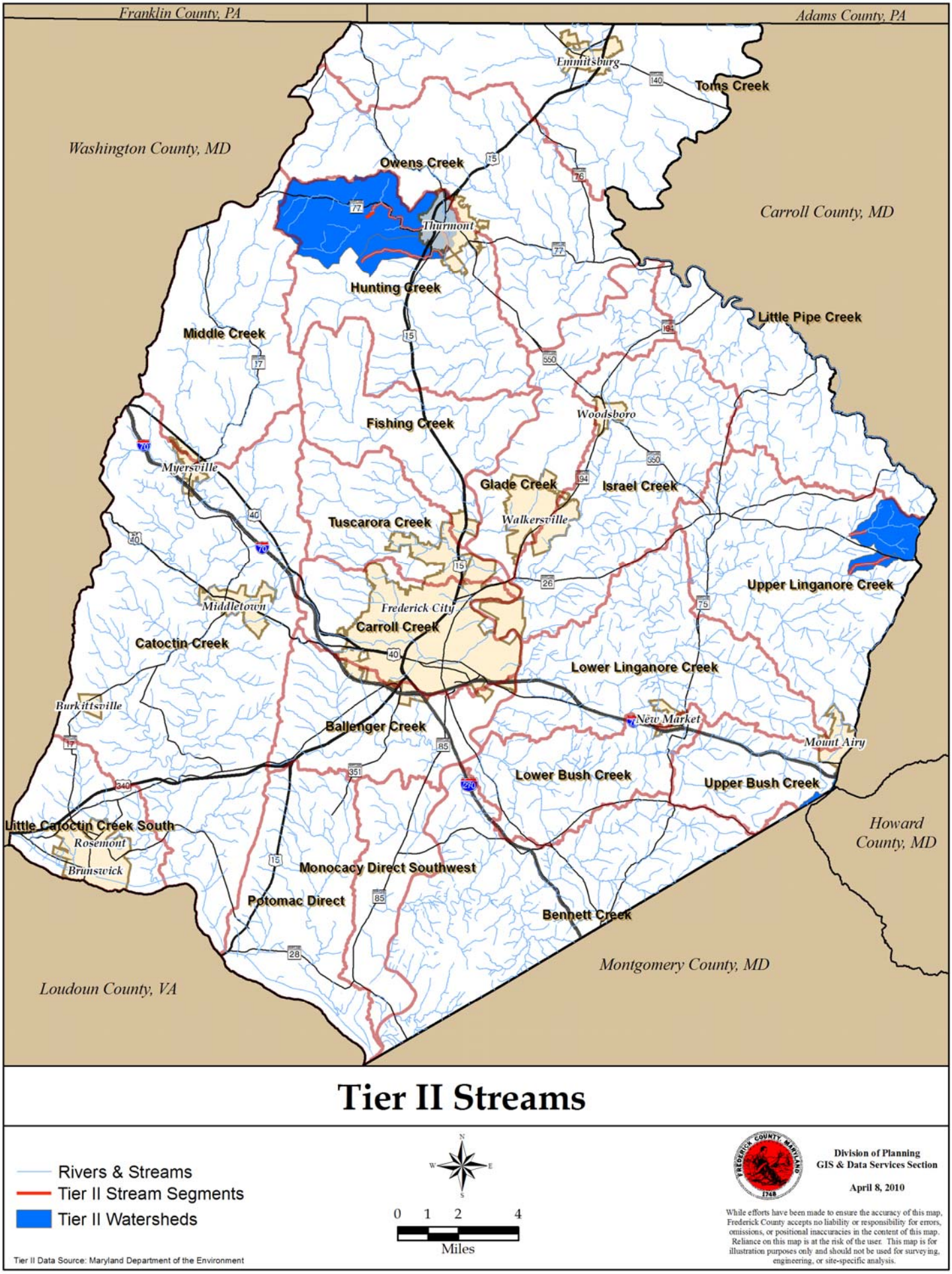
To protect these high quality Tier II waters, the State has adopted an anti-degradation policy and regulatory protections. To implement this policy, state regulations require a Tier II antidegradation review be performed if proposals for wastewater, stormwater or other discharges result in a new discharge or modifications of an existing discharge into Tier II waters. The regulations also apply to discharges in the watershed located upstream of identified Tier II segments in order to protect downstream water quality. The Maryland Department of the Environment's Water Quality Infrastructure Program is responsible for coordinating the review of applications for discharges into Tier II waters.

100-YEAR FLOODPLAIN

The 100-year floodplain is the portion of the landscape adjacent to streams and rivers that is subject to inundation by a flood event having a 1% chance of occurring in any year. Floodplains are generally comprised of rich alluvial soils formed by many years of deposition of soil, gravel, sand, rock, leaves, twigs, animal and other plant materials caused by the continual ebb and flow of water in and out of the stream or river channel.

Floodplains are a natural part of the aquatic environment and contained diverse ecosystems. A key function of floodplains is to hold excess water and allow a slow release into groundwater and back to the waterway. Streams and rivers carry higher suspended sediment during flood events; the floodplain acts as a 'sink', trapping and settling these particles. The soil microbial community is active in floodplains, processing and cycling nutrients. Unique plants that can tolerate episodic high water are present in floodplains along with a variety of animal species that contribute to high biodiversity.

Map 03-4: Tier II Streams



HABITAT OF ENDANGERED AND THREATENED SPECIES

Frederick County's diverse landscape supports high biodiversity, the variety of plant species, animal species and all other organisms found in a particular environment. The protection of habitats that are critical to maintaining biodiversity contributes to the protection of rare, threatened and endangered plant and animal species.

The Maryland Department of Natural Resources – Natural Heritage Program - has identified 26 animal species and 74 plant species in Frederick County in their current inventory of Rare, Threatened, and Endangered Species. Of these, nine animal species and thirty-five plant species have been determined to be endangered statewide. Two of these endangered species, the Yellow Lance (a freshwater mussel), *Elliptio lanceolata* and Torrey's Mountain-Mint, *Pycnanthemum torrei*, are cited as globally rare. Seven plant species are identified by the state as extirpated. The species "was once a viable component of the flora or fauna of the State of Maryland, but for which no naturally occurring populations are known to exist in the state." The Maryland Department of Natural Resources' Fisheries Division also maintains an official list of game and commercial fish species that are designated as threatened or endangered in Maryland.

These rare species serve as bellwethers for the health of the ecosystem that we rely on and share with them. Many of these species serve us directly. They may have medicinal applications or utility for research and education, or cultural significance. The challenge in Frederick County and all of Maryland is how to balance population growth and land development with our responsibility to protect Frederick County's array of unique habitats and species.

The primary state law that governs endangered species is the Nongame and Endangered Species Conservation Act (NESCA), which contains the official State Threatened and Endangered Species list. The NESCA reads:

- It is the policy of the State to conserve species of wildlife for human enjoyment, for scientific purposes, and to insure their perpetuation as viable components of their ecosystems.
- Species of wildlife and plants normally occurring within the State which may be found to be threatened or endangered within eh State should be accorded the protection necessary to maintain and enhance their numbers.

The Natural Heritage Program (NHP) is the lead state agency responsible for the identification, ranking, protection and management of nongame, rare and endangered species and their habitats in Maryland. Data collected by NHP provide the scientific foundation for the Threatened and Endangered Species lists mandated by the Act. NHP researchers conduct inventory and monitoring activities on nongame wildlife, rare species populations and natural communities, documenting trends in population and habitat health and viability. Information gathered through this research guides land management decisions and regulations designed to protect and conserve the state's biological diversity.

No exact locations are provided for any of the listed rare, threatened and endangered species (as a means of protecting the listed species), although GIS data depicting generalized habitat/species locations has been provided to the County by the Maryland Department of Natural Resources for land use planning and development review purposes.

STEEP SLOPES

Steep slopes are defined as having an incline of 25% or greater. Protecting the natural terrain and vegetative features present on steep slopes prevents flooding, stream siltation, and the alteration of natural drainage patterns. Preserving steep slopes protects the natural environment, man-made structures, and the safety of all citizens. Steep slope protection also provides aesthetically attractive open space/view sheds and maintains local biodiversity found on many of these slopes. Preservation of steep slopes adjacent to watercourses is especially important because of the impact to water quality and in-stream aquatic habitat from soil erosion and sedimentation when slopes are graded, cleared or disturbed. Historically, many of these steeply sloped areas have not been disturbed, as they are very difficult to farm, graze, log or develop.

Frederick County's distinct landform regions, called Physiographic Provinces, can be used to describe the County's overall topography. The Blue Ridge Physiographic Province includes Catoctin Mountain at the eastern boundary and South Mountain at the western boundary. These mountain ranges contain the largest concentration of steep and moderate slopes in the County.

The Piedmont Plateau Province includes all lands in Frederick County east of the Catoctin Mountain range and is typified by rolling terrain and low ridges. Steep and moderate slopes exist along many streams in the Piedmont in Frederick County. Steep slopes are evident along Bush Creek, Linganore Creek and its tributaries south of MD 26. Numerous steep ridges and bluffs are also present adjacent to the Monocacy River as well as Catoctin Creek. In addition to the mountain ranges, Frederick County has a Monadnock (a mountain or rocky mass that has resisted erosion and stands isolated in a plain): Sugarloaf Mountain. It rises 800 feet above the Piedmont Plateau Province to an elevation of 1,282 feet.

FOREST LANDS

Approximately 35% (151,000 acres) of Frederick County, as of 2000, is covered by forestland. The forests provide countless benefits to including: air quality, water quality, scenic beauty, wood products, wildlife habitat, recreation, flood control and erosion control. According to the Maryland Department of Natural Resources' (DNR) Forest Service, the predominant forest cover type in Frederick County is the Oak-Hickory complex (oaks, hickories, red maple, beech, tulip poplar, white ash) occupying about 71% of the forestland base. Other forest cover types found in the County include the Northern Floodplain (14%): elm, black walnut, ash, sycamore, willow; Northern Hardwood (5%): sugar maple, beech, hemlock, basswoods, white ash, red oak; and others such as pine plantations and early succession forests (10%).

Presently, the major forested areas of the county lie in the mountain areas, including Catoctin Mountain, South Mountain and Sugarloaf Mountain and its immediate vicinity. The forest cover in the eastern county area, however, is much more fragmented, interspersed with large agricultural fields or residential development. Some forestland is also present in the Monocacy River and Potomac River riparian areas. Approximately 18% of the forestland in the County is publicly owned; the remainder is privately held with the potential for some commercial timbering and harvesting. There are also at least four privately owned Christmas tree farms in the County.

MONOCACY SCENIC RIVER

The Monocacy River is the largest Maryland tributary of the Potomac River. The River's headwaters are formed by the confluence of Marsh and Rock Creeks in Pennsylvania and flows 58 miles to the Potomac River. The Monocacy River bisects the County as it flows south of Miller's Bridge (MD 77) at Rocky Ridge. North of MD 77 the River divides Carroll County from Frederick County. The Monocacy drops just 170 feet along its course, giving it an unusually gentle gradient for a Piedmont River.

The Monocacy is a unique and vital resource in the County, used for public water supply (City of Frederick, Ft. Detrick), effluent disposal, recreational pursuits and scenic enjoyment. The Maryland DNR has identified several areas in the Monocacy River corridor that contain habitats of rare, threatened, or endangered species. The River's riparian area also contains numerous Wetlands of Special State Concern. These wetlands have exceptional ecological value and often contain the last remaining populations of native plants and animals.

The Maryland Department of Planning included the Monocacy in its 1970 study, *Scenic Rivers in Maryland,* and identified the Monocacy as a significant State resource, worthy of immediate study, and a prime candidate for State Scenic River designation. The Monocacy River was designated and added to the Maryland Scenic and Wild River System in 1974. A Monocacy Scenic River Local Advisory Board was formed in 1976, comprised of citizens from both Carroll and Frederick Counties, and appointed by the respective Boards of County Commissioners. The role of the River Board is to provide advice and recommendations to the Frederick and Carroll County Governments on land use, land development proposals and resource management issues that impact the Monocacy River and to serve as advocates for the river and its varied resources.

The River Board in conjunction with the Maryland Department of Natural Resources prepared The Monocacy Scenic River: Study and Management Plan in 1990. Both Carroll and Frederick Counties jointly adopted the Plan in May 1990. The River Management Plan provides a blueprint for restoring the water quality of the Monocacy River and managing this riparian resource wisely.

LIMESTONE AND KARST AREAS

Limestone is a very common sedimentary rock. It is composed mostly of the mineral calcite and can have varying amounts of clay, silt, and sand as layers within the rock. Metamorphosed, fairly pure limestone forms marble. High calcium limestone and its metamorphic equivalent, marble, are used in the manufacture of Portland cement, agricultural lime (a soil amendment), and in addition to their use as crushed stone used as aggregate. A carbonate rock, limestone is subject to erosion by groundwater and the formation of solution channels and sinkholes. While these channels are capable of carrying substantial quantities of groundwater that can be tapped for water supply purposes, they can also serve as conduits for groundwater contaminants.

A belt of limestone conglomerate runs north from the confluence of the Monocacy and Potomac Rivers, through City of Frederick to the Town of Woodsboro. This area, known as the Frederick Valley, is underlain by two main limestone formations—the Frederick Limestone and the Grove Limestone. The Frederick Limestone formation is a dark, impure limestone characterized by thin layers with many shaly interbeds, which tend to make the formation unfit for crushed stone. Grove Limestone is quarried at several locations in the Frederick Valley: two operations near Woodsboro, one at Lime Kiln (Essroc) near Buckeystown, and the Lefarge operation just southeast of Frederick City.

Sinkholes

Karst topography may be prone to the formation of sinkholes, which is a gradual and sometimes sudden collapse of the topsoil into a void. Sinkholes may be triggered by human activity such as excessive pumping of groundwater, which creates voids in the limestone rock and the discharge of storm water from roads or development that erode the limestone. Most sinkholes that form suddenly occur where soil that overlies bedrock collapses into a pre-existing void. Their presence indicates that additional sinkholes may develop in the future.

Environmental concerns include the introduction of contaminants and pollutants into the groundwater; catastrophic collapse and gradual subsidence of the lands surface; and flooding during or following intense storms. In fact, stresses induced by human activity in areas of karst topography result in environmental problems that are much more acute than those that would occur in terrains underlain by other types of rock. However, urbanization is increasingly affecting many areas that have karst topography, resulting in several karst-related environmental problems. Karst topography, particularly those of moderate to high sinkhole density, imposes constraints on land use. Mismanagement of areas with karst topography, whether through unsound development, poor farming practices, improper waste disposal or other means, will often damage ground water resources, cave ecosystems or man-made structures in these areas.

Changes to surface drainage may alter the rate at which the underlying karst aquifer receives it normal recharge (groundwater inputs). Vegetation slows runoff from storms and allows water to percolate into the soil. However, runoff from impermeable surfaces (cement drains, roads, parking lots, rooftops) may rapidly be funneled through sinkholes into the aquifer. Artificially filled sinkholes may become blocked inputs. Increasing the rate of runoff and/or blocking input points may cause surficial water to pond or flood, unless it's diverted away from its natural sink point (thereby altering the recharge at yet another sink point). This may drastically affect the amount of groundwater available for use in the immediate vicinity.

Groundwater Quality

The most important current and future environmental issue with respect to areas with karst topography is the sensitivity of karstic aquifers to groundwater contamination. The effect of human activity on areas of karst topography is most severe in cases where polluted surface waters enter karst aquifers. There is a general lack of public understanding of groundwater behavior, particularly in areas with karst topography. Karstic aquifers cannot filter contaminated groundwater sufficiently to render it potable at the discharge sites (e.g., springs emerging on the landscape). Water travels rapidly through solution conduits because recharge points (groundwater input areas) are directly connected to discharge points. Sinkholes are natural funnels that convey toxic substances directly into the karstic aquifers.

WETLANDS

Wetlands are a unique type of ecosystem and are also referred to as marshes, swamps and bogs. They are generally identified based on the degree of flooding, the existence of unique plant communities, and by special soil characteristics. Wetlands may be permanently flooded by shallow water, permanently saturated by groundwater, or periodically inundated for periods during the wet season.

Frederick County has inland wetlands, as opposed to coastal or tidal wetlands. Inland wetlands are most common within floodplains along rivers and streams (riparian wetlands), in isolated depressions surrounded by dry land, along the margins of lakes and ponds, and in other low

lying areas where the groundwater depth is shallow. Based on data from the Maryland DNR, Frederick County is estimated to have approximately 9,300 acres of wetlands.

The benefits of wetlands are described below:

- **Plant and Animal Habitat –** Many species of birds, mammals, reptiles, and amphibians rely on wetlands for breeding, food supply, cover, wintering and stopover during migration. They create numerous microenvironments for wildlife. Wetlands also provide unique habitat for many rare and endangered plants and animals.
- **Water Quality –** Wetlands play a less conspicuous but essential role in maintaining high environmental quality, especially in aquatic habitats. They do this in a number of ways, including purifying natural waters by removing nutrients, chemical and organic pollutants, and sediments, and by producing food that supports aquatic life.
- **Flood Control –** The more tangible benefits of wetlands include flood and storm water protection, erosion control, and water supply and groundwater recharge, harvest of natural products, livestock grazing and recreation.

PROTECTION MEASURES

The following protection measures are currently used by the County to address the protection of natural resources and the sensitive areas.

Waterbody Buffer Ordinance

The County adopted a countywide waterbody buffer ordinance (within the County Zoning Ordinance) in 2008 that applies to all perennial and intermittent streams in the County, excluding the municipalities. The ordinance is applied at the subdivision review stage and regulates construction and grading activities on new residential, commercial and industrial subdivision lots. Development setbacks up to 175 feet from all waterways and water bodies were established based on the degree and extent of slope present in the adjacent stream valley. Development on lots or parcels existing prior to the adoption of the waterbody buffer ordinance would still be required to maintain a 50-foot building setback from the edge of a stream or 25 feet from the 100-year floodplain line whichever is greater.

Floodplain Regulations

The County's Zoning Ordinance regulates development in 100-year floodplain, historic floodplain and flooding soils. These regulations apply to all of the County's zoning districts and are implemented through the development review process and even through the review of building permits for existing lots. The County does not permit structures, impervious surfaces, or grading within the 100-year floodplain. An additional 25-foot setback for structures is mandated from the 100-year floodplain line.

Zoning Ordinance

Steep slopes depiction on all site development plans and subdivision plats is mandated by the zoning ordinance and subdivision regulations. Septic systems are prohibited on steep slopes because effluent comes to the surface when septic systems are installed on steep slopes regardless of the soil type or depth of leachate trenches.

Frederick County addresses wetlands and flooding soils (soils with characteristics of temporary inundation) through the Floodplain District regulations in the zoning ordinance. The County does not permit development, impervious surfaces, grading, or filling in wetlands or the FEMA 100-year floodplain. A 25-foot setback is required from all wetlands. Both the Maryland Department of the Environment and the US Army Corps of Engineers are involved in designating wetlands in Frederick County. Wetlands, if present within 100-year floodplain areas along streams may be designated Natural Resource on the Comprehensive Plan.

Wellhead Protection Ordinance

In 2007 the County adopted a Wellhead Protection Ordinance, which regulates hazardous substance storage tanks. Any tank within certain distances of community groundwater supply wells must be above ground with 100% catchment basins or double-walled containment and spill protection alarms. The Wellhead Protection Ordinance also prohibits certain land uses and activities within wellhead protection areas.

Forest Resource Ordinance

The County's Forest Resource Ordinance (FRO) was adopted in 1992 and is applied through the development review process to subdivisions and site plans where forest removal over 40,000 square feet is proposed. The FRO allows for afforestation on-site or off-site, purchase of forest banking credits, or a fee-in-lieu payment into the forest fund. Since 1994 approximately 3,219 acres of land have been newly planted and protected through the purchase of banking credits. The highest priority for meeting FRO requirements is the afforestation of stream valleys within the particular development or at least within the same watershed. Further, FRO afforestation and forest 'banking' priority areas are stream valleys on agriculturally zoned land.

Resource Conservation Zoning

The Resource Conservation (RC) Zoning District is applied to approximately 97,200 acres in the County; a large portion of this acreage comprises the forestlands on Catoctin Mountain, South Mountain and Sugarloaf Mountain. The RC Zone limits new residential subdivision lots to 10 acres in size and prohibits development on slopes of 25% or more. The RC zone does not permit the construction of new public streets as part of residential subdivisions. Timber harvesting is permitted in all zoning districts with an approved logging permit. The Frederick County Forestry Board must also review and approve proposals for timber harvesting in the Resource Conservation zone, to ensure sound forestry best management practices are employed.

Development Review Process

The MD State DNR have an opportunity to review proposed subdivision and site plan applications to determine the existence of threatened and rare species on a subject site.

Stream Restoration

The National Pollutant Discharge Elimination System Program (also known as the County's Stormwater Permit) requires, in addition to water monitoring, watershed assessments, and public education, the restoration of degraded stream corridors. The County's first restoration project was completed in 2007 and involved stream channel rehabilitation and riparian buffer plantings along a portion of Ballenger Creek at the Ballenger Creek Elementary School.

Natural Resource Area Plan Designation

This Plan applies the Natural Resource land use plan designation to the mountain areas with contiguous forests and stream corridors. The stream corridors would include the major streams defining the County's 20 sub watersheds. Within the mountain/forestlands and the stream corridors would also include 100-year floodplain, plant/animal habitat, steep slopes, and wetlands. The purpose of the land use plan designation is to identify and highlight these features relative to the community growth areas. The plan designation itself does not impose any restriction or regulation on properties. The plan designation does provide the basis for considering the application of Resource Conservation zoning.

Public Ownership

Public ownership as parks and natural resource protection areas provides the greatest degree of protection for any sensitive area feature. There is approximately 28,525 acres of mostly forestland under municipal, state, and federal ownership. The municipal ownership is comprised of watershed protection lands (8,577 acres) primarily in the Catoctin Mountains. The State lands total approximately 11,267 acres on Catoctin and South Mountains. While forestland is the predominant feature under public ownership also included within these areas are steep slopes, streams, habitat of threatened and endangered species, and wetlands.

MINERAL RESOURCES ELEMENT

Frederick County has a long history of mining of various mineral resources. While the mining of minerals such as iron ore and copper are no longer active, other resources such as limestone have been mined in the County since the early 1900's and still have 50 or more years of life in current mining operations.

Limestone

The Grove and Frederick Limestone formations follow the Frederick Valley from just north of the Town of Woodsboro to the Potomac River. High-calcium limestone and its metamorphic equivalent, marble, are used in the manufacture of Portland cement and agricultural lime, in addition to their use as crushed stone.

Shale

Shale is used for the production of brick and terra cotta products such as pipe and tile and is found in Frederick County throughout the Triassic Upland areas. A type of shale found along the eastern margin of the Frederick Valley is used in the manufacture of lightweight aggregate. The Gettysburg Shale, found only in the western part of the northern Triassic Upland, is the most promising source of material for brick and tile. At present, this formation is mined near Rocky Ridge for brick manufacture.

Lightweight aggregate is produced from shale, which has the special property of expanding when heated. The resulting material is a light, sponge-like product, which has a high compressive strength, suitable for use as aggregate in structural concrete and concrete block. Lightweight aggregate is currently produced at a plant near Woodsboro.

Crushed Stone

Several types of rock in Frederick County are suitable for crushed stone, but at present only limestone and marble is being mined for this purpose. These rocks are most desirable because of the relatively low operating costs of extraction and processing as compared with other rock types. The Grove Limestone, which occurs in a strip along the center of the valley, is quarried at the Lefarge quarry near Frederick and at the Barrick/LeGore quarry in Woodsboro. The Wakefield Marble occurs in narrow bands within the phyllites and metavolcanic rocks of the Piedmont Upland area south of Union Bridge in Carroll County.

ACTIVE QUARRIES

Barrick/LeGore

Located just north of the Town of Woodsboro and currently owned by Laurel Sand and Gravel. The Grove Limestone at LeGore is used in the manufacture of lime. There is on-site processing for construction aggregate and an adjoining asphalt plant.

Lehigh

There are two quarry operations, one just southeast of Woodsboro along Hoffman Seachrist Rd. and a second near the Carroll County line along Clemsonville Rd. The Wakefield Marble is quarried near Union Bridge to supply a cement plant in nearby Carroll County.

Essroc

This operation is located south of Frederick along New Design Rd. in the Grove Limestone and supplies material to an on-site cement plant.

Lefarge

Located just southeast of Frederick along I-70 and Reichs Ford Rd. There is on-site processing for construction aggregate and adjoining uses including an asphalt plant and concrete block manufacturing.

Redland Brick

Located in Rocky Ridge and supplies shale material to an on-site brick manufacturing plant.

PLANNING MEASURES

Active mining operations have been designated on the County's comprehensive plans since the adoption of the first land use plan in 1959. While the land use plan designation of Mineral Mining has typically been applied only to the active mining areas, the recent adoption of the Walkersville (2006) and Thurmont (2008) Region Plans have applied the Mineral Mining designation to lands that would be used for expansion of mining operations.

The active mining operations are currently zoned Mineral Mining (MM) with the exception of the Redland Brick operation, which is zoned General Industrial (GI). The GI zoning district permits mineral extraction and mineral processing as permitted uses. The MM zoning district also permits mineral processing.

Beyond the existing and proposed mining operations the County does not identify future mineral extraction to protect these areas from incompatible development. Any land with an Agricultural/Rural land use plan designation is eligible for an application of Mineral Mining zoning. There have not been any proposals to develop entirely new mining operations since the late 1980's.

Deep pit quarries have potential for significant impacts on the ground water if they extend below the water table. De-watering of the pit can cause nearby wells to go dry, and in karst terrain, can induce the formation of sinkholes. State legislation calls for delineation of "zones of de-watering influence" (ZOI) around certain quarries and the quarry operator is required to remedy certain damages within the zone. These zones of de-watering influence have been delineated around four quarries in Frederick County.

Any expansion of existing quarry operations should be reviewed to assess possible impacts from sinkholes, particularly where the quarry is in proximity to highways and development properties.

Even though most large quarry operations intend to extract materials for many years, eventually, mining will cease and some sort of reclamation must be achieved. Deep pit quarries present unique challenges and opportunities for reclamation. Consideration must be given to the safe re-use of these properties once mining has ceased.

ACTION ITEMS

NR-A-01 Identify specific protection strategies for lands that are critical to the quality of public water supplies including groundwater recharge areas, which may include easements, fee simple acquisition, and transfer of development rights.

NR-A-02 Develop various media and environmental outreach education programs to encourage private landowners to protect their wetlands and/or to minimize wetland alteration during such activities as farming and timber harvesting and to increase public awareness of wetland values and the status of wetlands.

NR-A-03 Continue to develop and implement watershed management plans, including the National Pollutant Discharge Elimination System program initiatives, to help guide land use policy and zoning decisions.

NR-A-04 Investigate the applicable process to designate the 52-mile segment of the Monocacy River from Bridgeport to the Potomac identified by the National Park Service in its National Rivers Inventory as a National Scenic River.

NR-A-05 Target areas along the Monocacy River as Forest Resource Ordinance priority areas (forest planting and forest banking) in addition to streams in the Ag zoning district.

NR-A-06 Initiate an update of the 1990 Monocacy Scenic River Study and Management Plan, including examination of a Monocacy River Greenway and optional forms it could take.

NR-A-07 Establish a new variable-width development setback/buffer area, specific to Catoctin Creek and the Monocacy River, which addresses water quality protection, topography and other landscape elements, wildlife habitat, historic and archeological resources and scenic viewsheds.

NR-A-08 Identify environmental features and landscape elements, including karst topography and habitats of rare, threatened and endangered species, that constitute a Natural Resources Inventory and determine how such Inventory can be included as part of all future development plan submissions.

NR-A-09 Encourage construction techniques designed to protect roads, buildings and utility lines if they are to be permitted in areas prone to develop sinkholes.

NR-A-10 Amend the Agricultural Preservation ranking system to grant additional points to farms with frontage along the Monocacy and Potomac Rivers.

NR-A-11 Continue implementation of the Lower and Upper Monocacy River Watershed Restoration Action Strategies (WRAS) and the Maryland Chesapeake Bay Tributary Strategies, including detailed stream corridor growth management and environmental quality enhancement studies.

NR-A-12 Prepare a functional Green Infrastructure Plan to identify strategies to protect, connect, and enhance significant natural resource features in Frederick County.

NR-A-13 Amend the Forest Resource Ordinance (FRO) to permit FRO banking easements on existing forestlands in the Resource Conservation zoning district.

NR-A-14 Study the need for a new zoning district that would afford greater protection of natural resources and environmentally sensitive features.

04 Protecting and Preserving Our Heritage

This chapter of the Comprehensive Plan contains Goals, Policies, and Action Items regarding heritage preservation, including historic properties, scenic and cultural landscapes, and heritage tourism. An overview of the County's history sets the scene for a summary of historic preservation activities. The Historic Preservation Plan, the Historic Preservation Ordinance, the County Register of Historic Places and the Historic Preservation Commission's responsibilities are described. Related initiatives in which the County is involved are the Heart of the Civil War Heritage Area, the Journey Through Hallowed Ground, and the Maryland Historic National Road, and the Federal Certified Local Government Program. In the conclusion of this chapter tools and actions for future expansion of heritage preservation, including the possible inclusion of archeological site protection and preparation of a countywide historic architecture inventory book are described.

	Amendment Status
Goals, Policies, Action Items	**04/08/2010**
Maps and Graphics	**04/08/2010**
Background Information	**04/08/2010**

A vision for protecting and preserving our heritage...

In an increasingly interconnected global society, the Frederick County of tomorrow has embraced those distinctions that define this specific place in the world. The stories of our nation, our cultures, and most importantly, our families, are written across the County's landscape and continue to provide us with a rich sense of comfort and purpose. Our older buildings and landscapes, touched as they are by the narratives of our lives, seem to take on the roles of elders - informing us and strengthening us through their sheer ability to stand tall against the withering forces of time. Tomorrow's Frederick County understands the irreplaceable value of its historic buildings and sites and appreciates the fact that devoid of their context, these special places are diminished in their ability to guide, inform, and inspire. A challenge for the next decades – for us – will be to deliver to the future generations of County residents, who will draw knowledge and strength from our shared heritage, not only the County's preeminent historic structures, but their context as well, healthy and intact.

GOALS

HP-G-01 Minimize the impacts of development on the County's historic resources and their setting by establishing compatible land uses.

HP-G-02 Encourage voluntary protection of historic resources by providing incentives to private property owners.

HP-G-03 Protect and maintain Frederick County's most important historic structures, archeological, and natural sites, districts, and cultural landscapes.

HP-G-04 Retain as a working group those elements of the County's farm landscape that contribute to the aesthetics, historic character, and economy of agricultural areas.

HP-G-05 Maintain the historic character of the County's rural towns and villages.

HP-G-06 Support the economy of Frederick County by encouraging preservation, rehabilitation, and restoration within context, and promotion of tourism related to historic resources.

HP-G-07 Foster public education, greater appreciation, and understanding of historic and archeological resources to encourage support for preservation in Frederick County.

POLICIES

HP-P-01 Design new buildings, subdivisions, infrastructure, and signs to be compatible in scale and siting with existing, adjoining historic structures and settlements.

HP-P-02 Protect rural historic structures in the context of their natural and cultural settings.

HP-P-03 Participate in private and public partnerships to preserve significant historic resources.

HP-P-04 Actively promote the voluntary easement program of the Maryland Historical Trust and develop a County easement program as mechanisms to preserve historical resources.

HP-P-05 Incorporate adaptive reuse if necessary of historic structures and their settings in appropriate ways as part of development projects.

HP-P-06 Consider strategic purchases of critical historic structures and sites.

HP-P-07 Encourage nominations to the National Register of Historic Places and the Frederick County Register of Historic Places.

HP-P-08 Establish stewardship of historic resources by identifying, evaluating, designating, interpreting, and maintaining County-owned historic properties to preserve their historic character.

HP-P-09 Incorporate the preservation and enhancement goals of the Heart of the Civil War Heritage Area, the Catoctin Mountain Scenic Byway, the Historic National Road, and the Journey Through Hallowed Ground Management Plans in planning activities and development reviews for the benefit of the County's historical environment and to support the economic benefits of heritage tourism.

STATE PLANNING MANDATES AND VISION

This chapter supports the following State Visions:

- *Quality of Life and Sustainability*
- *Economic Development*

In addition, the Maryland Preservation Plan contains state-wide goals for managing growth by encouraging neighborhood revitalization, stimulation of economic development through heritage tourism, increasing public awareness and appreciation of heritage resources, encouraging protection of historic resources, and pursuing the technological, financial, and legal tools sufficient to preserve Maryland's historic resources. These goals are reflected in this chapter and in the County Historic Preservation Plan.

Frederick County hosts two Rural Legacy areas, Mid-Maryland and Carrollton Manor, as a land planning strategy developed under the 1997 Priority Funding Areas Act. Both of these areas have been active in preserving land that contributes to the preservation of Frederick's cultural landscape.

RELATED COUNTY PLANS

2007 Historic Preservation Plan

The first County Historic Preservation Plan was adopted in 1997 and updated in 2007. It is a broad statement of historic preservation goals, objectives, and strategies and a description of the existing resources for preservation. The 1997 Plan provided the foundation for establishing the County's Historic Preservation Commission and the Historic Preservation Ordinance.

2004 Catoctin Mountain National Scenic Byway Corridor Management Plan

The Catoctin Mountain National Scenic Byway follows the route of US 15 from the Pennsylvania border to the Potomac River. In 2003, the corridor was designated a State Scenic Byway and as a National Scenic Byway in 2005. The Management Plan provides a description of the intrinsic qualities (historic, recreational, natural, cultural etc.) of the corridor as the basis for understanding the important resources along the Corridor and details strategies for conserving the intrinsic qualities and managing improvements and changes. The Catoctin Mountain Scenic Byway became part of The Journey Through Hallowed Ground National Heritage Area in May 2008.

Maryland Historic National Road Scenic Byway Corridor Partnership Plan

The Historic National Road (HNR) is an All-American Road in the Federal Highway Administration's America's Byways program. The Maryland section of the HNR is one of six states identified in the 2003 designation. The Maryland section's Corridor Partnership Plan delineates the corridor across the state. The Corridor Partnership Plan outlines the historical, archeological, cultural, scenic, and recreational qualities that support the designation and strategies to promote the economic benefits of tourism along the corridor, while recommending local, state, and national programs that can protect historic and scenic resources that are vital to the Corridor.

Heart of the Civil War State Heritage Area Management Plan

Comprised of portions of Frederick, Carroll, and Washington Counties, the Heart of the Civil War Heritage Area is Certified under the Maryland Heritage Areas Program, a State program to facilitate economic development through heritage tourism. The Management Plan is incorporated as part of the Countywide Comprehensive Plan as a condition of participation by the County government in the Heritage Area. The Plan was incorporated by reference on March 7, 2006. This update of the Comprehensive Plan, when adopted by the Board of County Commissioners, will reconfirm the incorporation of the Management Plan.

FREDERICK COUNTY HISTORIC RESOURCES AND CONTEXT

Frederick County has a rich inventory of historic resources include buildings, districts, sites, and its communities. The County has maintained a strong rural and cultural landscape that relates both land and the traditional lives of its people from the early settlement of the area to the present day's changing economies. The interaction of human experience with our natural environment is the story of Frederick County. Even those elements that are not visible and exist as archeological evidence constitute important parts of our historical chronology. We are incredibly fortunate that so much of our physical history survives. This is the essence of our heritage and what gives the County its uniqueness. But, it is perishable. Once lost, true historical identity cannot be reproduced.

Archeology

Historical and cultural information from surviving historical sites, districts, and properties is only one aspect of historical heritage that is at risk. The remains of prehistoric and historical period sites beneath the surface are also threatened by development projects and new infrastructure facilities. Currently, the County has no provision for requiring testing of development sites to ensure that important archeological sites are not irreparably damaged or lost.

As we recognize and honor our heritage, the County must accept the necessity of committing to preserve the tangible record – our historic resources. Change is inevitable and we must adapt our regulations and processes to manage change so that valued historical resources are handled in a balanced and appropriate manner. This takes more than a regulatory commitment; it also requires a public dedication to this vital concept that affects our quality of life. Preserving our heritage is not a burden – it is our duty.

HISTORICAL SUMMARY OF FREDERICK COUNTY

Early Settlement

In about 1621, Captain Henry Fleet of the Jamestown settlement in Virginia sailed up the Potomac River on an expedition to buy corn from the Native American people in the area. During several subsequent trips, he probably reached the vicinity of the present Frederick County. Other infrequent visitors and an occasional fur trader or missionary expedition are known to have been in the area during the period up to 1720, but the Piedmont Region remained largely wilderness until the third or fourth decade of the 18th century.

Beginning in the 1720's, surveys were applied for and certified from the Proprietary Government's Land Office for Western Maryland. In spite of increased land transfers, the area of the present Frederick County (at that time still part of Prince George's County) remained sparsely settled and the land mostly unproductive in European economic terms. By about 1730, several large tracts had been purchased by investors, including Carrollton in 1723 by Charles Carroll the Settler (10,000 acres), Merryland in 1730 (6,300 acres), Tasker's Chance in 1725 (7,000 acres, part of which was the site of the future Frederick Town), and Monocacy Manor in 1724 (10,000 acres). Frederick Town was laid out in 1745 and settlement began in earnest the same year, with the aim of being the county seat of the new Frederick County, incorporated in 1748. Settlement of other towns began as early as the 1720's and founding of the towns usually occurred with the recording of a town plat, although incorporation of the government occurred later. Other towns established in the 18th century were Emmitsburg in 1785, Middletown in 1767, Brunswick in 1780, and New Market in 1792. These towns and other settlements were directly linked to the surrounding agricultural lands being cleared for crops and livestock, serving as the markets and linked by early roads to larger communities.

Agricultural Development

Agricultural intensification occurred in Frederick County from about 1730 to 1805. Primarily Evangelical Reformed, Brethren, and Lutheran in religion, the settlers were joined in about 1734 by a small group of English Catholics near the present Emmitsburg, establishing a long tradition of religious toleration upon which Mount Saint Mary's College and St. Joseph's Seminary were built in the 19th century. The founding of a church or place of worship in a dwelling or even a barn often stimulated or was concurrent with a nearby mill location and continues to be a focal point for the County's towns and rural communities.

At the same time the Germans were moving into the County from the north, settlers of English heritage were acquiring land tracts in the southern part. There was a marked difference in the subsequent development of the southern County area, vestiges of which survive in the present, although the merging of the two cultures began immediately. By 1790, improvements in agricultural methods such as crop rotation showed how the diversification of crops had a far greater potential for Frederick County.

By the mid 19th century, the typical farmstead consisted of a main dwelling house of stone, log, or brick, surrounded by several domestic service buildings such as a washhouse or summer kitchen, a smokehouse, a springhouse, and a chicken house. Near the end of the 19th century, the major change in agriculture in the County from grain crops to dairy production resulted in new buildings in the agricultural group. Dairy barns in the early 20th century employed more modern building materials such as concrete block, metal roofs, and concrete floors.

Industrial Development

Industrial sites initially were those that sustained settlement: flour mills, saw mills, tanneries, glass factories, and woolen mills. Most mills were stone or brick and powered by rivers and streams. In the mid to late 19th century, many mills converted to steam powered machinery. The siting of mills often stimulated clustering of related services and products nearby, such as coopersmiths who made barrels for flour, blacksmiths for wagon repairs and horse shoeing, and tanneries for leatherworks in both agricultural and domestic uses such as shoemaking. As these natural gathering places for the rural population grew, general stores were often established in the vicinity and post offices came to be located within the stores. Local road networks were carved out to lead to the burgeoning settlements around industrial places and churches. Where

churches were found, there was usually a nearby school established by residents of the area. After the Baltimore and Ohio Railroad and later other railroads were built through Frederick County beginning in the mid-1830's, the water and coaling stops on these routes became new stimuli for settlements.

Transportation Networks

Aside from the County's agricultural history, few components have impacted where and how Frederick's communities have grown as widely as the transportation network including highways, railroads, and the C&O Canal.

The National Road, the first congressionally authorized public road in the nation, was slated to extend from Cumberland in Allegany County to the Mississippi River near St. Louis. The purpose was to link Baltimore to the Ohio and Mississippi River valleys. The section linking Baltimore to Cumberland was to be built by local funding from banks and turnpike companies in Maryland, since many potential sections were already in use through this means. By the mid 1820's, this portion, known as the National Pike, (what is now MD 144, Old National Pike, and US 40 Alternate) was complete in Frederick County and became the most important roadway in the County for the rest of the 19th century. Along its route, taverns, stables, inns, wheelwright and blacksmith shops, and tollhouses were erected, often near bridges or crossings with other existing roads. These locations often stimulated growth of towns such as Mt. Airy, New Market, Frederick and Middletown due to the services they offered and the opportunities for transport of agricultural goods. Subsequently, other turnpike companies were formed to improve the existing routes from Frederick to Harper's Ferry, Woodsboro to Taneytown, and Libertytown to Reisterstown.

The Baltimore and Ohio Railroad reached Frederick in 1831 and was extended through the County to Harpers Ferry in 1834. What is referred to as the Main Line supported numerous industries, which in turn stimulated the development of small communities such as Monrovia and Ijamsville in the eastern part of the County and Lime Kiln, Adamstown, and Doubs in the southern part of the County. Certainly the City of Brunswick can trace much of its history and economic development to the rise and fall of the railroad.

The Chesapeake and Ohio Canal Company began construction of the long-desired water link between the Chesapeake Bay and the Ohio River valley in 1828 reaching Frederick County in the early 1830's. The Canal, even at that point in time, was behind technological advances of the day, and, although finished to Cumberland, its heyday was short, ending its use in the 1920's. The corridor is now a significant component of the County's green infrastructure contributing to both the natural resource protection of the Potomac River valley and as a significant recreational amenity.

The Hagerstown and Frederick Electric Railway was established in 1896 between Frederick and Middletown by a group of land and farm investors in the Middletown Valley who looked to find a more efficient way to move their goods over the Catoctin Mountain ridge. Other lines were eventually added providing service within the City of Frederick and connecting Thurmont and Jefferson. At its peak, the H&F had a total of 80+ miles of track. The H&F was slowly abandoned with the last portion between Frederick and Thurmont finally closing in 1958.

The Civil War

The Civil War period, from 1861 to 1865, was an era of profound effects to the growth and outlook of the County and the economy. In Frederick County, located at a key point in the State, important national roads and railroad networks formed the gateway to the industrial and agricultural heartland of the Union. It was inevitable in many ways that the conflict would come to the area. The movement of elements of both armies through the County resulted in repeated occupations of Frederick and other towns. The County and the B&O Railroad played a major role in the first important event that led to the outbreak of war, the unsuccessful raid by John Brown and his allies on the Federal Armory at Harper's Ferry. Following the great battles of South Mountain, which took place primarily in Frederick County, and Antietam two days later in nearby Washington County in 1862, the 1863 Battle of Gettysburg in Pennsylvania just a few miles from the County's northern border, and at Monocacy in 1864, Frederick and its surrounding areas were necessarily involved in the care of wounded and dead from these actions.

Economic Development in Late 19th and Early 20th Centuries

With the increasing technological advances of the 19th and 20th centuries, the population of the County grew in both economic stature and social structure. Farming was still the most important industry, and within that theme, dairy production became the dominant agricultural product of the County and remains so today. Labor-saving devices on the farm allowed the employment of fewer hands to plant, gather, and process crops and milk produce. Slavery ended as a practice in 1864-65 as one result of the Civil War, but the African-American population of the County remained fairly stable in numbers and tended to remain employed in agriculture, manufacturing, and domestic service into the 20th century.

The automobile's development and rapid spread among the American people brought other deep changes in the physical development of Frederick County. The car made travel possible for all economic classes. With this intriguing prospect came the need for a better road network. The existing National Pike was still the most used roadway within the County. The road surfaces had been gradually improved to minimize mud and dust problems, which were key to the advancement of auto travel. When these factors were under control, the door was open to freight traffic by truck, which affected the viability of railroads. The Hagerstown and Frederick Electric Railway was first established in the mid-1890's between Frederick and Middletown by land and farm investors in the Middletown Valley. The National Pike was the only direct route that linked the two towns, but it was also subject to steep grades and difficulty for both horse wagons and gasoline-powered trucks. The electric powered rail line offered a new mode to move freight and passengers over the mountain with ease.

20th Century Development

In the period 1900 to the beginning of World War II in 1939, Frederick County remained one of the most prosperous agricultural counties in Maryland. The city of Frederick and Brunswick experienced the most growth in residential areas due to the influence of County government and the court system and manufacturing enterprises in Frederick, and the expansion of the Brunswick classification yard of the B&O in 1896. Mostly, however, farming continued to be the principal industry and the concern of most citizens. The expansion of the dairy industry that had begun in the late 19th century increased demand and the vast farms of the County rose to the need. The Great Depression of the 1930's was more devastating to Frederick County in that many farmers were forced to sell their properties. Wealthier local and out of state investors bought up many of these farms and some former owners became tenants on the same places.

Federal government programs such as the Civilian Conservation Corps provided work in building up the recreational areas of the Catoctin Mountain ridgeline. Road building was another Federal opportunity to aid transportation of goods while also providing jobs. The National Pike in the Middletown Valley was bypassed by the newly built US 40 in the 1930's and 1940's.

The period of World War II from 1939-1945 halted much economic expansion in the County, except for war-related occupations. The food production needs of both the nation and the armed forces kept Frederick County in high operation during the war period. Farm workers were often called into uniform service, however, and ready hands to help on the farms were in short supply. Many Frederick County residents commuted to work in Baltimore and Washington, D.C. by rail during the war.

Following the end of the war in 1945, the returning military veterans looked to return to their family occupations in large part, but many defense-related jobs converted to peacetime positions with the Federal and State governments and the manufacturing plants of the area. By the mid 1950's, Frederick County experienced a boom in population in part due to the expansion of Fort Detrick.

The start of the interstate highway system, which connected Frederick with Baltimore and Washington D.C., provided easy access to jobs, thus creating the perception of Frederick as a bedroom community. This perception was supported by the many subdivisions that began to appear at the edges of the City of Frederick, signaling a series of annexations in the late 1960's, which added over 4,200 acres to the City. Some small villages and large farms were met or surrounded by new development growing outward from the city. As the County has developed its own employment base, it has matured and developed as an independent economy.

HISTORIC PRESERVATION ACTIVITY

The effect of the rapid pace of development in Frederick County that continues into the 21st century is evident in the loss of many of the large, open parcels that ring the towns of Frederick County. Within the farms that occupy the parcels, the main dwelling and a large Pennsylvania bank barn and a dairy barn may still survive, along with a varying collection of domestic and agricultural outbuildings. These farmsteads that so symbolized the County's cultural, historical, and economic heritage are fast becoming obsolete in today's world. Where large planned unit developments are occurring on the former farms, the farmstead is too often sacrificed, due to costs of rehabilitation and a perceived incompatibility with the new neighborhoods.

While the City of Frederick has actively protected its historic downtown area since the 1950's, the County has only fairly recently initiated a proactive approach with plans and regulations to protect its historic resources. What follows is a summary of the preservation activities initiated by the County as well as various state and national historic designations that address the state and nationally significant resources in the County.

HISTORIC PRESERVATION PLAN

The County's first Historic Preservation Plan was adopted by the Board of County Commissioners in 1997. This Plan contained a historical summary, a report on the results of the

recently completed historic sites survey, an overview of the existing resource organizations and programs at the local, state, and national levels that support historic preservation and the Goals and Objectives for Frederick County's beginning of a countywide program. The Action Items were entitled Strategies for Implementation. As supporting appendices, the existing National Register of Historic Places list, information about the State Heritage Preservation Tax Credit Program, and other resource documents were included.

Adhering to the original plan's general format, the principal changes in the 2007 Historic Preservation Plan were annotations to the Goals, Objectives, and Strategies for Implementation to show the progress along the County's path to a fully realized historic preservation program. The key points were the adoption of a Historic Preservation Ordinance that established the Historic Preservation Commission and the landmark list, the County Register of Historic Places, and the establishment of a full-time historic preservation planner position in the Planning Division. These activities and accomplishments are more fully described in the following sections.

HISTORIC PRESERVATION ORDINANCE

The Board of County Commissioners created the Frederick County Historic Preservation Commission (HPC) and the Frederick County Register of Historic Places (CR) with the adoption of Ordinance 97-16-194, effective January 1, 1998. The County's purpose, as stated in the Ordinance, is "the preservation of sites, structures, and districts of historical, archeological, and/or architectural significance together with their appurtenances and environmental settings." The County recognized the importance of preserving heritage as a public purpose and that a local designation program with criteria for designation, processes for nomination and the review of changes to the listed properties serves to preserve not only buildings and places, but supports a higher quality of life and strengthens our economy by reducing waste, providing opportunities for jobs, and promoting awareness of the value of preserving and protecting historic properties.

HISTORIC PRESERVATION COMMISSION

The eleven-member Historic Preservation Commission met for the first time in July 1998. The Commission is responsible for reviewing all nominations to the County Register of Historic Places and applications for work on listed County Register properties. The Commission issues Certificates of Appropriateness on those projects that meet its Interim Design Guidelines. The Commission is also responsible for review of applications for zoning text or map amendments, conditional uses, variances, site plan or subdivision approvals, preparation and amendment of master plans, and any other legislation or proposal that involves County Register properties. The Commission may make recommendations regarding these actions in addition to any Certificate of Appropriateness that may be required. The Commission is also empowered to accept donations of and acquire historic preservation easements on County Register properties and other significant properties, consistent with County laws and regulations. With these parts of the program in place, the County applied for and was accepted in 2001 into the Federal Government's Certified Local Government (CLG) program, a Federal-State-local partnership that allows the County to participate in the National Register of Historic Places nomination process, receive educational set-aside funds for education of the Preservation Commissioners, and comment on Federal and State funded or licensed projects that may affect historic properties in Frederick County.

FREDERICK COUNTY REGISTER OF HISTORIC PLACES

The first designations to the Frederick County Register (CR) occurred in October 1999. The County Register, a voluntary designation, currently lists eight individual properties. (See List and Map in this chapter.) Through a Special Exception in the Zoning Ordinance, owners of properties eligible for either the National Register or the CR may be approved for certain uses that are not otherwise allowable in the zoning district where the property is located. A requirement of approval under the Special Exception is the listing of the property in the CR. Two of the eight CR properties came to the program through successful Special Exception approvals. However, the Ordinance allows for nomination of a much wider range of historic resource types: districts, cultural and historical landscapes, and archeological sites. To date, no properties of these types have been nominated. A key incentive to County and National Register designation is the eligibility of listed property owners for the Maryland Heritage Preservation Tax Credit for owner-occupied and commercial properties. This long-standing program provides the eligibility for a 20 percent income tax credit for approved rehabilitation costs on structures on either the NR or in a local historic designation program established under the State enabling legislation. The County Register is the local designation program for the unincorporated area of the County.

MARYLAND INVENTORY OF HISTORIC PROPERTIES, FREDERICK COUNTY

The Maryland Inventory of Historic Properties (MIHP) is a general database of historic property information maintained by the Maryland Historical Trust (MHT). The MIHP is a research and documentation tool and is not a regulatory program. Each jurisdiction has powers under State law to create its own regulations regarding historic properties. The Frederick County Historic Preservation Ordinance establishes regulations as described above. The Frederick County Inventory totaled 1,320 sites, structures, and districts as of September 2008. (See map of Historic Properties in this chapter.) The MIHP is an open-ended inventory that allows for additions of new property information of any type, historical period, or location within the County. The last major project in Frederick County to add to the MIHP was during the period 1991-1995, when a project supported by matching grants from the MHT provided funding for a contract historic sites surveyor to cover two Planning Regions per year to update the existing inventory. The results of the project provided almost 500 new additions to the MIHP and vastly more field information with general rankings and map locations that could be used as the basis for continued inventory. The project was used as the supporting data for the first Historic Preservation Plan for the County, adopted in 1997, and subsequently, the adoption of the Historic Preservation Ordinance in 1998. Importantly for future planning of historic resource identification and protection in the future, the survey identified approximately 5,170 new potential historic resources in the County. Only a fraction of those sites have been added to the Inventory and more are being demolished than are saved.

HISTORIC DESIGNATIONS

Heart of the Civil War Heritage Area

The Heart of the Civil War Heritage Area, a State-certified area including parts of Frederick, Carroll, and Washington Counties, recognizes the concentration of Civil War sites, battlefields, and many interpretive stories, as well as the roads still in daily use that both Union and

Confederate troops followed through the region. In much of Frederick County, the views and standing structures are very much as those soldiers would have seen them in the 1861-65 conflict. Capital and non-capital grants are available to qualified organizations and local governments to promote heritage tourism projects. Non-capital projects may include special events, marketing materials, educational materials and activities, and planning and design for such projects. Historic resources associated with the themes of the Heritage Area may be acquired, preserved, restored, and/or developed for appropriate tourism uses if they meet the guidelines of the Heritage Area Management Plan. These benefits also apply to recreational, natural, and cultural resources and attractions. Targeted Investment Zones within each county in the Heart of the Civil War Heritage Area are prioritized areas that receive incentives to generate private investment. Additional program benefits available to the Zones include capital grants, bond-financed loans for economic development projects and additional heritage preservation tax benefits. Zones in Frederick County currently include Frederick and Middletown, but any incorporated or unincorporated area within the Heritage Area that meets the Targeted Investment Zone criteria is eligible to apply for designation.

Catoctin Mountain National Scenic Byway

In 1999 the Maryland State Highway Administration designated the US 15 corridor through Frederick County as a State Scenic Byway. In 2001 the County initiated an effort to prepare a Scenic Byway Management Plan for US 15. A Corridor Management Plan for the US 15 Catoctin Mountain Scenic Byway was completed and approved by the County in 2004. This Management Plan formed the basis for a nomination of the US 15 Corridor as a National Scenic Byway, successfully achieving that designation in 2005. Grants are available to promote the conservation of the Corridor's documented scenic, historical, archeological, cultural, and recreational qualities. The local committee is reforming into a management entity under the guidance of the Byways Manager based in the office of the Tourism Council of Frederick County, Inc. The adoption by the County of the Maryland State Highway Administration's "Context Sensitive Solutions for Work on Scenic Byways" is a principal goal of the organization.

The Journey Through Hallowed Ground National Heritage Area

The Journey Through Hallowed Ground, a public-private partnership of government jurisdictions, non-profit organizations, museums, institutions, private and business property owners and is administered by, a non-profit organization. The Journey Corridor extends from Gettysburg, Pennsylvania through Frederick County, Maryland to Monticello in Albemarle County, Virginia. The National Heritage Area designation is based on the vast number of historical, archeological, cultural, and recreational sites within the Corridor, which encompasses the Catoctin Mountain Scenic Byway, but does not supersede the local managing committee's purposes. The National Heritage Area opens the door to potential grants for promoting economic development through heritage tourism and educational opportunities focused on the many elements of the Corridor. A Corridor Management Plan will be prepared for the Journey, incorporating elements of the Catoctin Mountain Scenic Byway Corridor Management Plan.

Maryland Historic National Road Scenic Byway (HNR)

The managing entity, the Maryland National Road Association, is a non-profit organization with a Byway Manager and a Board of Directors composed of volunteer representatives of organizations, tourism directors of the counties on the Byway, and interested individuals. As a membership-supported organization, public involvement is one of the main promotions of the

Association. The Historic National Road in Frederick County passes through Mt. Airy, New Market, Frederick, and Middletown where development is increasing and the HNR is the principal Main Street or an important arterial road. The State Highway Administration prepared a guideline for the HNR, "Context Sensitive Solutions for the Maryland Historic National Road" that the Maryland National Road Association recommends for adoption by the jurisdictions along the Corridor.

Monocacy National Battlefield

The Monocacy National Battlefield, a National Park Service unit, was established by Congress in 1934, but only in the late 20th century has become a protected area of about 1,647 acres within the boundary. In addition to the open agricultural fields still extant that were present in 1864, historic resources include the Best Farm, the Worthington House, the Thomas Farm, and the Gambrill House and Mill. The current land use reflects the agricultural economy of the mid 19th century, underscoring the importance of agriculture in the long history of the County.

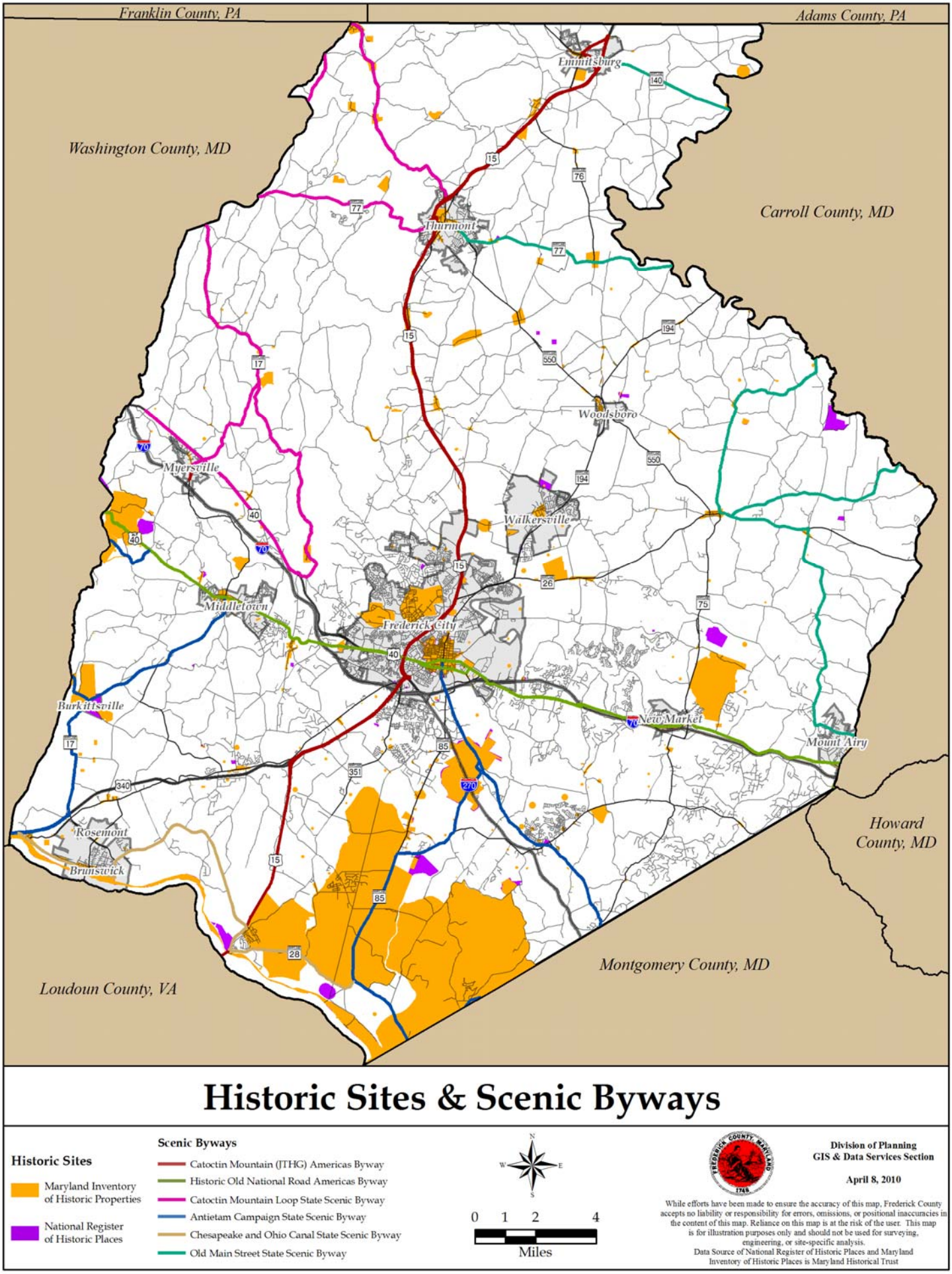
South Mountain State Battlefield

South Mountain State Battlefield encompasses three gaps on South Mountain, Turner's, Fox's, and Crampton's that were the scenes of intense fighting two days prior to the Battle of Antietam in September 1862. The area also includes part of the Appalachian National Scenic Trail, a Federal unit. The State of Maryland designated the Battlefield as the first state battlefield in 2000 to promote more active preservation of the land and historic resources. With the initiation of the Maryland Civil War Trails in the 1990's, South Mountain is currently a tourism development location, with signage and access limited by ongoing funding and acquisition activities. The potential area includes approximately 6,234 acres.

Maryland Civil War Trails

Maryland Civil War Trails is a statewide network of themed driving tours focused on the Civil War. The Antietam Campaign and the Gettysburg Campaign routes include many sites in Frederick County.

Map 04-1: Historic Sites and Scenic Byways



PROPOSED TOOLS AND ACTIONS

Historic District Handbook

The HPC has determined that a focused educational effort aimed at potential historic districts is necessary to advance the goals of the Historic Preservation Ordinance and of the Comprehensive Plan. To that end, the Commission is preparing a Historic District Handbook that details each step of the process for citizens who are interested in achieving historic district status for any qualifying area in the unincorporated County. With this tool, the Commission plans to embark on a schedule of presentations to civic organizations, local historical groups, and community associations to inform the public in potentially eligible historic areas of the benefits and processes of County Register designation. The Handbook is part of the Commission's efforts at intensifying the educational component of preservation, to include regular events, publications, and public training workshops on what is significant about Frederick County's historic architecture and the appropriate ways to preserve the properties.

Incorporation of Historical and Archeological Evaluation and Protection in County Development Review

The rapid pace of development in Frederick County that began in the 1980's and has continued to the present threatens the loss of potentially significant historic standing structures and archeological sites before adequate evaluation and assessment of the effects of projects can be accomplished. To address this concern, the Action Recommendations for the Historic Resources theme are focused on updating the MIHP and instituting development review processes that provide for archeological and historic site evaluation and protection of significant properties in applications for large development parcels.

Historic Architecture Inventory Book

A countywide historical architecture inventory book is a key tool in educating the public and the government about historic resources and their value in the County's quality of life, fostering the appreciation of our heritage and supporting the need for preservation of historic properties. The Maryland Historical Trust and other organizations have published several county historic inventory books and experience has shown that these volumes tend to become the most well-used among both residents and scholars wanting to learn more about the history of a county and its built environment. In Frederick County, the last Countywide inventory project was in the early 1990's in advance of the first County Historic Preservation Plan and the subsequent adoption of the Historic Preservation Ordinance. Although updates and additions to the Frederick County section of the Maryland Inventory of Historic Properties (MIHP) regularly occur from other sources and projects, such as the required state and federal reviews for project receiving approval or funding from these sources, no widespread comprehensive survey has been done since 1995.

ACTION ITEMS

HP-A-01 Using the identified special views and sites in the Management Plans of the Historic National Road and the Catoctin Mountain Scenic Byway as a starting basis, prepare a list of prioritized critical scenic views and sites and identify various means for protection, including, but not limited to, fee simple purchases, easement purchases or donations, agricultural land preservation programs, bond issues, and transfer of development rights.

HP-A-02 Continue the Planning Division's participation in the management entities of the Heart of the Civil War Heritage Area, the Catoctin Mountain Scenic Byway/Journey Through Hallowed Ground National Heritage Area, and the Maryland National Road Association to support these organizations' historic preservation goals and their focus on heritage tourism.

HP-A-03 As part of all major land development applications (i.e., rezonings, major subdivisions, site plans, etc.); create a checklist to include identification and evaluation of historical resources, including archeological sites, as well as a plan for the preservation of those resources that are significant.

HP-A-04 Promote existing incentives for appropriate adaptive reuse of historic structures and their setting; including the Maryland Heritage Preservation Tax Credit, the Federal Rehabilitation Tax Credit for Historic Structures, and the Frederick County Property Tax Credit for locally designated historic structures through brochures, flyers, workshops, the County web site, and any available and appropriate new technologies.

HP-A-05 Update and continue the inventory of historic sites in the County.

HP-A-06 Publish a historical inventory book about the County's historical architecture, archeological sites, and historic cultural landscapes.

HP-A-07 Develop and adopt a County-based loan program to assist owners of historic buildings needing rehabilitation.

HP-A-08 Identify potential historic districts eligible for the County Register of Historic Places and focus educational efforts on these areas to promote nominations. Potential historic districts may include, but are not limited to:

Adamstown	Johnsville
Braddock Heights	Kemptown
Buckeystown	Libertytown
Catoctin Furnace	Wolfsville.

HP-A-9 Incorporate the Maryland State Highway Administration's Context Sensitive Design Solutions for the Maryland Historic National Road Scenic Byway in development reviews along the Historic National Road corridor in Frederick County, and the Context Sensitive Solutions for Work on Scenic Byways on Maryland's scenic byways in the County, including the Catoctin Mountain Scenic Byway.

HP-A-10 Study the feasibility of establishing a historic materials recycling entity supported by partnerships with public, private, and non-profit organizations.

HP-A-11 Update existing and create new educational materials to promote historic preservation practices and methods, including, but not limited to, the current Frederick County Register of Historic Places brochure, the County web site, and any available and appropriate new technologies.

HP-A-12 Through coordination with the National Park Service (NPS), examine impacts to NPS lands from proposed development activities adjacent to or in close proximity to NPS facilities, and develop compatibility guidelines for these areas. Protection of NPS units through buffering, alternative site design, or other land management controls should be considered.

HP-A-13 Consider a process to prioritize historic sites, structures, and areas related to the County's identification and designation of Areas of Special Merit through updating the inventory.

HP-A-14 Prepare guidelines and regulations to encourage sustainability and adaptive reuse of historic structures and sites.

HP-A-15 Investigate new tools for outreach and education.

05 Preserving Our Agricultural and Rural Community

The goals, policies and action items necessary to plan for a continued vibrant and viable agricultural community are provided for in this chapter. In addition to describing the trends of the agricultural economy this chapter includes the programs that have been instituted to preserve land in Frederick County and a new State Planning requirement for a Priority Preservation Plan. The Priority Preservation Plan contains an implementation strategy; which will require specific studies or action for its implementation and to reach the County goal of placing 100,000 acres under protective easement by the year 2020.

	Amendment Status
Goals, Policies, Action Items	**04/08/2010**
Maps and Graphics	**04/08/2010**
Background Information	**04/08/2010**

A vision for preserving our agricultural and rural communities…

Agriculture is an essential part of the County's history and economy with a long established role in the physical development of our communities to the economic output that provides agricultural products and jobs in the agricultural economy. The preservation of our agricultural lands and the County's rural heritage remains one of the highest priorities - feeding both the community treasury and the collective soul - will continue to play a fundamental role in defining this community in future decades, perhaps enjoying a rediscovered value to future generations of citizens seeking local and sustainable sources of food, fiber, and fuel. The County's rural landscapes, taken for granted by some, will be increasingly valued for what they are.

GOALS

AG-G-01 Preserve the County's prime agricultural lands for continued production.

AG-G-02 Encourage the growth of new, and the preservation of existing agricultural industries in Agricultural designated areas in order to support local farm operations.

AG-G-03 Permanently preserve through various agricultural programs at least 100,000 acres of agricultural land by 2020 and protect a total agricultural base of 200,000 acres as a Rural Reserve to support a diversity of agricultural practices.

AG-G-04 Maximize state funding and technical resources for a coordinated agricultural land preservation effort.

AG-G-05 Maintain compatibility and create a regional mass with agricultural preservation activity with adjoining counties.

POLICIES

AG-P-01 Enhance the existing Agricultural Preservation Program by identifying Priority Preservation Areas, which will assist in the protection and retention of the County's agricultural industry resource base.

AG-P-02 Minimize the development in areas of our best agricultural lands to preserve critical masses of farmland.

AG-P-03 Prohibit expansion of designated Rural Residential areas into surrounding lands designated Agricultural/Rural.

AG-P-04 Support Frederick County's farming economy and farming communities and services necessary to sustain a viable agricultural industry.

AG-P-05 Support land use initiatives to maintain and enhance Rural Communities to service the agricultural industry.

AG-P-06 Prohibit the expansion of community growth areas for development into Priority Preservation Areas.

AG-P-07 Community water and sewer service will not be extended beyond Community Growth Areas into lands designated Agricultural/Rural.

STATE PLANNING MANDATES AND VISION

This chapter supports the following State Visions:

- Quality of Life and Sustainability
- Growth Areas
- Economic Development
- Environmental Protection
- Resource Conservation

This chapter also addresses the State of Maryland mandate for completion of a Priority Preservation Plan as required in HB-2.

RELATED COUNTY PLANS

2006 Land Preservation,Parks and Recreation Plan

The Land Preservation, Parks, and Recreation Plan (LPRP) provides the necessary framework from which to develop an integrated and coordinated approach to the provision of park and recreation facilities, agricultural land preservation, and natural resource protection. To maintain eligibility for Maryland's Program Open Space (POS) funding the County must prepare and update this Plan. All land acquisition and park development funded through these programs must be consistent with the approved LPRP. One of the prominent State guidelines for the LPRP is to ensure that public investment in land preservation and recreation supports, local comprehensive plans, associated implementation programs, State Planning Policy, and State and local programs that influence land use and development.

2007 Agricultural Land Preservation Program Certification Report

Certification of local Agricultural Land Preservation Programs is jointly administered by the Maryland Agricultural Land Preservation Foundation (MALPF) and the Maryland Department of Planning (MDP). The Certification Program allows counties to retain greater portions of the Agricultural Transfer Tax if they are able to demonstrate that they have an effective program to preserve agriculturally viable land. Certified counties are allowed to keep an additional percentage of the Agricultural Transfer Tax revenue (75%) where uncertified counties retain 33% of the revenue. The increase in a county's share of Agriculture Transfer Tax helps support its agricultural land preservation program. All retained funds must be spent or encumbered for land preservation purposes within three years or the funds revert to MALPF. Frederick County was re-approved for State Certification in 2007.

2008 Frederick County Agricultural Strategic Plan

This Plan was prepared through the County's Office of Economic Development (OED) as an update of an Agricultural Market Analysis and Strategic Plan prepared in 2001. The 2008 Strategic Plan conducted an assessment of the agricultural industry and sectors in the County including an analysis of the strengths, weaknesses, opportunities, and threats of the agricultural economy. The Plan includes recommendations under three areas: *market developments, training and education, and regulatory support for agriculture*.

THE ROLE OF AGRICULTURE IN THE COUNTY

Frederick County's history since its initial settlement in the mid 1700's has been closely tied to agriculture. The County's fertile soils, sufficient water, and its favorable climate and topography were a strong attraction to the early settlers. The productivity was such that Frederick County was the largest wheat-producing county in the United States in 1790. The growing agricultural industry was already well diversified with grain crops, livestock, vegetables, fruit orchards, and for a short period tobacco.

The role of agriculture in the County can be described in the context of the County's economy; its rural landscape, and its communities. The expansion of agricultural activities also affected the physical landscape of the County through the clearing of forestland. Many of the County's towns and communities were established to support the surrounding agricultural enterprises. Proximity to major markets, strong local agricultural structure/businesses, high quality soils and access to water sources are just some of the advantages in the County that positively impact agricultural activities. In an effort to highlight the role of agriculture in the County the general plan mapping for this Plan includes an Agricultural and Rural Communities Plan component.

AGRICULTURAL ECONOMY

Frederick County has one of the strongest agricultural economies in Maryland. Agriculture remains important to the County's overall economy as one of its leading industries with an agricultural output of approximately $133 million in 2006 and farm employment of 1,100 workers. Even with a continuing decline in the number of farms (down from 1,800 in 1964 to 1,200) and the amount of land in farm use (down from 289,000 acres in 1964 to 195,000 acres), agriculture is expected to remain a significant part of the County's economy. Unlike many counties in the Washington metropolitan area, Frederick has been able to sustain the supporting agricultural industries including farm equipment sales, grain and feed mills, and processing businesses.

The County's leading agricultural sectors are dairy and livestock/poultry. The County is the State's leading dairy producer ($50.1 million in 2002) and is one of the top 75 counties in the entire country. Frederick also leads the State as the largest beef producer. Frederick County is ranked first in the State in milk production, hay production and corn for silage. While the field crop and forage represents a secondary sector it accounts for the largest agricultural land use in the County with approximately 120,000 acres.

The equine industry in the County is ranked second in the State for number of equine facilities and number of acres (22,000 acres) used solely for equine purposes. The County ranks third for the number of horses (8,500).

The horticulture industry, which includes Christmas tree farms, greenhouse operations, sod, and production of nursery stock, is an increasingly larger component of the County's agricultural industry. Compared to other central Maryland jurisdictions the County's industry is relatively small with about 49 horticultural operations.

The produce industry includes the production of fruits and vegetables, which are a significant component of direct market sales through roadside stand operations and farmers markets. Included in this sector is the expanding winery and wine grape operations, which are part of the high-impact value-added agricultural enterprises that are replacing traditional production

farming. The agricultural industry will continue to change reflecting market conditions and will be affected by forces beyond the County boundaries.

RURAL LANDSCAPE AND COMMUNITIES

Beyond the role of agriculture as part of the County's economy is the effect agriculture has on how the County looks, its rural landscape of rolling hills and open vistas and its rural communities. For many residents and visitors, the County's rural landscape and small towns are a defining contribution to the perception of the County as a unique place.

The rural landscape extends beyond those lands that are under active agricultural use and include residential and other uses that are generally compatible with the surrounding agricultural lands. Throughout the County's agricultural area are rural communities, some dating back to the County's early settlement that provides opportunities to support the surrounding agricultural activities. While these communities are not considered growth areas that would accommodate intensive new development they could provide a focus for locating agricultural processing facilities or other businesses that support agriculture.

AGRICULTURAL RESOURCE PROTECTION MEASURES

AGRICULTURAL ZONING

The County's Agricultural Zoning District encompasses approximately 243,000 acres and is the primary means to protect our agricultural resources. The County's Agricultural zone is regarded as one of the strictest in the State though it does permit limited residential subdivision and other non-agricultural uses.

In 1977 the County amended its Zoning Ordinance including a significant reduction in the residential subdivision potential in the Agricultural Zoning District. Prior to 1977 agriculturally zoned parcels could accommodate up to 49-lot subdivisions, which resulted in approximately 59 subdivisions created throughout the County's agricultural area. Since 1977 parcels zoned Agricultural and existed as what is called an original tract as of August 18, 1976, could only subdivide into 3 lots + remainder, with a minimum lot size of 40,000 square feet. In 1986 the Agricultural zone was amended to allow for additional subdivision rights if the new lots are clustered in a small portion of the farm parcel and the lots are no greater than 2 acres in size. The cluster option allows for an additional lot per 50 acres for parcels greater than 25 acres. It is also required that the cluster lots be located on the least productive soils.

Remainder parcels have no further subdivision rights and are often times in tracts of 100 acres or more. While these parcels do not have further subdivision rights under the existing zoning, there are additional non-agricultural uses permitted either by right or by special exception that can be permitted. A parcel's status as a remainder does not include a permanent preservation easement.

In addition to the ability to create 3 lots + a remainder for residential use, the Agricultural zone also permits farm lots, which are lots of 25 acres or more that are intended to be created solely for farm use. Such lots created after August 18, 1976 count towards the three lots and a remainder subdivision rights. In the past, farm lots were not required to be perced for an on-site

sewage disposal system since the use of the lot was to be strictly agricultural. However, because many of the farm lots were subsequently perced for residential use the County recently revised the subdivision regulations to require farm lot subdivisions to adhere to normal subdivision well and perc test requirements.

Since 2002 the number of residential lots created in the Agricultural zone has averaged approximately 150 lots/year, which is an increase over the period of 1995 to 2001, when the average was 84 lots/year. When combined with the number of farm lots created since 1995, a total of 1,804 lots encompassing 22,500 acres have effectively been taken out of agricultural use.

STATE AND COUNTY AGRICULTURAL PRESERVATION PROGRAMS

Maryland recognized the impact of the loss of farmland in the 1960's; which led to the development of Agricultural Land Preservation Programs. Agricultural land is consistently threatened by competing land uses. Agricultural Land Preservation Programs have become increasingly popular as a method to permanently preserve agricultural lands in the face of development pressure. Land preservation has many benefits to the community such as; protection of the land for local food and fiber production, limits sprawl, provides environmental protection, curbs the cost of community services, allows the implementation of land use plans, and also provides equity to landowners without developing the land. Frederick County has been at the forefront of the use of land preservation initiatives, as have many of the Counties in Maryland. Land preservation activities in the County are summarized below:

- As of March 2010 the County has permanently preserved 45,131 acres.
- There are a total of 322 farms currently preserved.
- Since 2001 the County has preserved an average of 3,200 acres of farmland per year.

Maryland Agricultural Land Preservation Foundation (MALPF) Program

The Maryland Agricultural Land Preservation Foundation (MALPF) was created in 1977 by the Maryland General Assembly and is an agency within the Maryland Department of Agriculture. The Foundation purchases agricultural preservation easements on properties through a competitive application process submitted by the property owners. These easements permanently restrict any non-agricultural related development on the parcels. Frederick County settled on its first MALPF easement in 1980. In 2007, MALPF had a total of 1,933 easements statewide preserving over 265,600 acres of land. Activity in the MALPF program has varied throughout the years due to a variety of factors including funding, easement values and development activity. In Frederick County, there are currently 165 MALPF Districts that encompass 23,557 acres, which includes 117 farms (18,235 acres) under easement.

Frederick County Critical Farms Program

The Critical Farms Program was established in 1994 in order to assist full-time farmers in buying farmland. This program was created to help farmers compete with non-farm buyers who often times have resources not available to farmers and therefore are in a more competitive position to buy farmland. The program works through the County's purchase of an option to acquire an easement that takes place at the time of settlement on the land purchase. The option agreement with the County requires the new farm owner to make application to MALPF and or another land preservation program within 5 years.

Since the program was adopted in 1994 the County has assisted in the acquisition of 27 farm parcels by fulltime farmers on 3,383 acres of land. Fifteen of these farm parcels have subsequently been permanently preserved under MALPF, two have been preserved under the Rural Legacy Program and two have been preserved under the Installment Purchase Program.

Frederick County Installment Purchase Program (IPP)

The Installment Purchase Program (IPP) was created in 2002 to supplement local land preservation efforts and to provide an attractive alternative to existing land preservation programs. The IPP works through the County's Bonding Authority to acquire development easements at today's prices and pay for them with a deferred principle payment and annual tax exempt interest payments. Rather than pay lump sum amounts for easements, the County invests in a zero coupon bond that matures to the full principle value of the easement. The property owner then receives the tax-free interest and a lump sum principle payment at the end of a term, specified by the landowner between 10 and 20 years. Since the program was created in 2002, the Installment Purchase Program has preserved 96 farms on 14,811 acres of land.

Rural Legacy Program

In 1997 the Maryland General Assembly passed the Neighborhood Conservation and Smart Growth initiatives to strengthen the earlier Planning Act of 1992. The Rural Legacy Program was established under these initiatives with the purpose of preserving agricultural, forest, and natural resource lands in contiguous blocks. The competitive grant funding is available to local jurisdictions or private land trusts to either purchase land outright or purchase development easements.

There are two approved Rural Legacy areas in Frederick County; the joint application between Frederick County and the Mid-Maryland Land Trust Association, Inc (MMLTA) and the joint application between Frederick County and the Carrollton Manor Land Trust Association. The Mid-Maryland / Frederick County Rural Legacy area was established in 1998 in the western part of the County encompassing the Middletown Valley along South Mountain extending from U.S. 340 north to Myersville. The Carrollton Manor/ Frederick County area was established in 2003 in the southern part of the County east of the Catoctin Mountains to the Monocacy River.

Since the Rural Legacy Program was created there have been 30 properties covering 4,064 acres put under a preservation easement. Twenty-nine of these properties to date have been preserved in the Mid-Maryland Rural Legacy area and the first easement was acquired in 2007 in the Carrollton Manor Rural Legacy area.

Transportation Enhancement Program

The Enhancement Program was first developed under the 1991 Federal transportation legislation known as ISTEA (Intermodal Surface Transportation Efficiency Act) and has been carried forward with subsequent reauthorizations of Federal transportation legislation. The State of Maryland has been using this funding to purchase development easements to protect land associated with the Battle of South Mountain.

Federal Farm and Ranch Protection Program (FRPP)

The Federal Farm Bill provides funding through the Natural Resource Conservation Service (NRCS) for farmland preservation. The County has been active in the FRPP since 1996 with an independent application, which won grant approval. Since that time the County has made joint

application with other Maryland Counties through the Maryland Agricultural Land Preservation Foundation (MALPF) Program. Nearly all of the properties utilizing FRPP funds have been through MALPF. However the County does have easements on 496 acres that have used FRPP funds independent of MALPF.

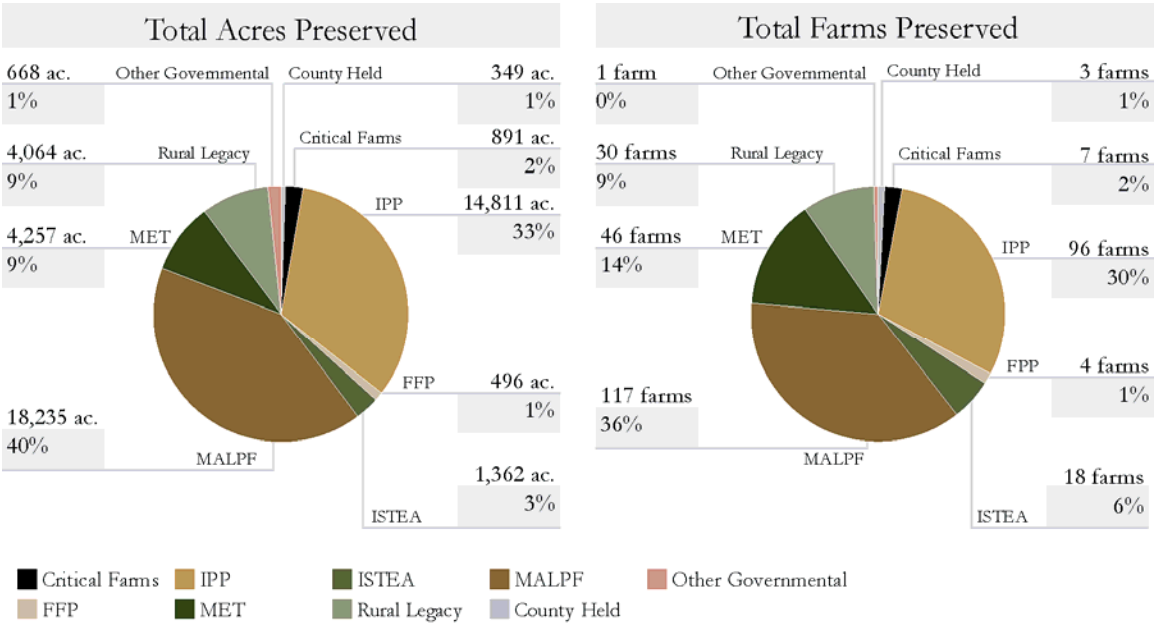
Maryland Environmental Trust (MET)

The MET is a quasi-governmental organization of the State Department of Natural Resources with the purpose of protecting scenic open spaces including farm and forestland, wildlife habitat, environmentally sensitive or unique areas and historic sites. Easements are established only through voluntary donations by the property owner, which does provide property and income tax benefits. The first easements in Frederick County were donated on the Austin Renn Farm in Buckeystown. As of 2009 there have been 46 properties on 4,257 acres of land placed under an MET easement in Frederick County.

FUNDING

Funding for easement acquisition in Frederick County comes from four primary sources: State and Federal grants and cost share programs such as MALPF, Rural Legacy and FRPP; the Local Share of the Agricultural Transfer Tax (75%); a share of the Recordation Tax (15%); and local general revenue funds allocated through the County's annual budget process. Although the Agricultural Transfer Tax can be allocated to various programs it has been almost exclusively devoted to the MALPF Program. A portion of the Recordation Tax is dedicated to the IPP Program. The Critical Farms Program, Rural Legacy and MALPF also receive funding from our general revenue funds. From 1998-2008 over $50 million dollars of local funding has been allocated to the various State and local programs to preserve land.

Figure 05-1: Agricultural Preservation



Source: Frederick County Division of Planning, as of March 1, 2009

PRIORITY PRESERVATION ELEMENT

The Maryland General Assembly passed the Agricultural Stewardship Act of 2006 (House Bill 2), which requires counties seeking state certification of their agricultural land preservation program include a Priority Preservation Element in its comprehensive plan. The primary component of the Priority Preservation Element is the delineation of Priority Preservation Areas (PPA's), which provide a focus for establishing agricultural preservation easements to create larger blocks of preserved farmland.

The Act states that Priority Preservation Area (PPA) shall:

- Contain productive agricultural or forest soils, or be capable of supporting profitable agricultural and forestry enterprises where productive soils are lacking.
- Be governed by local policies that stabilize the agricultural and forestland base so that development does not convert or compromise agricultural or forest resources.
- Be large enough to support the kind of agricultural operations that the county seeks to preserve, as represented in the comprehensive plan.

PRIORITY PRESERVATION PLAN

The County's Priority Preservation Plan is comprised of the following:

1. Rural Reserve
2. Priority Preservation Area
3. Implementation Strategy

Rural Reserve

The purpose of the Rural Reserve is to identify and promote the rural agricultural characteristics of the County and potential for agricultural and resource based industries. The County's Rural Reserve is designated for those areas outside of the community growth boundaries and encompasses lands in the County designated as Agricultural/Rural. Resource protection tools such as Agricultural Preservation easements, restrictive agricultural zoning and agricultural economic development are some of the methods used to protect this resource. The Rural Reserve is not to be considered as residual land left over from the growth areas but as specifically identified land with the purpose of maintaining the rural character of the County valued by so many of it's citizens. The Rural Reserve is intended to remain predominately intact for the future with only minor boundary revisions through future comprehensive plans.

Priority Preservation Areas (PPA)

Within the Rural Reserve, PPA's are established to target and prioritize land preservation easement purchases and other incentives to preserve land. Further, the purpose of the PPA's is to target land preservation efforts and build critical masses of protected lands on the highest priority properties. In addition the Priority Preservation legislation builds on earlier State efforts through the Rural Legacy Program to concentrate land preservation efforts in those areas deemed to be most important by the County. As such most of the two approved Rural Legacy areas; the Mid-Maryland Rural Legacy Area and the Carrollton Manor Rural Legacy Area have

been included as Priority Preservation Areas. The criteria for establishing Priority Preservation Areas included the following:

- Prime farmland soils as identified in the USDA Soil Survey for Frederick County
- Existing clusters of agricultural preservation easements
- Predominance of large farm parcels of 100 acres or more
- Existence of high value agricultural enterprises such as dairy farms, wineries, and greenhouse/nursery operations.

Frederick County has a large agricultural land area of over 250,000 acres with many valued agricultural areas, most of which could be considered for priority preservation. However, in order to truly prioritize and to create an achievable preservation plan, the priority preservation areas were constrained in a reasonable manner. The methodology for identifying the Priority Preservation Areas involved the mapping of characteristics including size of parcels, prime farmland soils, existing preservation easements, zoning, comprehensive plan growth boundaries, and high value agricultural enterprises. In total there are 99,038 acres of land included in the five Priority Preservation Areas described below.

Mid-Maryland Priority Preservation Area

This PPA predominately consists of the Mid-Maryland Rural Legacy area and encompasses approximately 17,460 acres west of Catoctin Creek, east of South Mountain, extending north of US 340 to Myersville. This is an area of significant prime farmland including two of the three best farmland soils in the County with Myersville and Fauquier loams. This PPA contains the largest contiguous block of preserved farmland in the County, with 8,983 acres (51% of the total PPA and 60% of Undeveloped Land in PPA) under easement.

Carrollton Manor Priority Preservation Area

This PPA contains approximately 17,966 acres located south of Ballenger Creek, east of US 15, west of the Monocacy River extending south to the Potomac River. The MD 85/New Design Road corridor contains the largest concentration of preserved farmland in this PPA and is characterized by larger farms on relatively flat terrain, with some of the most productive agricultural soils (Duffield) in the County. There are 4,213 acres (23 % of the total PPA) under easement and 26% of the undeveloped land remaining within this Priority Preservation Area.

Walkersville Priority Preservation Area

This PPA encompasses 10,946 acres virtually surrounding the Town of Walkersville and extends north to the Town of Woodsboro. The PPA also extends to the west of US 15 including the Crum and Thatcher properties, which were annexed into the City of Frederick in 2009. The area includes the highest concentration of prime farmland anywhere in the County and includes 1,955 acres (18% of the total PPA) under easement. This PPA encompasses the Town of Walkersville's growth area that would accommodate potential annexation into the Town for residential or employment development. Currently there are 980 acres of undeveloped land within the corporate limits of Walkersville, which at a density of 3.5 dwellings per acre could yield approximately 2,335 dwellings. This is important in order to recognize the Town of Walkersville's future expansion needs that can be accommodated within the current municipal boundary. As proposed, this PPA will enable Walkersville to maintain its identity separately from Frederick City to the southwest and the Town of Woodsboro to the north.

Middletown/Jefferson Priority Preservation Area

This PPA encompasses 5,710 acres and is west of Braddock Heights and east of Catoctin Creek extending south from Middletown to Jefferson. This PPA was delineated based on the predominance of prime farmland soils and the high percentage of farm parcels greater than 100 acres in the Middletown valley outside of the Mid-Maryland Rural Legacy area. There are 1,570 acres (27% of the total PPA) under easement, which is 30% of the undeveloped land remaining within the PPA. There are 27 parcels of land that are larger than 100 acres that encompass over 3,960 acres.

Eastern County Priority Preservation Area

This PPA is the largest, encompassing 45,956 acres east of MD 75, west of the Carroll County line and extending south to the Town of New Market. The northern extent is MD 194 north of Ladiesburg. The area includes 10,666 acres (23% of the total PPA) under easement, which is over 27% of the undeveloped land remaining in the PPA. The predominance of prime farmland and existing preservation activity are visible in this area. With the high degree of preservation in neighboring Carroll County, this PPA results in a large regional land preservation area.

Table 05-1: Priority Preservation Areas

Priority Preservation Area	Total Land Area (acres)	*Undeveloped Land (acres)	Existing Easements (acres)	Percent Undeveloped Land in Easement	Land Needed for 80% Goal (acres)
Mid-Maryland	17,460	15,081	8,983	60%	3,082
Carrollton Manor	17,966	16,280	4,213	26%	8,811
Walkersville	10,946	10,376	1,955	19%	6,346
Middletown/Jefferson	5,710	5,268	1,570	30%	2,644
Eastern	45,956	39,084	10,666	27%	20,601
Total	**99,038**	**86,089**	**27,387**	**32%**	**41,484**

*Parcels greater than 25-acres and NOT Zoned for Development

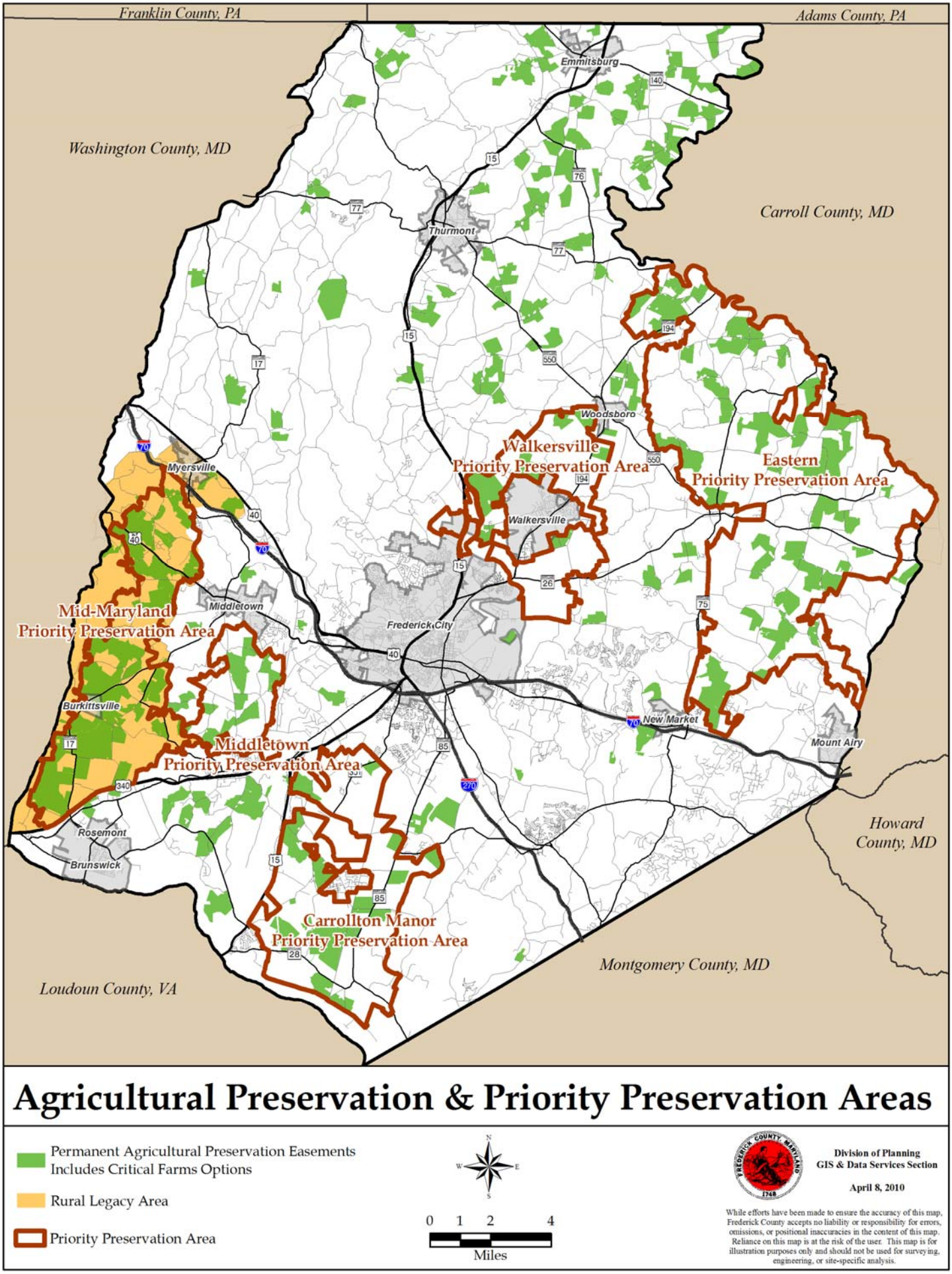
Implementation Strategy

In order to implement the Priority Preservation Plan and promote the preservation of these areas a number of actions should be taken.

- Increase the visibility and identity of the rural character of the County by promoting those areas outside of the growth areas as a Rural Reserve. The Rural Reserve would include the Agricultural/Rural designation and establish that development, public infrastructure and regulations will be made in accordance with the rural character.
- Support amendments to Zoning Ordinance to consider limiting the number of large farm parcels (which are used for residential purposes) that can be created off an original tract of land. In addition a maximum lot size should be considered for the Ag zoning district.

- Amend the Ranking systems for the Installment Purchase Program (IPP), the Maryland Agricultural Land Preservation Foundation Program (MALPF) and the Critical Farms Program to increase the ranking points for properties within the PPA's.
- Re-examine the potential for a Transfer of Development Rights (TDR) Program that would establish the PPA as sending areas. A TDR program would utilize private sector funding as a means to preserve land while directing new development to the community growth areas.
- Prepare a fiscal analysis for the impact of an expanded tax credit program to give tax credits to property owners to establish 10 year agricultural preservation districts in order to give enough time for easements to be purchased or otherwise preserved.

Map 05-1: Agricultural Preservation and Priority Preservation Areas



ACTION ITEMS

AG-A-01 Study the feasibility of a transfer of development rights (TDR) concept and other alternatives that would support protecting agricultural land in the County.

AG-A-02 Prepare Zoning Ordinance Amendment to support Agricultural industries and supporting businesses in Rural Communities while reducing regulatory roadblocks.

AG-A-03 Develop and maintain a database of agricultural remainder properties and the development potential of properties zoned Agriculture and adopt incentives to promote the use of protective easements on existing agricultural remainders.

AG-A-04 Revise standards for County road improvements in the Agricultural areas, basing the new standards on the needs of the agricultural community rather than the needs of non-agricultural uses.

AG-A-05 In coordination with the Office of Economic Development, prepare an Agricultural Action Program to identify strategies that promote agricultural support industries and the agri-tourism industry.

AG-A-06 In cooperation with other participating counties and the County's State Delegation, obtain appropriate revisions to the easement programs of the Maryland Agricultural Land Preservation Foundation and the Maryland Environmental Trust to make the programs more attractive to farmers. Particular attention should be paid to the amount of funding available and the appraisal system in the easement program.

AG-A-07 Prepare revisions to the County's Zoning Ordinance, Subdivision Regulations, building codes, and other related regulations/ordinances to address the evolving technological and operational characteristics of farm operations. This review will include zoning changes for appropriate agricultural uses.

AG-A-08 Develop proposal to minimize farmland loss to residential activity such as establishing maximum lot size in agricultural zoning district.

AG-A-09 Develop a program to educate the public and the farming community on planning and agricultural issues.

AG-A-10 Implement the Priority Preservation Plan strategies.

AG-A-11 Promote and expand the farm market network in the County.

06 Providing Transportation Choices

An important purpose of this chapter is the consideration of all modes of transportation in addressing the mobility needs of the County. This is a significant departure from previous County plans that focused solely on highways. While this Plan recognizes that automobiles will remain as the most prevalent means of transportation it also emphasizes the need to provide for a more balanced transportation system.

This chapter will provide an overview of long range transportation improvements for the following:

- *Highways*
- *Public Transportation*
- *Pedestrian and Bicycle Facilities*

	Amendment Status
Goals, Policies, Action Items	**04/08/2010**
Maps and Graphics	**04/08/2010**
Background Information	**04/08/2010**

A vision for providing transportation choices…

For tomorrow's citizens and employers of Frederick County, solutions to the myriad transportation crises facing the region emerge, at least in part, due to changes in the patterns of land use. Coming into its own as a center of employment, Frederick County will continue to take full advantage of its proximity to the Washington DC metropolitan area while seeking ways in which workers can greatly reduce their commuting distance. For many information workers, the need to commute to a job site will have diminished greatly in the first half of the 21st century, while those that continue to commute will increasingly do so over shorter distances as the proliferation of mixed use neighborhoods makes it viable – and attractive – to live and work in the same place. Improvements to the transportation network – guided as much by network management as by tangible infrastructure development – will be completed on a regional basis in an attempt to maximize both limited funding and valuable energy resources. For tomorrow's Frederick County, the transportation technology with the greatest potential to improve the quality of life for citizens may not be the wheel, train, or turbine – it may indeed be the shoe.

GOALS

TR-G-01 Plan a safe, coordinated and multi-modal transportation system on the basis of existing & future development needs, land uses and travel patterns.

TR-G-02 Integrate transit, pedestrian, bicycling and ADA accessible facilities into the County's existing roadways and communities and the design of new roadways and communities.

TR-G-03 Maintain and enhance the quality of the transportation system to assure an acceptable level of service, safety and travel conditions for all roadway users.

TR-G-04 Reduce the need for single occupancy auto use through travel demand management and increasing the share of trips handled by bus; rail; ride-sharing; bicycling and walking.

POLICIES

Roads & Highway Related Policies

TR-P-01 Utilize access-management principles to reduce the conflicts between local and through traffic to improve the safety and capacity along roadways.

TR-P-02 Continue to support the preservation of rural roads in agricultural and resource conservation areas and historic bridges countywide through implementation of the county Rural Roads program and application of context sensitive design.

TR-P-03 Maximize transportation network connectivity by providing an interconnected street and transportation network within and between new and existing development.

TR-P-04 Ensure County, State and developer funded road designs are compatible with and sensitive to adjacent land uses by incorporating context-sensitive design and streetscape improvements where appropriate.

TR-P-05 Consider the roadway's existing and projected traffic volumes, crash history, level-of-service, and planned land use patterns in prioritizing roadway and bridge improvements in the County's Capital Improvement Program (CIP).

Bicycle & Pedestrian Related Policies

TR-P-06 Support the implementation of the Countywide Bikeways and Trails plan including identifying needed sidewalk, shared-use path, on-street bikeway improvements; maintenance; education and enforcement.

TR-P-07 Ensure commercial and residential development constructs shared use paths and on-street bikeways designated in the County Bikeways & Trails Plan that pass through or immediately adjacent to their proposed development site. Easements in lieu of constructed improvements may be provided in the case of shared use paths.

TR-P-08 Prioritize bicycle and pedestrian network implementation based on providing safe and functional transportation connections between residential, employment, recreational, shopping, schools and transit centers.

TR-P-09 Pursue the shared use of existing and proposed publicly and privately owned utility right-of-ways for the purposes of establishing shared use path facilities.

Public Transportation Related Policies

TR-P-10 Encourage higher density and mixed use residential and employment centered transit oriented development in growth areas that are served by or could be served by rail service, local and regional bus transfer points, shared-use paths and ride-sharing facilities.

TR-P-11 Support expansion and improvement of local and regional multi-modal commuter options including rail, bus, and park and ride provision.

TR-P-12 Support the development of a rapid bus, heavy rail or light rail transit-way along the I-270 corridor.

TR-P-13 Support the implementation of the short and long-term transit goals set forth in the 2007 Transportation Development Plan.

Other Transportation Related Policies

TR-P-14 Continue to cooperate with the City of Frederick on planning & implementation of the Frederick Municipal Airport Master Plan.

TR-P-15 Accommodate safe use and access in the design and maintenance of all developer or County funded road projects by public transportation, cyclists, pedestrians and users with disabilities.

TR-P-16 Foster close coordination between Frederick County and the Maryland Department of Transportation; the Metropolitan Washington Council of Governments; and adjoining jurisdictions on matters related to funding; management of existing transportation networks; planning and programmed improvements; data collection and modeling; emergency through routes; land use plans and coordinated legislative actions.

TR-P-17 Support the accommodation of freight rail and trucking, which will enhance development of a broad base of industrial and commercial uses by providing adequate infrastructure and the designation of industrial or freight rail dependent land uses along the rail lines.

TR-P-18 Support coordinated efforts to pursue Federal, State, local, non-profit and private funding for transportation improvements.

TR-P-19 Support efforts to establish the framework for permitting electronic toll collection along roads in Frederick County.

TR-P-20 Identify and improve the location and alignment of new roads, bicycle/pedestrian connections and transit links in advance of future need to coordinate establishment of right of way requirements and access control.

TR-P-21 Minimize the impact of airport, highway, truck and rail noise on sensitive land uses.

TR-P-22 Support regional air quality conformity efforts by participating in the regional air quality conformity assessment process based on FHWA & EPA regulations.

TR-P-23 Consider transportation system management (TSM) opportunities when planning network improvements for efficiency, safety, enforcement, and data collection.

TR-P-24 Encourage the preservation and maintenance of state / national scenic byways in ways that retain their natural and historic character State and National Scenic byway.

TR-P-25 Employ Transportation Demand Management (TDM) options such as ridesharing, transit provisions and incentives, commuter outreach programs, non-motorized and ride-sharing transportation facility provision, community outreach, tele-work and parking demand management as an integral part of county, developer, and state roadway projects in Frederick County.

TR-P-26 Maximize the opportunities to manage the safe and efficient movement of trucks through Frederick County.

STATE PLANNING MANDATES AND VISION

This chapter supports the following State Visions:

- *Community Design*
- *Infrastructure*
- *Transportation*

In addition, The 2009 Maryland Transportation Plan includes the following goals for transportation system planning in the State:

- *Quality of Service:* Enhance users' access to, and positive experience with, all MDOT transportation services.
- *Safety and Security:* Provide transportation assets that maximize personal safety and security in all situations.
- *System Preservation & Performance:* Protect Maryland's investment in its transportation system through strategies to preserve existing assets and maximizing the efficient use of resources and infrastructure.
- *Environmental Stewardship:* – Develop transportation policies and initiatives that protect the natural, community, and historic resources of the State and encourage development in areas that are best able to support growth.
- *Connectivity for Daily Life:* Support continued economic growth in the State through strategic investments in a balanced, multimodal transportation system

RELATED COUNTY PLANS

2001 Frederick County Master Transportation Plan

The Master Transportation Plan provides a countywide focus on transportation needs and supports a multi-modal approach in addressing the mobility needs of the County. The Plan compiles the various goals & polices from individual transportation plans, reports, and studies.

1999 Frederick County Bikeways & Trails Plan

Frederick County adopted its first Bikeways and Trails Plan in December 1999, which addresses both on-street bicycle facilities and off-street trails. This plan proposes a county wide network of 334 miles of on-street bikeways and 174 miles of off-street trails.

2007 Transportation Development Plan (TDP)

The TDP assesses current services and also recommends transit improvements and expansion for the following 5-10 year period. The current TDP was adopted in 2007. TransIT Services also works with an appointed committee, the Transportation Services Advisory Council (TSAC), to identify transportation trends and issues and increase awareness of transportation alternatives.

Transportation Priorities Review

Every year the County prepares a list of transportation priorities. The report primarily addresses state highway projects, but also includes county roads, local and regional transit, bike/pedestrian projects, and the City's Municipal Airport. This listing is forwarded to the Maryland Department of Transportation for funding consideration in the State's CTP.

PROVIDING TRANSPORTATION CHOICES

An important purpose of this chapter is the consideration of all modes of transportation in addressing the mobility needs of the County. This is a significant departure from previous County plans that focused solely on highways. While this Plan recognizes that automobiles will remain as the most prevalent means of transportation it also emphasizes the need to provide for a more balanced transportation system. This becomes more apparent when one looks at the proportion of the population that cannot make use of an automobile due to: age, too young and the elderly; having a disability; or not being able to afford an automobile. As the County grows the number of people and the overall proportion of the population that is dependant on transportation choices will continue to increase. Supporting transportation options will also be a focus for those who have the option of using an automobile to encourage residents to choose transit, bicycling or walking for at least some of their daily trips.

The focus of a balanced, multi-modal transportation system needs to be on providing mobility for people and not just automobiles. For those communities that have focused primarily on building additional road capacity, this can be a significant departure in the mindset for addressing the increasing level of congestion. It is generally accepted that we will not be able to build enough road capacity to ever provide a significant relief to congestion. In Maryland the increase in Vehicle Miles Travelled (VMT) is far outpacing the rate of population growth and the ability of communities to increase road capacity. This situation requires communities to improve all transportation choices to compensate for the inability of highway capacity to keep pace with the expected growth in the County.

To provide a balanced transportation system, that meets the needs of the transportation disadvantaged and others that are able to use an automobile, will require the County to focus on two basic approaches to transportation or mobility planning: reducing the demand for auto use and providing access for all transportation modes.

BACKGROUND & TRENDS

Frederick County's transportation system requires special consideration in view of several issues:

- Local and regional motor vehicle traffic continues to increase. The primary effects of this are felt along the I-270, I-70 and US 15 corridors and in the City of Frederick where a high volume of traffic, both local and through traffic is traveling on the few roads that run continuously through the area.
- The capacity of the County's highways is key to growth management of the County and should be carefully coordinated with the land use plans. Development along many corridors in the county continues to threaten safe and efficient operation along these routes. Congestion along these corridors is not solely the product of increasing traffic volume, but also of conflicting turning movements at intersections and driveways.
- The reduction in federal & state funding for roadways places more financial pressure on local jurisdictions, as well as on private developers, to fund new roadways, roadway improvements, and transit service.
- A multi-modal system will be needed to serve the County's future transportation needs. A multi-modal transportation system is comprised of highway, transit, pedestrian and bicycle facilities, airport and rail facilities; together with interconnections between each mode.
- Transit, while growing in importance in Frederick County, continues to carry a relatively low percentage of total trips.
- Beyond a strict capacity based approach to highway systems evaluations, the community character impacts of roads and traffic also need to be considered. This is particularly true in the rural communities where historically development has been highway oriented.
- The private sector will increasingly be part of the solution of transportation issues, including financing and other transportation system modifications.

TRAFFIC VOLUMES

Vehicle Miles of Travel (VMT)[1] captures the total amount driving by all vehicles on the entire road network in a given time period and geographic area. This includes residents driving within the County as well as those who are just driving through the County. VMT can be used to provide a general indication of how driving continues to dominant how we get around. From 1980-2006 the County's total population increased by 99%, while the total VMT increased by 197%. The avg. annual pop. growth has been 2.7% versus an avg. annual VMT rate of 4.4%.

JOURNEY TO WORK TRENDS

The predominant mode of travel to work continues to be the automobile with a lone driver. The percentage of Frederick's workers driving alone increased from 73% in 1990 to 79% in 2006. Workers using alternative means of commuting including carpooling, transit, walking, and bicycling continues to decline from 23% to 17%. Of Frederick's 102,318 resident workforce (as of 2000), 42,046 (41%) work outside of the County. This is a slight increase from 40% in 1990. Of these 42,046 out-commuters over half (22,867) work in Montgomery County.

[1] Vehicle Miles Traveled (VMT) trend data in Frederick County is for State Highways only.

Table 06-1: Transportation Characteristics – Frederick County

	1990	2000	2006	2007
Total Population	150,208	195,277	222,938	224,705
Total Population 16 Years or Older	114,419	147,144	173,622	173,406
Commuting to Work (Workers >16 Years Old)	80,850	102,318	118,660	117,769
Means of Transportation to Work	**1990**	**2000**	**2006**	**2007**
Car, truck, or van -- drove alone	72.9%	79.3%	79.1%	80.1%
Car, truck, or van -- carpooled	17.1%	12.4%	12.6%	10.3%
Worked at home	3.6%	4.0%	3.5%	4.8%
Walked	3.6%	2.4%	1.9%	1.8%
Public Transportation (excluding taxicab)	2.0%	1.4%	1.6%	2.5%
Other means (Including Bicycle)	0.8%	0.6%	1.2%	0.5%
Vehicle Availability	**1990**	**2000**	**2006**	**2007**
Households with No Vehicle Available	5.7%	5.0%	4.3%	3.8%
1 Vehicle per Household	24.5%	25.2%	26.6%	25.3%
2 Vehicles per Household	42.6%	43.5%	41.1%	40.8%
3 or more Vehicles per household	27.2%	26.4%	28.0%	30.1%
Mean travel time to work (minutes)	27.3	31.9	33.8	35.1

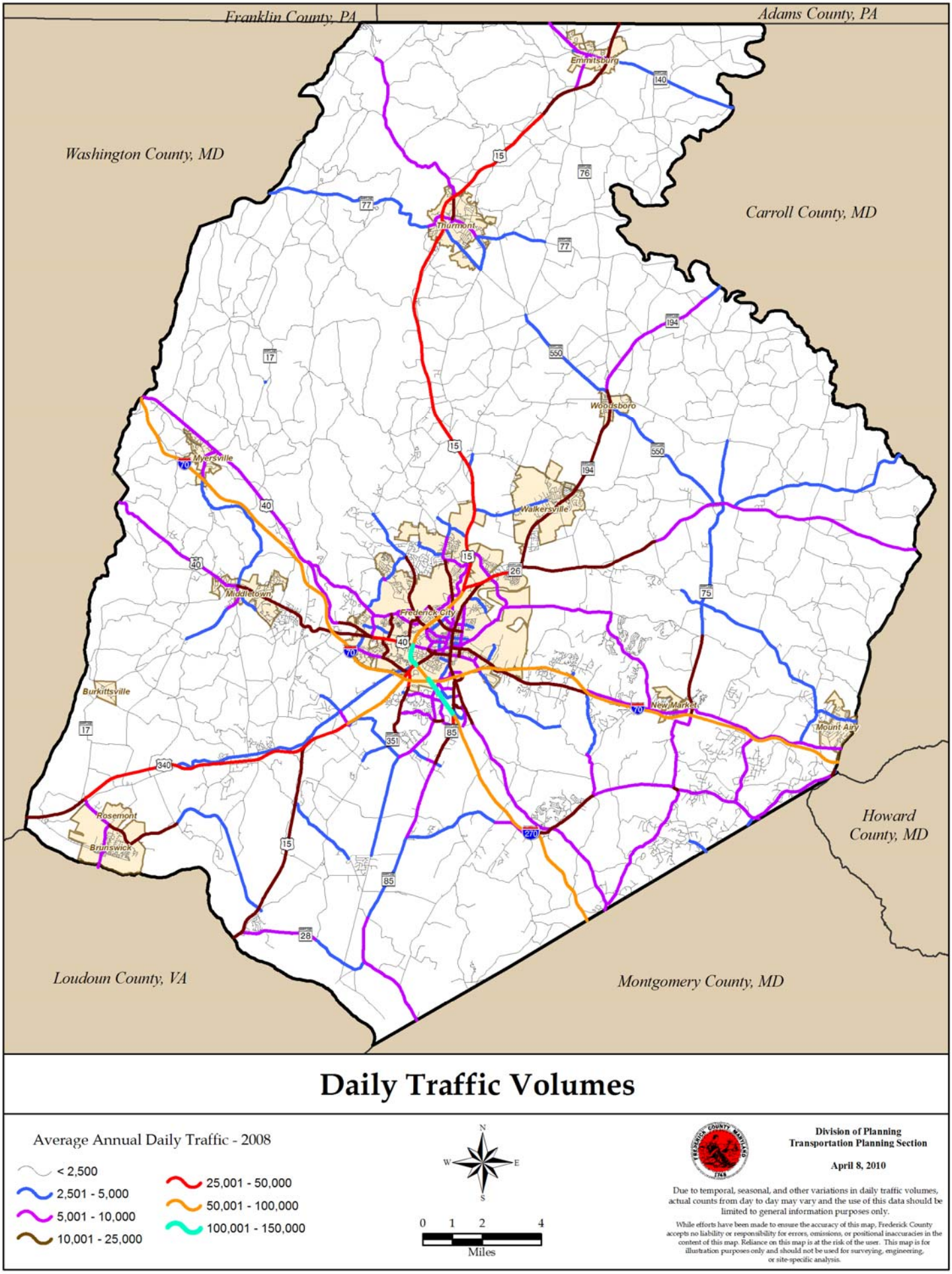
Source: US Census: 1990, 2000 & American Community Survey: 2006, 2007

OTHER TRANSPORTATION TRENDS

Measurable shifts from auto use to transit for some daily trips can only happen with increased regional and local jurisdiction transit service, rising fuel costs, increased participation in employer-sponsored transit benefit programs, and increased population growth in areas well served by transit.

- From FY 2002 through FY 2008, average weekday transit ridership in Frederick County grew at rate of over 15%.
- MARC service average daily ridership for the Frederick County stations has increased over 38% since 2000 with over 1,500 passengers a day now boarding in Frederick County. While the Brunswick station continues to be the most heavily used station in the County, the Frederick and Monocacy stations have experienced the greatest ridership increases since 2002 at 25% and 55% respectively.
- The 991 Commuter bus service, which provides service from Hagerstown and Frederick to the Shady Grove Metro station, experienced a greater than 15% increase in ridership in 2007, including an increase of over 76% since 2000.
- Combined ridership on MTA commuter rail and commuter bus increased at a rate of almost 8% per year from 2000 to 2007.

Map 06-1: Daily Traffic Volumes



ROADS & HIGHWAYS

PROGRAMMED IMPROVEMENTS – SHORT & MEDIUM RANGE

Maryland Consolidated Transportation Program

State highway projects are funded in the MDOT's six-year Consolidated Transportation Program (CTP). Reflected costs include planning, design/engineering, right-of-way and construction and represent an approximate total cost of a project, some of which may not be reflected in the funding programmed by the State in the CTP.

County Capital Improvement Program

The County Capital Improvement Program (CIP) is a 6-year funding program prepared on an annual basis. It identifies roads, highway, bridge and intersection improvement projects and funding levels for those projects. It also identifies funding contributions to SHA projects.

PLANNED IMPROVEMENTS – LONG RANGE

Highway Needs Inventory

The State Highway Needs Inventory (HNI), updated every three years, identifies future (20+ year) highway improvements that warrant major construction or reconstruction. The HNI is not a construction program, and inclusion of a project on the HNI is not a commitment to implementation, nor is it prioritized. Projects must be listed in the HNI to be eligible for funding in the CTP.

County Highway Plan

The Highway Plan component of the Comprehensive Plan identifies new road alignments, realignments of existing roadways, and future interchange improvements. The majority of these alignments are carried forward from the eight region plan updates adopted between 1997 and 2008. Many of the roads will be developer-funded and constructed as part of the land development process or be combined County, State, Municipal & developer projects. New road alignments are conceptual in nature and will be subject to further engineering and feasibility studies to determine specific alignments. The purpose of the Highway Plan is to:

- Coordinate long-term highway improvements with the projected land use plans.
- Identify functional classification (interstate, arterial, collector, local) for all County and State roads.
- Assist with preservation of right-of-way for road alignments to accommodate future improvement of existing roads/interchanges and for construction of new roads.

Highway Functional Classification

The Highway Plan applies a functional classification to the 2,345 miles of roads within the County including those maintained by the State and the municipalities. The functional classification is based on several factors such as traffic volume and speed, trip length of those driving on the road, and the degree of access control. The following are the current definitions and characterizations of the highway functional classifications:

- Freeway/Expressway – Divided highways that carry a high volume of traffic at high design speeds for interstate and inter-county travel. They connect the major centers of activity. They provide uninterrupted flow (no signalized intersections) from origin to destination and access is fully controlled by grade separated interchanges. Freeways in Frederick County include I-70; I-270; US 15 and US 340.
- Major Arterial – Carries a high volume of traffic for travel within the county, or for travel to and from adjacent counties. Access is typically allowed from intersecting public streets and not directly with adjoining parcels.
- Minor Arterial – Carries moderate to high volume of traffic usually for travel within the County. These roads typically provide access to the interstate system.
- Collector – Collects and distributes traffic from neighborhoods to the arterial system. They may allow some direct access to adjacent properties such as community shopping areas, schools, parks, and residential developments.
- Local – Local roads provide direct access to abutting properties. They are designed to handle relatively low traffic volumes.

The following are general descriptions for new/relocated road alignments and new or improved interchanges identified on the Highway Plan map. Also listed are changes to the functional classification of existing roads now reflected in this Plan.

Adamstown Region

US 15 (Freeway) - Widening of US 15 between the Potomac River and US 340 to four lanes using parkway design standards, including separated grade interchanges at the following locations: US 15 at MD 464/MD 28; US 15 at Mountville Road. The US 15 / Mountville Road interchange replaces an interchange proposed at US 15 & Hawker Road in previous plans.

MD 28 (Minor Arterial) – Relocate MD 28 from just east of Point of Rocks through the Canal Run development to US 15 at MD 464.

English Muffin Way (Minor Arterial) - New Construction from Elmer Derr Road at the Linton PUD to Cap Stine Road at the US 340/Mt. Zion Rd. interchange.

Winchester Blvd / Agro Drive (Collector) – Upgrade Winchester Blvd to Collector classification, add proposed Collector connection from and including Agro Drive to Winchester Blvd to Manor Woods Road.

Manor Woods Road/Michaels Mill Road – Change existing Minor Arterial classification to Local road from MD 85 to New Design Rd.

Brunswick Region

MD 464 / Souder Road (Collector) - A proposed relocation of MD 464 / Souder Road

US 340/MD 180 Interchange (Jefferson) – Add missing movement from westbound US 340 to MD 180 at existing partial interchange approximately ¼ mile west of Copperfield Drive.

US 340/US 15 Interchange – Add missing movements from northbound US 15 to westbound US 340 and from eastbound US 340 to southbound US 15 at the US 15/US 340 split.

Olive School Road (Collector) – Change existing Local classification to Collector.

Roundtree Road – Change existing Collector classification to Local.

Frederick Region

US 15 Interchanges (Freeway) – Address access control to close existing at-grade intersections as planned grade separated interchanges are constructed at Monocacy Blvd/Christopher's Crossing, Biggs Ford Rd. (partial interchange only), Old Frederick Rd. and Hessong Bridge Rd.

Christopher's Crossing (Major Arterial) – Change current Minor Arterial classification to Major Arterial. Construct remaining portions of new road from US 40 to US 15

Willowbrook Road Arterial (Minor Arterial) - Construct new road from Willowbrook Rd. to planned interchange at US 15/Biggs Ford Road.

Spectrum Drive/Shockley Drive (Collector) – Extend Shockley Dr., with a bridge over I-270 from MD 85 to Spectrum Dr. through the I-270 Technology Park.

Genstar Drive (Collector) - Construct new road from Genstar Drive at Monocacy MARC Rail Station to Reich's Ford Road at Ray Smith Road.

MD 355 Parallel Road (Collector) – Construct new parallel road to MD 355 between MD 85 and Genstar Dr.

Hessong Bridge Road (Collector) – Change Hessong Bridge Road from Local road to Collector road from Utica Road to planned interchange at US 15.

MD 180 to Mt Phillip Road (Collector) – Construct new road from MD 180 to Mt. Phillip Road.

Jefferson Tech Park Interchange & Collector – Identify new developer built interchange on US 340 with a Collector roadway to connect with MD 180. Delete proposed Minor Arterial extension of Crestwood Blvd. from Hanover Drive to MD 180.

Middletown Region

Middletown Bypass (Collector) – *Change the* southern road alignment to a Collector classification. Remove the planned road alignment between US 40A and I-70. Remove the planned interchange symbol at I-70/Hollow Rd. These changes reflect the purpose of the road to primarily serve local traffic to enhance connectivity rather than regional through traffic.

New Market Region

MD 75 Relocated (Minor Arterial) – New/relocated road extend south of Baldwin Road through the existing Park and Ride lot. There would be a new bridge over Bush Creek and the CSX railroad tracks and the relocated road would tie back into the existing MD 75 alignment north of the Brethren Church.

Town Center Connector (Minor Arterial) – Construct new road between I-70/Meadow Rd. interchange and Boyers Mill Rd.

I-70/Meadow Rd. Interchange – Construct missing ramp movements from eastbound I-70 MD 144 and from Old National Pike to westbound I-70.

Mussetter Road Extension (Collector) – Construct new road between Greenview PUD and Boyers Mill Rd.

Royal Oak Drive Extension (Collector) – Extend existing Royal Oak Drive to connect with Old New Market Road. Change existing segment of Old New Market Road from proposed Royal Oak extension to MD 75 from Local classification to Collector.

Pinehurst Drive/Yeagertown Road Connection (Collector) – Construct a collector road to connect Pinehurst Drive to the existing intersection of Yeagertown Road & Boyers Mill Road

Thurmont Region

Thurmont Blvd - Extend from MD 806 to Moser Road

Emmitsburg West Connector (Collector) – Construct new road from MD 140 west of Town to South Seton Ave.

US 15 Interchanges – Address access control to close existing at-grade intersections as new grade-separated interchanges are constructed. Separated grade interchanges (listed in priority order) are planned at the following locations in this region: South Seton Ave./Old Frederick Road and North Seton Ave./Welty Road.

Urbana Region

MD 75 Relocation and Interchange (Minor Arterial) - relocation between Lewisdale Road and planned interchange with I-270.

I-270 Employment Corridor Collectors - Construct new Collector roadways between Urbana and Hyattstown connecting to future employment development between MD 355 and I-270

Walkersville Region

Libertytown Bypass (Minor Arterial) – This Plan only maintains the planned road between Daysville Rd. and MD 75 as a Collector to primarily facilitate better truck movement between MD 550 to the north and MD 75 to the south. All other segments of the planned bypass are removed from the Plan. The classification of MD 26 and MD 75 through Libertytown would change from a Collector to a Minor Arterial.

Retreat Road (Collector) – Delete previously proposed realignment of Retreat Road.

Daysville Rd./Devilbiss Bridge Rd. relocation (Minor Arterial) – Delete previously proposed realignment of Daysville Rd. east of MD 194 and Devilbiss Bridge Rd. on west side of MD 194.

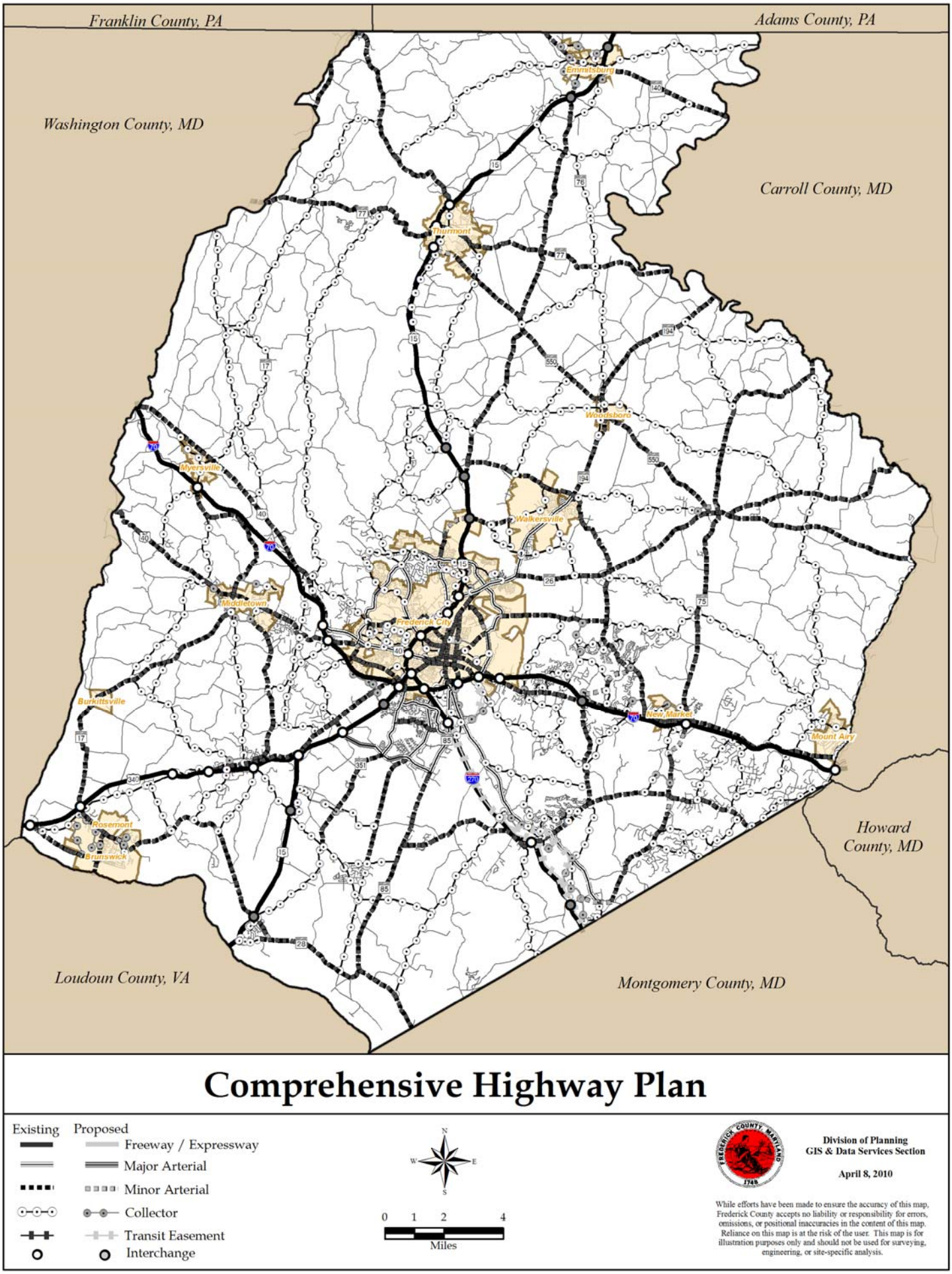
PLANNING AND DESIGN CONCEPTS

Corridor Planning

There are a number of highway corridors in the county that could benefit from detailed planning to address road improvements/design and land use issues. These could be stand-alone transportation specific plans or part of a larger community and corridor planning efforts. The transportation aspects of these corridor plans would include components such as:

- Access management options
- Inter-parcel transportation links
- Transit links and access
- Vehicle, bicycle and pedestrian safety improvements
- Bicycle and pedestrian facility gap analysis
- Parking design and needs assessment
- Streetscape improvements
- Regional transportation links
- Application of intelligent transportation system (ITS) applications – traffic signal timing

Map 06-2: Highway Plan



Travel & Traffic Demand Modeling

In an effort to improve highway planning in the County and to more effectively assess the need for road improvements and the construction of new roadways an enhanced travel forecasting program is necessary and has been initiated in 2008. Final travel demand model reports will be incorporated into future updates to the transportation element of the Countywide Comprehensive Plan with additional analysis being performed at both the corridor and community plan levels.

Access Management

Access Management involves controlling traffic movements and the spacing, design, location and number of access points along a roadway to manage access to adjacent land uses while simultaneously preserving the flow of traffic on the roadway system. Effective access management improves the safety and capacity along densely developed roadways by reducing the friction between local and through traffic.

Frederick County and SHA coordinate access management on a case-by-case basis for new development and redevelopment projects. Additional access management control guidelines could be developed to supplement the existing requirements in the zoning ordinance. These guidelines could then be refined and adopted into the County's Streets & Roads Design Manual & Adequate Public Facilities Ordinance.

Adequate Public Facilities Ordinance

The Adequate Public Facilities Ordinance (APFO) was first adopted in 1991. The "Road Adequacy Provisions" were comprehensively reviewed and amended in July 2009. Under the APFO requirements, most subdivision and site plan applications to submit a traffic impact study that assesses the proposed development's impact on nearby roads and intersections. If the development impacts are below the APFO thresholds then the developer would be responsible for improvements to mitigate their impact. The APFO continues to be a valuable growth management tool that helps define the timing of when and how infrastructure and development may be implemented.

Rural Roads

In September 2002, the County adopted a Rural Roads Program to address the preservation of the County's existing gravel roads and other rural roads designated by the resolution. Roads in the program may not be improved with a tar/chip or paved surface unless residents petition the County to remove the road from the Rural Roads Program.

Scenic Byways & Context Sensitive Design

Scenic byway designation can enhance community identity and pride, encouraging citizen commitment to preserving community values. By preserving scenic resources, scenic byway designation and management will enhance land values and make the area more attractive. Scenic byway designation is also used to promote local tourism that is consistent with the community scenic values. There are two National Scenic Byways designated in Frederick County, the Catoctin Mountain America's Byway (US 15) and the Historic National Road All-American Road (MD 144, US 40A and Old National Pike). There are also a number of State designated Scenic Byways that pass through the county including: Old Main Streets, C&O Canal, & the Antietam

Campaign Heritage State Scenic Byway. A number of documents have been prepared for the management of scenic byways in Frederick County including corridor management plans, corridor partnerships and context sensitive solution guides. Guidelines set forth for context sensitive design can apply not just to scenic byways but to other corridors as well.

There are a number of other strategies the county can undertake to enhance and preserve both the National Scenic Byway corridors and the designated state scenic byways. These strategies would include:

- Implementation of Corridor Management Plan & Corridor Partnership Plans for the Catoctin Mountain and Old National Road National Scenic Byways
- Use the Context Sensitive Solutions guide to diminish the visual, environmental, historical, and experiential impact of any new transportation infrastructure within the byway corridors.
- Examine land use patterns closely to determine the probable or likely impacts to the Byway corridor from visual, safety or volume impacts to the corridor.
- Enhance the corridor through roadway landscaping and plantings
- Provision of wayfinding and tourist-oriented destination signs
- Protect the corridors from encroachment of incompatible land uses.
- Mitigate uses which detract from scenic values by applying site design principles such as adequate setbacks, structure design, landscaping or screening.
- Prohibit billboards and regulate on-site signs so that they do not detract from scenic views.
- Use bio-retention and other storm-water best management practices in the alteration of existing contours and to preserve important vegetative features along the highway.
- Protect the hillsides by limiting development on steep slopes and along ridge lines.
- Prevent the need for noise barriers (sound walls) by requiring a minimum setback for residential development adjacent to a scenic highway.
- Consider the provision of parallel shared use paths along scenic byway corridors

Gateways, Wayfinding, & Streetscapes

The creation of quality communities is not just dependent on maximizing the capacity of highways. The identification of gateways, wayfinding and streetscapes has a variety of benefits to the County including landscaping, appropriate lighting and well marked entry and through travel routes are all part of enhancing the highway network in the County's communities. Community gateway improvements may be as simple as placing a "Welcome to Main Street, USA" type sign or more extension improvements including opportunities for traffic calming to address safety issues, context sensitive design for the road itself and pedestrian improvements. Related to the community gateways is wayfinding, which is oriented to tourism and addresses road and pedestrian signage directing visitors to parking, shopping, tourist sites etc.

Completing the transportation network with a well-designed streetscape is a way not only to enhance quality communities but also to provide many transportation related amenities. Urban street trees provide cooling shade and a buffer between adjacent land uses and pedestrians. Burying utilities can provide safety and aesthetic benefits. Benches and bicycle parking should be provided as well. Understanding of the needs of people with disabilities by providing appropriate accessible facilities is also an important part of any streetscape projects. While retrofitting existing streets with improved streetscapes is desirable, in order to save costly retrofitting, streetscape improvements should become standard in the design of all State, County and Municipal roadway projects in the County.

Neighborhood Traffic Calming

A neighborhood traffic calming policy was endorsed on January 4, 2000 by the Frederick County Board of County Commissioners (BoCC) following a series of public briefings and workshops with the, citizens, neighborhoods, and other agencies. The BoCC has delegated to the County Manager the oversight of the Policy and any appeals. The Division of Public Works administers the Policy on a day-to-day basis. Because of their historical use and precedence these mitigations are recognized as permitted traffic calming measures which now enjoy uniformly developed criteria for design and purpose when constructed and used within guidelines. In lay terms, they may be used but they don't have to be used. It will be valuable to revisit this policy in the future to incorporate into the streets and roads design manual and make sure that traffic calming improvements are consistent with the functional classification of the roadway.

Environmental Assessment

Air Quality

While maintaining air quality in Frederick County is important, there are few ways for local government to assess point versus non-point pollution sources and therefore setting local goals for reduction in pollutants or reduction in vehicle miles traveled would be infeasible. Any State or Federally funded transportation projects in Frederick County are subject to a regional air quality conformity process conducted by the Metropolitan Washington Council of Governments. Despite not having any specific goals, air quality improvements resulting from increased fuel efficiency, use of alternative fuels and reductions in vehicle miles traveled would be beneficial and are complementary to many of the other transportation and smart growth goals of the county. Travel demand management, an increase in non-motorized transportation and increased use of public transportation would be the most effective tools that Frederick County could pursue to help reach regional air quality conformity goals.

Historic Preservation

There are times when transportation network improvements can have a negative impact on the historic and archaeological resources of the county. It is recommended that in the future, standards or guidelines be put in place for county funded projects to account for potential impacts on historic resources.

Noise Mitigation

The impacts of noise from airports, railroads, trucks and highways are greater as the volumes on each of these facilities have increased and as populations have grown, more citizens are affected. In order to minimize the impact of transportation noise, the county should consider the establishment of a noise ordinance that would address the following: highway overlay zones, railroad quiet zones, truck quiet zones, and airport overlay zones.

Highway & Truck Noise

While the county does not currently have a highway noise mitigation ordinance, there are a number of circumstances where noise may impact communities in the county. State highway projects involving road widening adjacent to existing residential uses must be assessed for their potential noise impact and mitigation measures may be implemented if required. Of particular concern is noise generated by truck traffic with the most common type of truck noise issue is the use of the engine brake.

The following strategies could be used to mitigate noise impacts on adjoining residential uses:

- Increased building setbacks from roadways
- Truck quiet zones
- Use of landscaping, screening, or berming
- Grade separation
- Noise barriers
- Land use overlay zones.

Railroad Noise

A railroad quiet zone typically could be designated on a case by case basis in areas that have freight or passenger rail service in residential areas where road/railroad crossings are guarded by signalized and gated crossings. Warning horns are commonly used at rail / road crossings to alert roadway users of the presence of an oncoming train. Limiting the use of the horns to emergency only situations in those areas in close proximity to sensitive land uses would be the purpose of such an ordinance and improve the quality of life for area residents.

Airport Noise

While Frederick County only has one airport, the volume of general aviation air traffic is such that noise from the airport does have an impact on adjacent land uses. In addition to general fixed wing operations, a helicopter pilot training school operates from the airport. Property purchasers within 3 miles of the airport must review and sign airport noise disclosure forms from both Frederick County and the City of Frederick. An airport noise overlay zone could be applied to parcels around the airport to provide an additional level of buffering or awareness to noise sensitive uses.

PUBLIC TRANSPORTATION

The provision of rail and bus transit is crucial to managing a balanced and equitable transportation system for the general population while reducing congestion along the County's Roads. In addition, public transportation provides significant improved mobility for those considered to be transit dependent, including individuals who are too young to drive, senior citizens, people with disabilities and people with low incomes. The transit dependent population is expected to increase with aging population demographics. Consideration for the expansion of existing local and regional existing fixed rail should not be limited to just increasing service on existing routes. New bus, light rail, and commuter rail routes should be considered where feasible to connect existing and proposed employment and residential centers. The alternatives analysis should not be limited to an analysis of ridership but also should consider the economic benefit of new routing as well. Public private partnerships for the funding of public transportation should be considered as an important way in maximizing and county, state, and local funding contributions.

LOCAL TRANSIT SERVICES

Local TransIT service has been provided in the County since 1986. Two bus services are offered:

- General Public Transit – fixed route connector and shuttle service provides transportation throughout the County to shopping and business centers primarily within the City of Frederick
- TransIT Plus – a demand response service that utilizes paratransit vehicles to provide general transportation for senior citizens and disabled persons.

Frederick County's 2007 Transportation Development Plan (TDP) creates a blueprint for community transportation services in the County for a six-year period. The plan forecasts operational and capital needs related to fixed-route transit, paratransit and commuter shuttle services. The plan recommends a phased expansion of transit services to provide service to the county's community growth areas. Transit friendly design standards supportive of future transit growth are also recommended. Improving the efficiency of the current system is a top priority as well as increasing service frequency and expansion of services to growth areas. The number one priority every year is to at least maintain existing service levels.

Specific goals of the TDP include:

- Improve links to regional commuter modes
- Improve performance measures
- Expand service in growth areas & regional communities
- Raise overall level of service (headways or buses per hour)

Other priorities set forth in the TDP include:

- Funding to expand peak-period shuttle service to regional communities such as Urbana, Middletown and New Market.
- Funding to expand paratransit service to meet growing demand.
- Funding to expand facilities and infrastructure to meet existing and future needs related to projected growth including:
  - Facility Parking Expansion
  - Administrative Building Expansion
  - Passenger Shelters and Transfer Centers

REGIONAL TRANSIT SERVICES

Commuter Bus

The Maryland Transit Administration (MTA) operates the #991 Commuter Bus, which originates in Hagerstown making 33 trips per day. This commuter bus service serves two stops in Frederick County, the Monocacy MARC station and the Urbana Park & Ride, carrying users to the Shady Grove Metro Station. Expansion includes a stop at the Myersville Park and Ride lot.

As additional commuter bus expansion is considered, as with local transit and fixed rail service, it should not be limited to existing routes. Additional routes serving the US 15 corridor and the communities north of the City of Frederick have been added to the list of priorities submitted by the county to the State of Maryland. Commuter bus routes serving the Baltimore Metropolitan area could be considered as demand arises. A key consideration for MTA, when contemplating additional routes or service, is the ability to serve a stop with adequate parking. This makes the coordination of the siting and design of existing and future park and ride locations crucial to the success of commuter bus service. In addition to park and rides, other multi-modal connection opportunities should be considered including links to local TransIT service and bicycle/pedestrian access.

Commuter Rail

In addition to commuter bus service, the Maryland Transit Administration (MTA) provides commuter rail service for Frederick commuters. MARC commuter rail service along the Brunswick Line includes Frederick County stations at Brunswick, Point of Rocks, Monocacy, and Downtown Frederick. This service provides access to downtown Washington D.C. with transfers to Metro rail at Rockville and Silver Spring. TransIT Services of Frederick County provides shuttle service to the Frederick station and the Meet-the-MARC shuttle to Point of Rocks. Currently three southbound a.m. and three northbound p.m. trains per day are provided Monday through Friday to the Monocacy and Downtown Frederick MARC Station. In addition 6 eastbound a.m. and 6 westbound p.m. trips serve Point of Rocks and Brunswick stations. Full implementation of the 2007 MARC Growth & Investment Plan is recommended. Priority improvements include future expansion along the Frederick Branch of the Brunswick line including doubling of the number of daily trains serving downtown Frederick and Monocacy MARC stations, reverse commute service, weekend service and the addition of a Point of Rocks platform on the Frederick Branch. Consideration for an additional rail station on the Frederick Branch Line at Adamstown is also recommended.

I-270 Transitway

A transitway has been proposed along the I-270 corridor since 1972, connecting Frederick with the Shady Grove Metro station. The alignment for the transitway was developed in the I-270 Corridor Cities Transit Easement – Frederick County Extension Study prepared for Montgomery and Frederick Counties in 1991. This study identified several alternative alignments for a transitway between Clarksburg and Frederick. The ongoing I-270/US15 multi-modal study has carried forward only detailed assessment of the portion of the Corridor Cities Transitway (CCT) between Shady Grove Metro and Clarksburg. The Multi-Modal Study is considering either Light Rail Transit (LRT) or Bus Rapid Transit (BRT) for the CCT.

The Frederick Extension study concluded that the light rail transit (LRT) or bus rapid transit (BRT) modes would be the most feasible in the corridor versus either heavy rail (Metro) or commuter rail. The preferred alignment follows along the east side of I-270 with an optional route through the Urbana PUD. This alignment would continue into downtown Frederick and terminate at the MARC station.

Additional items would need to be considered prior to moving forward with this project including an updated design/engineering and environmental review of the master plan alignment, right-of-way requirements, specific station/stop, locations for a yard and shop facility and updated cost estimates.

PLANNING & DESIGN CONCEPTS

There is a wide variety of policies and actions that can be applied to support transit usage in Frederick County. Conditions common to the success of these planning and design concepts include:

- higher residential density;
- compact growth areas,
- safe and convenient pedestrian and bicycle access to bus stops and transit stations

Complete Streets

The concept of complete streets is that all streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and transit riders of all ages and abilities must be able to safely move along and across a complete street. Establishing a county policy and appropriate ordinances requiring all road projects, regardless of the funding source, in the county to be designed as complete streets, where feasible, is an important step in meeting smart growth goals, creating quality communities and improving the safety and transportation choices for residents of Frederick County.

Related comprehensive plan policies and action items include updates to the county roadway functional classification system, updates to the streets and roads design manual, incorporation of context sensitive design principles and the provision of balanced and interconnected multimodal transportation network.

An efficient and manageable complete streets policy will recognize the need for flexibility: that all streets are different and user needs will be balanced. It would apply to both new and retrofit roadway projects, including design, planning, maintenance, and operations, for the entire right-of-way. It would also make any exceptions specific and based on clear procedures that require BoCC approval.

Transit Friendly Design

To maximize the use of public transportation in the Frederick County community, it is important to address land use and the design of new development to provide a greater physical orientation to likely transit routes and stops. The County has developed Transit Friendly Design Guidelines, which seek to integrate land use, zoning, and transportation planning elements to promote higher density, mixed use development that is easily accessible and designed for various modes of transportation.

Transit Oriented Development

Transit Oriented Development (TOD) refers to residential and commercial centers designed to maximize access by transit and non-motorized transportation, and with other features to encourage transit ridership. A typical TOD is focused on high-capacity fixed guideways such as MARC Rail, Light Rail Transit (LRT) or Bus Rapid Transit (BRT), and has a rail station at its center, surrounded by relatively high-density development one-quarter to one-half mile, which represents pedestrian scale distances. Successful implementation of a TOD in Frederick County would be subject to the following practices and policies:

- The neighborhood is designed with interconnected streets to facilitate pedestrian and bicycle access to the transit station.

- Mixed-use, with a focus on residential, compact development including shops, schools, other public services, and a variety of housing types, within 1/2 mile of the transit station.
- Parking management to reduce the amount of land devoted to parking compared with conventional development, and to take advantage of the parking cost savings associated with reduced automobile use
- Provide market based transit oriented development through incentives such as structured property taxes, development fees and utility rates to reflect the desire for and lower public service costs of clustered, infill development.
- Educate public officials, planners, developers, residents and business managers concerning the potential benefits of locating in a TOD.
- The following areas could be considered for TOD/re-development:
  - Frederick City Downtown Transit Center
  - Point of Rocks MARC Rail Station
  - Urbana
  - Brunswick MARC Rail Station
  - Francis Scott Key Mall
  - Adamstown (MARC Line)
  - Monocacy MARC Rail Station

Travel Demand Management

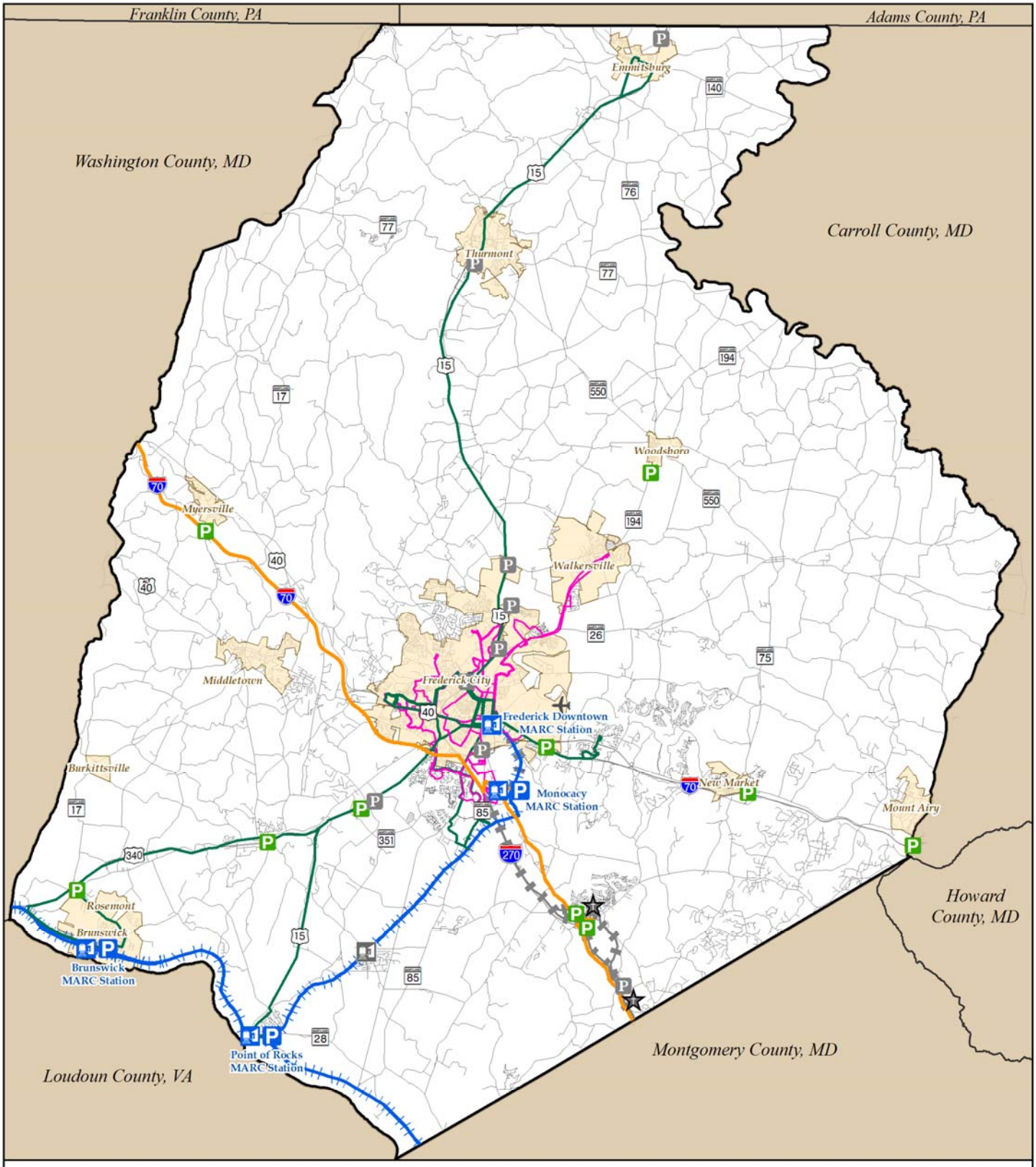
Travel Demand Management (TDM) takes the approach that rather than continually looking to expand road capacity in an attempt to meet the travel demand, strategies shall be implemented to reduce the demand for automobile use in the first place. It is important to note, however, that while the focus for TDM strategies has been on the typical work trip during the morning and evening peak hours, that non-work trips related to shopping, running errands etc. during the mid-day and on weekends represents a greater proportion of the total traffic.

While many strategies can be implemented through local government programs some jurisdictions have required new businesses to either set up or join existing transportation management associations (TMAs) that are responsible for funding and administering various TDM strategies for a single business or in some cases for an entire office park. For a TDM program to be successful there must be alternatives available that meet the needs of workers and others looking to reduce their dependence on the automobile.

The following table gives examples of the wide variety of TDM strategies that could be applied in Frederick County:

Improves Transport Options	Financial Incentives	Land Use Management	Policies and Programs
- Transit improvements - Non-motorized improvements - Rideshare programs - Flextime - Car sharing - Tele-work - Taxi improvements - Bike/transit integration - Guaranteed ride home - HOV Priority	- Road pricing/toll lanes - Distance-based fees - Commuter financial incentives - Parking pricing - Pay-as-you-drive vehicle insurance - Fuel tax increases - Employer transit/bike subsidies	-Smart growth -New urbanism -Location-efficient development -Parking management -Transit oriented development	-Employer required TDM Programs -Commute trip reduction -Freight transport management -Tourist transport management -TDM marketing

Map 06-3: Public Transportation



Public Transportation

- Airport
- Existing Park & Ride
- Proposed Park & Ride
- MARC Station
- Proposed MARC Station
- Proposed 270 Transitway Stop
- MTA 991 Commuter Bus
- TransIT Shuttle Route
- TransIT Connector Routes
- MARC Rail Lines
- Proposed Transitway
- Roads

N W E S

0 1 2 4
Miles

Division of Planning
Transportation Planning Section

April 8, 2010

While efforts have been made to ensure the accuracy of this map, Frederick County accepts no liability or responsibility for errors, omissions, or positional inaccuracies in the content of this map. Reliance on this map is at the risk of the user. This map is for illustration purposes only and should not be used for surveying, engineering, or site-specific analysis.

Ridesharing/Commuter Assistance Services

Frederick County employs a full-time commuter assistance coordinator that coordinates ridesharing and commuter assistance for residents and employees of Frederick County. Resources include the online services that the Metropolitan Washington Council of Governments provides. Bus and train schedules, online trip planning, "Guaranteed Ride Home", park and ride locations, ride share & vanpool matching, information on commuting via bicycle and information on tele-work programs.

Park-and-Ride Lots

Park-and-ride lots decrease traffic congestion and improve air quality. Park and ride lots provide convenient transfer points for carpools, vanpools, local and regional bus service, or commuter rail.

PEDESTRIAN AND BICYCLE FACILITIES

Bicycle and pedestrian facilities are an important element of providing a balanced transportation network and the creation of quality communities. The main barriers to creating a useful, functional pedestrian-bicycle network are distance and separation of uses, lack of pedestrian-bicycle facilities in commercial and employment areas, and the difficulty of safely crossing main roads. A pedestrian/bicycle network should provide continuous connections between residential, employment, recreational, shopping, and transit centers. These facilities must be designed to ensure the safety of the pedestrians and cyclists including adequate access across highways and bridges.

The provision of bicycle and pedestrian facilities in the county should be expedited by requiring shared use paths, shoulders, sidewalks and related facilities are provided for by zoning, adequate public facilities and subdivision regulations. In addition when roadway segments do not connect to form the preferred grid street network, bicycle and pedestrian connections shall be provided.

Off-street Shared Use Paths

The County's Bikeways and Trails Plan, adopted in 1999, identified 174 miles of proposed shared use path corridors within the County. To date, the county has funded the design and construction for less than 7 miles through two pending projects, the Ballenger Creek Trail and the Point of Rocks MARC Station access trail. The City of Frederick has funded plans to expand its shared use path network along the East Street Corridor and providing connections along Carroll and Rock Creeks to the West Side of the City. Outside of the City of Frederick, other shared use paths are limited to recreational pathways within the boundaries of county parks, a short segment in the Town of Thurmont and the C&O Canal Towpath. Linking residential, commercial and employment centers as well as schools and recreation sites for all residents is a key part of increasing bicycling and walking in the county for transportation and recreation use.

On-street Bicycle Facilities

The 1999 County Bikeways and Trails Plan identified 334 miles of on-street bicycle facilities that would make use of paved shoulders along the roadways. A limited number of SHA and County

projects have provided shoulders of adequate width to safely accommodate bicycles and even fewer have been marked or signed specifically for cyclists.

Specific types of on-street bicycle facilities by corridor or area were not recommended in the bikeways and trails plan. A complete non-motorized transportation network will require on-street bikeways where right-of-way is not available for separated paths. There are a number of on-street bicycle facility types that could be applied to the on-street bikeways proposed in the plan. These include:

- Signed and marked bicycle lanes and paved shoulders
- Signed bicycle routes
- Shared roadways

As improvements are made to roads, accommodations for wider paved shoulders to meet minimum standards for bike routes are considered. Where appropriate these facilities would include bike lanes, which would make use of either existing or newly constructed shoulders. The construction of new shoulders or intersection improvements would typically only be done as part of an upgrade/reconstruction project for the road itself. Specific design standards by functional classification will be identified in the update of the streets and roads design manual.

Pedestrian Facilities

As might be expected in a geographically expansive area with dispersed communities, no comprehensive pedestrian system was ever constructed and the relatively low densities of development in these areas makes it difficult to retrofit the region with a robust sidewalk network. The focus for pedestrian improvements should be on completing missing links within 2 miles of existing or proposed schools and where the type and density of existing and proposed development will support pedestrian activity.

Although most of the existing pedestrian network resides within the municipalities, Frederick County should work to improve the existing networks within its own communities. When providing new facilities the county should be flexible in its normal requirements of adjacent landowner maintenance of sidewalks.

The State Sidewalk Retrofit Program has been in place for several years and provides local jurisdictions with a 50% match towards the construction of new sidewalks along State highways. The local jurisdiction is responsible for the other 50% of the construction costs as well as any design and right-of-way costs. In an effort to become more proactive with regards to improving pedestrian facilities in the County, it is recommended that the county participate in the State sidewalk retrofit programs and develop a county sidewalk improvement program.

PLANNING & DESIGN CONCEPTS

Described below are several design elements that address pedestrian access for new development or when retrofitting existing development.

- Mix land uses – Integrate residential, commercial, and employment uses to provide more opportunity for people to walk for shopping, work, or social trips. With the typical distance that most people are willing to walk being ¼ to ½ mile it is important that the uses be located in a relatively compact area.

- Interconnected street network – Minimize the use of cul-de-sacs. Provide short blocks and street alignments that are interconnected in an effort to provide pedestrian routes that are short and direct. The likelihood of people walking is directly related to distance, with ½ mile being an upper limit beyond which walk trips decline significantly.
- Locate buildings close to the street – Locating buildings as close to the sidewalks helps to shorten the walking distance between the street and the building entrances. Buildings close to the street with parking to the side and rear of the site also presents a more visually attractive streetscape that helps to encourage pedestrian activity.
- Provide sidewalks – All new developments and road improvement projects within growth areas should provide sidewalks on at least one side of the street.
- Safe intersections – Intersections are a critical link in providing safe pedestrian access in the community. Accommodations such as short crossing distance, use of smaller curve radii for street corners, pedestrian refuges in medians, and pedestrian signals should be provided to ensure safe pedestrian crossing at intersections.
- Pedestrian comfort – Provide a comfortable pedestrian environment, particularly along heavily traveled streets. Provide grass-planting strips between the sidewalk and the street to buffer pedestrians from the traffic. These buffers also provide space for snow storage during the winter and for street trees to provide shade during the summer.

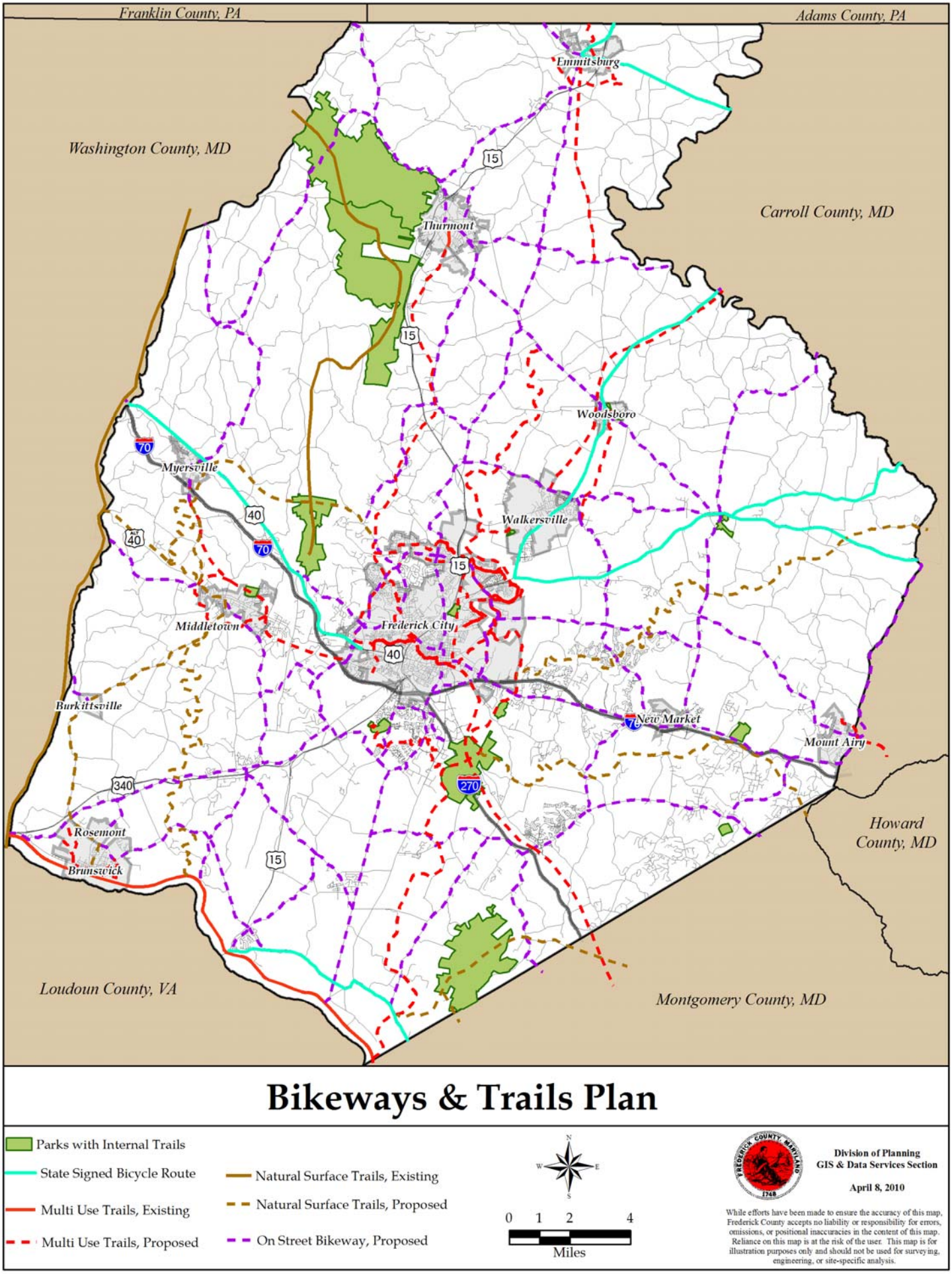
Safe Routes to School

One of the key ways to improve the safety, health and transportation issues for Frederick County residents is by focusing on providing safe options for school children to walk or bicycle to school. The provision of and improvement of safe school walking and biking routes should be included in all of the following transportation and land use planning processes: school siting; internal and external school transportation access; county, state and municipal capital improvement programs; developer funded transportation improvements; available grant funded programs and school bus transportation planning. Benefits of a safe routes to schools program include: improved walking and bicycling conditions; increased physical activity; decreased congestion and air pollution around schools; and it can lead to cost savings for schools (reduce need for "hazard" busing).

A complete program includes the following elements:

- Engineering: The provision of sidewalks, shared use paths, crossing improvements, on-street bicycle facilities, signage and pavement markings.
- Enforcement: School zone speed enforcement, crossing enforcement and parking enforcement
- Education: Bicycle and pedestrian safety skills education, health education, incorporation into Maryland approved curriculum objectives
- Encouragement: Incentives for walking and bicycling; special events; overcoming safety concerns through parent, staff and community support and supervised walking and bicycling.
- Evaluation: goal setting and program adjustments as needed.

Map 06-4: Bikeways and Trails Plan



OTHER TRANSPORTATION FACILITIES

FREIGHT RAIL

There are a number of freight rail lines that operate in Frederick County. Support of these rail lines is important to both economic growth in the county and maintenance of the long-term fixed rail component of the transportation network. Long haul lines include the Metropolitan Branch line along the Potomac River that serves major intermodal transportation points east and west of Frederick County and the Old Main Line east through Mount Airy to Baltimore. CSX owns the rails and in addition to accommodating freight needs, leases their track to MTA for MARC rail service and Amtrak for long distance travel routes. It is important to understand this relationship when considering improvements to commuter rail service and safety or transportation network improvements that may impact existing rail right-of ways. The Maryland Midland Railway (MMID) provides 67 miles of short-line rail freight service to central Carroll and Frederick Counties including the communities of Thurmont, Rocky Ridge, Woodsboro and Walkersville. MMDI also owns an additional 7 miles of track that are not in service. From these points, the line connects to CSX Railroad lines, providing nationwide linkages. Industrially zoned parcels that can accommodate freight rail dependent business are encouraged along MMID and CSX rails.

TRUCKING & DISTRIBUTION

In the past several decades, there has been a significant shift in freight movement from rail to trucks. The roots of this shift lie in the greater flexibility of truck movement, the cost of the two modes, and the rise of the "just-in-time" delivery concept in the industrial and commercial sector.

The use of the county's roadways by trucks presents both opportunities and problems. The efficient movement of goods is important to the County's economy. However, when large trucks use older and narrower streets, there can be conflicts. Future studies could be undertaken to assess various alternatives for truck routes around the county. A truck origin and destination study could help further assess existing conditions and needs for routing and enhance the mobility of freight through and within Frederick County while considering options for mitigating any existing or potential impacts to roadway infrastructure or sensitive land uses. Siting of truck dependent land uses within close proximity of existing highway infrastructure is an important way of accommodating truck transportation in the County.

AIR TRANSPORTATION

Frederick Municipal Airport (FDK), which is owned and operated by the City of Frederick, is an important part of the transportation network in Frederick County. While scheduled commercial air service does not serve FDK, the airport is a designated FAA reliever for BWI and is the second busiest airport in Maryland with over 140,000 operations per year. An important economic engine for the county, it is the home of Aircraft Owners & Pilots Association headquarters (the largest pilot member organization in the world); one of eight Maryland State Police Medevac Aviation units; an aviation insurance provider; helicopter and fixed wing flight schools; a number of aircraft support operations; and home base of over 260 aircraft. The

Master Plan, Airport Layout Plan and the Business Plan were approved by the City of Frederick in February 2008.

While developing the master plan, a capacity analysis was completed to identify the future capital needs at the airport. The City planning process identified the following improvement projects for the airport:

- Air traffic control tower
- Extend Runway 5/23 and realign taxiway "Alpha"
- Construct 120 "T-Hangars"
- Construct full size corporate hangar
- Complete perimeter fence & road
- Build co-located fuel farm
- Develop plans for "future aviation areas" near existing terminal building

In general, airport enhancements as noted in the Master Layout Plan are and should remain consistent with the Frederick County Comprehensive Plan. For projects/improvements that are eligible for Federal Aviation Administration (FAA) funding the current level is split, Federal - 95%, State - 2.5%, and Local - 2.5%. The local share may be split between the City and the County. All development projects identified in the Airport's approved Master plan are subject to a full environmental assessment (EA) which is currently underway as of 2008. County comments on the EA include the following:

- The proposed air traffic control tower (ATCT) adds to the region's safety and security.
- The proposed improvements will allow for the safe and efficient accommodation of air traffic today and in the future at FDK.
- ATCT design should take into account visual impacts to surrounding parcels and terminal building.
- FAA should be supportive of proposed routing of shared use path shown in 1999 Frederick County Bikeways and Trails Plan outside of a secure airport fence along the Monocacy River
- Terminal building rebuild / rehabilitation needs to be sensitive to potential historic register eligibility.
- Any projected increases in noise levels should be identified in master layout plan EIS

ACTION ITEMS

Highway Related Action Items

TR-A-01 Maintain a countywide travel demand model of the existing and proposed highway and transit network to assist with identifying and assessing highway needs and analysis of corridor and community plan recommendations.

TR-A-02 Revise the County's streets and roads design manual to refine design standards for roadway functional classifications, street lighting, transit, bicycle and pedestrian facilities, traffic calming tools, emergency and maintenance vehicle access and standard right-of-way needs including appropriate coordination with municipalities while maintaining vehicle traffic flow and safety.

TR-A-03 Develop a county roads needs inventory that would list and prioritize capital improvements to county roads, intersections and new road alignments. A bridge priority listing and a listing of emergency through routes should also be included in this inventory.

TR-A-04 Assess and update county neighborhood traffic calming policy.

TR-A-05 Prepare a truck origin and destination study to assess existing conditions and needs for routing and enhancing the mobility of freight through and within Frederick County while considering options for mitigating any existing or potential impacts to roadway infrastructure and sensitive land uses.

TR-A-06 Prepare pre-planning/feasibility studies for priority county and state highway corridor upgrades.

Bicycle & Pedestrian Transportation Related Action Items

TR-A-07 Update the County Bikeways and Trails Plan with the assistance of a broad-based citizen's advisory committee.

TR-A-08 Create options and incentives which will encourage voluntary landowner participation in the establishment of greenways and trails.

TR-A-09 Prepare detailed shared-use path corridor feasibility studies.

TR-A-10 Establish a bicycle/pedestrian advisory group.

TR-A-11 Address how on-street bicycle and pedestrian improvements can be retro-fitted to existing roads.

TR-A-12 Provide opportunities for bicycle and pedestrian safety education and enforcement.

TR-A-13 Require the accommodation of Safe Routes to School planning for all existing and proposed County School's by preparing plans that address coordinated education, enforcement, encouragement, design and school siting to provide for safe bicycling and walking options for students.

TR-A-14 Revise county roads and bridges ordinance to provide the optional waiver of sidewalk maintenance requirements by abutting property owner(s).

Public Transportation Related Action Items

TR-A-15 Update transit-friendly design standards for new development, including transit amenities and improved bicycle and pedestrian access to transit.

TR-A-16 Incorporate Transit Oriented Development design guidelines into the County's Zoning Ordinance and development review process.

TR-A-17 Establish appropriate TOD development overlay zones around existing and future Transit Centers.

TR-A-18 Work with the Maryland Transit administration and Montgomery County to explore and coordinate scheduling improvements and stop options for MARC trips from Frederick, Point of Rocks, Germantown, Gaithersburg and Rockville; and make direct link between MARC and Metro at Shady Grove.

TR-A-19 Study the feasibility of fixed heavy rail, light rail, and bus rapid transit in the county including connections between existing and proposed local and regional residential and commercial development centers.

TR-A-20 Conduct a detailed design/engineering study of the I-270 Transitway master plan alignment. This study should address type of facility, specific station/stop locations, opportunities for connections beyond those previously identified, parking location (s) for a yard and shop facility.

TR-A-21 Work with SHA, MTA, county municipalities and surrounding jurisdictions to identify locations for, and address specific needs for existing and future park and rides and intermodal transportation centers.

Other Transportation Related Action Items

TR-A-22 Adopt county-wide complete streets ordinance, regulation and guidelines that requires the provision of facilities and design features for all user groups where needed including: public transit, cyclists, pedestrians and people of all ages and disabilities in the design and implementation of all County CIP and Developer funded road projects.

TR-A-23 Prepare parking design guidelines that address general parking lot design, the provision of parking structures, application of permeable surfaces, LEED and/or LID guidelines.

TR-A-24 Update the parking section of the zoning ordinance to address the following items by existing and proposed land uses: defining the appropriate treatment of parking provision for residential and commercial uses including loading and unloading, provision of structured parking, provide guidance for the requirement of bicycle parking where appropriate and address reductions in required parking where transportation demand management measures are implemented.

TR-A-25 Pursue grant funding of transportation projects to maximize the implementation of transportation goals and policies.

TR-A-26 Explore the possibility of transportation excise tax funding by district to facilitate area specific funding resources or use for non-highway transportation facilities.

TR-A-27 Update the Master Transportation Plan to focus on the countywide roadway assessment prioritization and financial analysis and revisions to the recommended projects.

TR-A-28 Establish airport, highway, truck and rail noise ordinances where appropriate.

TR-A-29 Participate in the Frederick County Community Traffic Safety Task Force to take full advantage of the programs offered by the Maryland Highway Safety Office Division of the Governor's Office for Highway Safety. Car, truck, bicycle, pedestrian, transit and rail safety problems in Frederick County shall be identified using statistics from the Maryland Highway Safety Office, local traffic and law enforcement data, and citizen concerns.

TR-A-30 Develop and encourage tree planting and landscaping projects, using native species where approved, along designated State and National Scenic Byways.

TR-A-31 Incorporate Scenic Byways Corridor Management Plan recommendations into appropriate county programs and plans.

TR-A-32 Require screening using native species where approved and context sensitive design solutions for site development on designated State and National Scenic byways

TR-A-33 Enhance the travel demand management program in the County to include additional policies and programs that provide options and incentives for switching single occupant vehicle trips to higher occupancy alternatives, walking or bicycling.

TR-A-34 Protect air safety in Frederick County by permitting expansion of public general aviation operations only at Frederick Municipal Airport.

07 Serving Our Citizens

This chapter provides an overview of the County's services and facilities that serve our citizens. Background information is provided describing the current facilities and projected needs. Since the various facilities and services do not all fit into the same category this chapter is divided into three elements as follows:

- *Community Facilities – schools, parks, library, public safety, and human services*
- *Public Utilities – solid waste management and water/sewer service*
- *Affordable Housing – addresses workforce housing*

	Amendment Status
Goals, Policies, Action Items	**04/08/2010**
Maps and Graphics	**04/08/2010**
Background Information	**04/08/2010**

A vision for serving our citizens…

In an era where our communities are increasingly being shaped by the vast and invisible infrastructures of the modern world – namely the rapidly changing communications technology – the responsibility and demand to maintain and improve the tangible infrastructures that hold our communities together is even greater. The citizens and leaders of tomorrow's Frederick County will uphold this responsibility and meet this demand. These infrastructures of streets, sewer lines, parks, and buildings - as well as programs and services - will remain intimately tied to our patterns of land use. Community development principles will be applied to both new and existing growth areas in Frederick County, will guide the deployment of the infrastructure and public services that will maintain efficiency and innovation to support our communities. The Frederick County of tomorrow will provide the support needed by the Baby Boomer generation to live out their golden years, while wisely laying the groundwork for the physical and social infrastructure of the generations to follow.

GOALS

SC-G-01 Provide for community services and facilities in an efficient and timely manner relative to the pace of growth.

SC-G-02 Maintain adequacy of public facilities and services relative to existing and projected targeted populations.

SC-G-03 Locate community services and facilities that maximize accessibility via transit, bicycle, and pedestrian modes of transportation.

SC-G-04 To the extent feasible, distribute public facilities and services throughout the County on a local, regional, or centralized basis.

SC-G-05 Ensure that County facilities serve all County residents equally by employing Americans with Disabilities Act (ADA) standards.

POLICIES

General

SC-P-01 Place major facilities such as schools, libraries, fire/rescue facilities and senior centers within community growth areas with an emphasis in the central portion of community growth area, preferably adjacent to commercial centers.

SC-P-02 Prioritize funding for those capital projects, which correct existing deficiencies.

SC-P-03 Prioritize land acquisition for capital facilities as part of a land banking program well in advance of the need for new facilities and acquired through the development review process.

SC-P-04 Work collaboratively with all of the municipalities in Frederick County to adopt an Adequate Public Facilities Ordinance (APFO) which complements the County's APFO.

SC-P-05 Consider joint use of County facilities, including but not limited to libraries, senior centers, health clinics, schools, and public safety facilities.

SC-P-06 Employ Leadership in Energy and Environmental Design (LEED) and Low Impact Development (LID) standards in County facilities.

School Policies

SC-P-07 Standardize school design to accommodate additions and reduce design & construction costs.

SC-P-08 Maintain a system wide enrollment capacity of 90% at the elementary, middle, and high school levels.

SC-P-09 Stage development of new school facilities concurrent with new residential growth.

SC-P-10 Maximize the use of school sites through the construction of multi-story buildings to reduce building footprints and emphasizing bicycle and pedestrian access to minimize parking needs and bus transportation.

SC-P-11 Utilize school building(s) or sites no longer needed for educational purposes for re-use as public uses or private redevelopment.

Park Policies

SC-P-12 Develop the County's park system with a balance of active parks that focus on a variety of recreational uses and passive parks that focus on less intensive uses such as trails, picnicking, historic preservation or natural resource protection.

SC-P-13 County parkland acquisition is guided by the following thresholds:

Neighborhood parks:	5-acres/1,000 population
Community parks:	10-acres/1,000 population
Regional parks:	10-acres/1,000 population

SC-P-14 Consider stream corridors within community growth areas for development as public linear parks to allow for greenway/trail linkages both within and between community growth areas.

SC-P-15 Development of parks in a manner that is sensitive to and protective of natural resource and environmentally sensitive features.

SC-P-16 Coordinate with the municipalities in the provision of park and recreation facilities.

SC-P-17 Develop parks in a manner that prioritizes the preservation of archaeological and historic sites and structures.

SC-P-18 Integrate community parks into community growth areas to maximize bicycle and pedestrian access, and enhance community identity.

SC-P-19 Prioritize funding to accommodate land acquisition for land banking of new sites, and for the expansion of existing parks.

SC-P-20 The park/school concept shall be given high priority in order to more efficiently meet local park and recreational needs. Joint use agreements between the Parks and Recreation Commission and the Board of Education and municipal officials (where appropriate) should continue to be established and refined to make all County schools available for recreational use.

SC-P-21 Promote the development and operation of revenue producing facilities.

Fire and Rescue Policies

SC-P-22 Support a coordinated volunteer and professional system of fire and rescue services.

SC-P-23 Locate new fire/rescue facilities within community growth areas and outside of hazard areas as described in the Hazard Mitigation Plan.

Human Services Policies

SC-P-24 Consult human service providers during preparation of Corridor and Community plans to ensure human service issues, opportunities and uses are addressed and incorporated into those planning efforts.

SC-P-25 Locate new human service facilities in proximity to the targeted population to maximize efficient access via roads with an emphasis on public transit, bicycle, and pedestrian access.

SC-P-26 Strive to utilize in-fill areas within Community Growth Areas as hubs for new services/facilities.

SC-P-27 Locate and combine human service uses/facilities county-wide to more efficiently serve the targeted populations and clients.

STATE VISIONS/PLANS

This chapter supports the following State Visions:

- *Quality of Life and Sustainability*
- *Infrastructure*
- *Housing*

Also included in the chapter is the Work Force Housing Element as required by HB 1160.

RELATED COUNTY PLANS

Frederick County Public Schools Educational Facilities Master Plan

The Educational Facilities Master Plan is prepared on an annual basis and serves as a tool to evaluate current facilities, future needs, and project priorities. This Master Plan has a 10-year outlook for the identification of future needs. The Plan is used as a basis for the Board of Education's (BOE) annual submission for the County's Capital Improvement Program (CIP).

2006 Frederick County Land Preservation, Parks and Recreation Plan

The purpose of the Land Preservation, Parks, and Recreation Plan is to provide the necessary framework from which to develop an integrated and coordinated approach to the provision of park and recreation facilities, agricultural land preservation, and natural resource protection. Under the requirements of Maryland's Program Open Space (POS) and the Federal Land & Water Conservation Fund Act of 1965, the County must prepare and maintain an Outdoor Recreation and Open Space Plan. All land acquisition and park development funded through these programs must be consistent with the approved State and County Land Preservation, Parks, and Recreation Plans. The County's use of POS funding requires such a plan to be updated every six years.

2007 Division of Fire and Rescue Services Comprehensive Review & Master Plan

In 2007, Frederick County undertook a comprehensive analysis of their fire/rescue services in coordination with a consulting firm, TriData. The primary goal of this was to review of current facilities, operations, management, and equipment to determine if the current system was providing effective and efficient service delivery.

In 2008, TriData presented their initial report to the BOCC. An implementation committee was appointed to review and analyze the recommendations contained in the TriData report. Implementation of this plan element will be ongoing as the BOCC will determine the available level of capital operating and personal expenditures.

IDENTIFYING FUTURE FACILITY NEEDS

Three approaches are commonly taken to identify future facility needs. The first identifies need based on the overall County population, the second based on plan build-out potential, and the third based on other demographic trends and characteristics.

For example, park needs in the County are calculated using a per capita acreage factor applied to the entire County population. By contrast, future demand for school facilities is based on the

build-out potential of residential land use designations in the Comprehensive Plan to attain a projected number of dwelling units. Other need determination is based on demographic shifts, such as the increasing share of the population that is over the age of 65 leading to a greater emphasis on the provision of senior services.

While these three broad-brush approaches are used in the County to determine future facility needs, each type of community service may also employ its own particular methodology. For example, while parks needs are determined relative to overall population, they are analyzed according different park categories. School needs that are determined by applying a yield factor to the total number of expected dwellings are analyzed by housing type to estimate the total number of expected future students in the school system by grade level. Additional permutations of need analysis are developed depending on such things as accuracy of data and specific policy objectives.

FACILITY SITING PRINCIPLES

Community facilities including schools, parks, libraries, and other facilities require a significant public investment to construct and maintain. Given that many facilities will continue to serve our communities for several generations it is critical that they be located to effectively serve both current and future residents. It is also important to understand the role facilities such as schools and libraries play in creating a civic focal point and an identity for our communities. The following principles are meant to provide guidance in locating facilities to maximize the efficient use of public funding and to support their long term use in the community.

- Community facilities should be located within Community Growth Areas where infrastructure is available (water and sewer facilities, roads, sidewalks, and public transit).
- Focus community facilities with other activities such as commercial areas and in the physical center of the community where the buildings themselves can help to establish a civic and community identity.
- Community facilities should be located within Community Growth Areas where the greatest population is concentrated to maximize pedestrian, bicycle, and transit access to the facilities.
- Community facilities should support the joint use of buildings and sites to consolidate services and better serve the surrounding community.
- Development proposals should incorporate into their plans and contribute to the construction of community facilities as identified in County Plans.

In addition to these principles, the location criteria for some community facilities have unique requirements or special emphasis. For example, the location of schools emphasize pedestrian and bicycle accessibility between schools and the surrounding residential areas of the community. Regional parks are destination parks with large land area requirements, and should be located in urban *or* rural areas with a service area extending 10 or more miles. Finally, human services facilities have the particular challenge of reaching citizens located throughout the County while most of the human service facilities are centrally located in Frederick City. Decentralizing citizen services throughout the County to make them more accessible to citizen users is the preferred remedy to this situation.

FUNDING

Beyond road and transportation facilities, community facilities that provide direct services to the County's residents represent a significant capital funding investment by the County and the State. In furtherance of the State Planning Vision that: "Funding mechanisms are addressed to achieve these visions", this Plan seeks to maximize the public investment through policies that support collocating different services and uses in the same facility and identifying appropriate locations to maximize their use.

The implementation of these policies is primarily achieved through the County's Capital Improvement Program (CIP). The County's CIP is a six-year program for capital expenditures including schools, parks, libraries, public safety, roads, and public utilities such as solid waste and water/sewer facilities. Capital expenditures may include the construction of new buildings, as well as the expansion or renovation of existing buildings. The costs associated with these facilities may include land acquisition, design/engineering, and construction. Each department evaluates its short term and long term needs, and determines which projects, if any, can be considered Capital Improvement items. Some departments may never have a capital project, while other departments have numerous capital projects such as Public Works and The Board of Education. These items are submitted in the form of departmental requests. The CIP provides Frederick County Government and the public with valuable information on each capital project, such as the scope (i.e., size, capacity, location, etc…); the fiscal year in which the project is scheduled to begin design, engineering and construction, as well as planned completion dates; a programmed amount to be expended each year, and the funding mechanism(s). The CIP also provides policy and guidelines, current Bond Rating, Debt Affordability, and current revenue information on an annual basis.

Funding for the CIP comes from many sources, primarily general fund (property taxes, impact fees, recordation tax, building excise tax), general obligation bonds, enterprise user fees, state & federal grants and developer participation. A Debt Affordability Model is used to determine the amount of new debt the County can afford to issue to support the 6-year CIP. The Model is driven by revenue and growth assumptions with established standards controlling the amount of new debt to be issued over the life of a CIP.

The selection of projects, from among those requested to receive CIP funding, is based on several criteria. First, in accordance with Article 66B of the Annotated Code of Maryland the project must be consistent with the most recently adopted Comprehensive Plan. Second, the project must meet the most recently adopted CIP policy guidelines. These policies are reviewed annually and intended to guide funding decisions during the CIP review process. Finally, there must be sufficient funds available to support the project. The Capital Budget is the first year of the CIP and includes those projects for which funds have been appropriated.

Review of the CIP occurs through several venues including the CIP Staff Funding Committee, the Board of Education, and the Frederick County Planning Commission, with the final approval resting with the Board of County Commissioners. Workshops and public hearings are held to provide County citizens a forum to understand and participate in the CIP process.

COMMUNITY FACILITIES ELEMENT

SCHOOLS

The facilities of the Frederick County public school system as of December 2009 include 68 separate schools buildings, constitute approximately 6.2 million square feet of interior space, and occupy over 1,400 acres of land. The following table displays the number of schools and buildings by grade level.

Table 07-1: Existing School Facilities

Grade Level	Number of Buildings	Number of Schools
Elementary	*45	**37
Middle	14	14
High	9	9
All Levels	68	60

*The Thurmont and Middletown communities have paired schools consisting of a primary school (grades pre-K through 2nd grade) and an elementary school (grades 3-5). Two elementary schools, Lincoln and New Midway/Woodsboro, are housed in two separate buildings.
* *Twenty-five of these have pre-kindergarten programs.

Table 07-2: Number of Portable Classrooms

Grade Level	2007-2008	2008-2009	2007-2008	2008-2009
	Number of Portables		Number of Locations	
Elementary	92	101	24	25
Middle	8	14	3	4
High	42	25	5	5
Total	**142**	**135**	**31**	**34**

CURRENT CAPACITY AND ENROLLMENT

School capacity is measured according to standards established by the State of Maryland Public School Construction Program (PSCP). According to the PSCP Administrative Procedures, "the state rated capacity is defined as the maximum number of students that reasonably can be accommodated in a facility without significantly hampering delivery of the educational

program...It isn't intended to be a standard of class size, but rather a criterion for evaluating whether a school is overcrowded."

The following table illustrates the overall utilization of existing school facilities relative to enrollment and state rated building capacity as of December 2009.

Table 07-3: Existing School Capacity and Enrollment

Grade Level	Enrollment	*Equated Enrollment	State Rated Building Capacity	Percent Capacity
Elementary	18,243	17,741	18,671	95%
Middle	8,999	8,999	11,012	82%
High	12,685	12,685	12,930	98%
Special Schools	273	273	390	70%
Total	**40,200**	**39,698**	**43,003**	**92%**

*Equated enrollment defines half-day pre-kindergartners as ½ full-time equivalent student. FCPS December 31, 2009

Individual schools may be under or over capacity. The following shows a breakdown of the number of schools that are either at or above capacity, or under capacity as of December 2009.

Table 07-4: School Capacity – Number of Schools

Grade Level	At or Over 100%	Between 90% and 100%	Below 90%
Elementary	13	11	13
Middle	3	2	9
High	4	3	2

PROJECTED ENROLLMENT

Enrollments in the Frederick County public school system are expected to increase in the future along with the general population, however the rate of growth relative to past trends will slow. System wide enrollment is projected to increase by a total of approximately 5,487 students between 2010 and 2018. This is in contrast to the historic growth of 10,086 students from 1990-2000.

The following chart shows the historic and projected total enrollment between 1970 and 2017, the enrollment growth by year between 1960 and 2010, and the projected enrollment growth by grade level.

Table 07-5: Historic and Projected Enrollment

Total Enrollment		Enrollment Growth By Decade		2008-2018 Enrollment Growth by Grade Level	
Year	Number of Students	Year	Number of Students	Grade Level	Number of Students
1970	19,389	1960-1970	5,090	Elementary	4,201
1980	23,459	1970-1980	4,070	Middle	1,167
1990	26,876	1980-1990	3,416	High	165
2000	36,961	1990-2000	10,086		
2010	41,135	2000-2010	3,245		
2017	45,975	2010-2018	5,487		

PLANNED FACILITIES

Facility needs may be addressed through new schools, additions to existing schools, and on a temporary basis with the use of portable classrooms. In some cases modernization and renovation of existing buildings, may be combined with additions to increase capacity of a particular school.

This Plan identifies 14 new school sites in the County. The total number of new seats is noted based on the following maximum school capacities: elementary – 700 seats, middle – 900 seats, and high – 1,600 seats. The locations indicated below are approximations and are not fixed on specific parcels.

Elementary School Sites – 6,300 new seats

- Harvest Ridge site - the vicinity of Bill Moxley Road and Lomar Dr.
- Linganore Community – site previously in Woodridge area moved to the Town Center area of the Linganore PUD.
- Monrovia - near the intersection of Ed McClain Road and MD 80.
- Greenview PUD - corner of Mussetter Road and Whiterose Dr.
- Dearbought - along MD 26 on the northeast side of Frederick City.
- North Frederick City – near Christopher's Crossing and Walter Martz Road around the northern portion of Frederick City.
- West Frederick City – Two (2) sites between I-70 and Butterfly Lane (on Hargett and Summers properties)
- Brunswick – Two (2) sites in Gaylan Manor and in Brunswick Crossing

Middle School Sites – 2,700 new seats

- North Frederick City – south of Christopher's Crossing and Yellow Springs Road.
- New Market – northeastern quadrant of MD 75 and Old National Pike.
- Mount Airy – north side of Town in Frederick County.

High School Sites – 1,600 new seats

- North Frederick City – near the intersection of Poole Jones Road and Christopher's Crossing.

PARKS

Frederick County has a very diverse system of parks comprised of municipal, county, state, and federal sites. The local parks under the county and municipal jurisdictions are primarily oriented to active park uses including playing fields, playgrounds, and picnic areas. The state and federal parks are oriented to resource protection though they also provide active uses such as camping and hiking. As the County and its communities continue to grow the role and function of parks may also evolve. Park system functions may include:

- Active Recreation Uses – oriented to playing fields, hard court sports, playgrounds, swimming pools, and recreation center buildings.
- Passive Uses – walking/hiking/bicycling trails, picnic areas, gardens, informal open/play fields.
- Natural Resource Protection – Protection of environmental features such as mountain and forestlands, wetlands, stream valleys, and watersheds.
- Historic Preservation – Focus on protecting/preserving a historic site or structure.
- Civic/Community Focal Point – Provide social gathering space, host festivals and cultural events.

Depending on the size of a given park, several different functions may be provided in a single park. For the County's parks the recent trend has been to develop fewer but larger park sites that are able to accommodate many different functions. With a focus of this Plan on having more intensely developed and redeveloped Community Growth Areas that may have more urban characteristics the role of parks will be more significant in providing a community amenity.

PARK TYPOLOGY

Within the context of the park functions described above the County will continue to classify its parks based on amenities, size, and the geographic service/catchment area surrounding the park. The park categories currently used by the County include:

Table 07-6: Park Types

Park Type	Acreage Range	Service Area	Type of Amenities
Neighborhood	1 to 10 acres	1/2 mile, within walking distance	playgrounds, picnic tables, benches and informal playfields
Community	30 to 100 acres	2+ miles	athletic fields, court game areas, picnic pavilions, playgrounds, trails, natural areas and pools
Regional	100+ acres	10+ miles	may have a higher quantity of recreational facilities than Community Parks and/or specialized facilities (i.e. natural areas, pools, multi-purpose buildings, etc.)
Special Use	can vary from 1 to 50 acres	Countywide	roadside overlooks & picnic sites, river access points, historic sites
Conservation/ Resource	1,000+ acres	Countywide	natural resource protection & conservation and passive uses such as hiking, fishing, nature study and camping.

EXISTING PARK FACILITIES

The following table gives an overview of the existing public parkland resources in Frederick County.

Table 07-7: Existing Public Parkland

Park Type	Municipal Acres	County Acres	Board of Education Acres	State Acres	Federal Acres	Total Acres
Neighborhood	536	12	281	---	---	829
Community	866	328	281	---	---	1,475
Regional	186	933	---	---	---	1,119
Special Use	---	519	---	---	---	519
Resource	[2] 8,577	---	---	11,267	8,681	28,525
Total	**10,165 acres**	**1,792 acres**	**[1] 562 acres**	**11,267 acres**	**8,681 acres**	**32,467 acres**

(1) Board of Education acreage is calculated as 50% of Middle and High School sites and 33% of Elementary School sites. The State allows up to 60% of a school site to be counted towards local parkland acreage.
(2) Watershed Properties

The existing park facilities owned and operated by Frederick County are as follows:

Table 07-8: Existing County Park Sites

Park Name	Park Type	Acres
Ballenger Creek Park	Regional	127
Brunswick/Jefferson Area Park	Regional	214
Buckeystown Park	Community	18
Carroll Creek Park	Special Use	27
Catoctin Creek Park	Special Use	139
Creagerstown Park	Special Use	5
Devilbiss Bridge River Access	Special Use	1
Dudrow Park	Special Use	27
Fahrney Branch Park	Special Use	35
Fountain Rock Park & Nature Center	Special Use	22
Fountaindale Park	Neighborhood	8
Green Hill Park	Community	21

Table 07-8: Existing County Park Sites

Park Name	Park Type	Acres
Kemptown Park	Community	72
Kingsbrook Park	Special Use	25
Libertytown Park	Community	101
Loys Station Park	Special Use	7
Middletown Park	Community	79
Monocacy River Park	Special Use	60
Monocacy/Overlook Park	Special Use	55
Old National Pike Park	Regional	156
Pinecliff Park	Regional	94
Point of Rocks Community Commons	Neighborhood	4
Point of Rocks Park	Community	17
Robin Meadows Park	Special Use	19
Rocky Ridge River Access	Special Use	19
Roddy Road Park	Special Use	16
Rose Hill Manor Park	Special Use	43
Urbana District Park	Regional	95
Urbana Park	Community	20
Urbana Centerville Park	Special Use	19
Utica Park	Regional	247
Total		**1,792**

In addition to these park facilities, the County's Division of Parks and Recreation operates eight recreation centers and the City of Frederick operates two at the following schools:

- Centerville Elementary
- Deer Crossing Elementary
- Emmitsburg Community Center (while not a school, recreational programs are provided through this facility)
- Middletown Primary
- Oakdale Elementary
- Thurmont Middle
- Tuscarora Elementary
- Walkersville Elementary (scheduled to open in Fall 2010)
- Thomas Johnson Middle (City of Frederick)
- Whittier Elementary (City of Frederick)

ADEQUACY STANDARDS

The State of Maryland allows local governments to adopt an acreage goal of 30 acres per 1,000 people. According to State standards, state and federal parkland can be counted toward this goal. Accordingly, the County has approximately 90 acres per 1,000 people of state and federal parkland alone.

However, the majority of the state and federal parkland does not meet the local needs for various playing fields to accommodate soccer, softball, baseball and other sports. Therefore, since 1988 the County has used a locally adopted acreage standard of 25-acres/1,000 population that focuses only on locally owned municipal and county parkland. This standard is further broken down into three subcategories based on park type to serve as a guideline to identify current and future park land needs.

Table 07-9: Park Acreage Standard by Park Type

Park Type	Acreage Standard
Neighborhood	5 acres / 1,000 persons
Community	10 acres / 1,000 persons
Regional	10 acres / 1,000 persons

Based on the existing parkland acreage, which includes municipal (excluding watersheds), county, and school sites, the County has 17 acres of parkland per 1,000 people. The following tables identify current and projected acreage needs based on the County's current and projected population:

Table 07-10: Current Parkland Needs

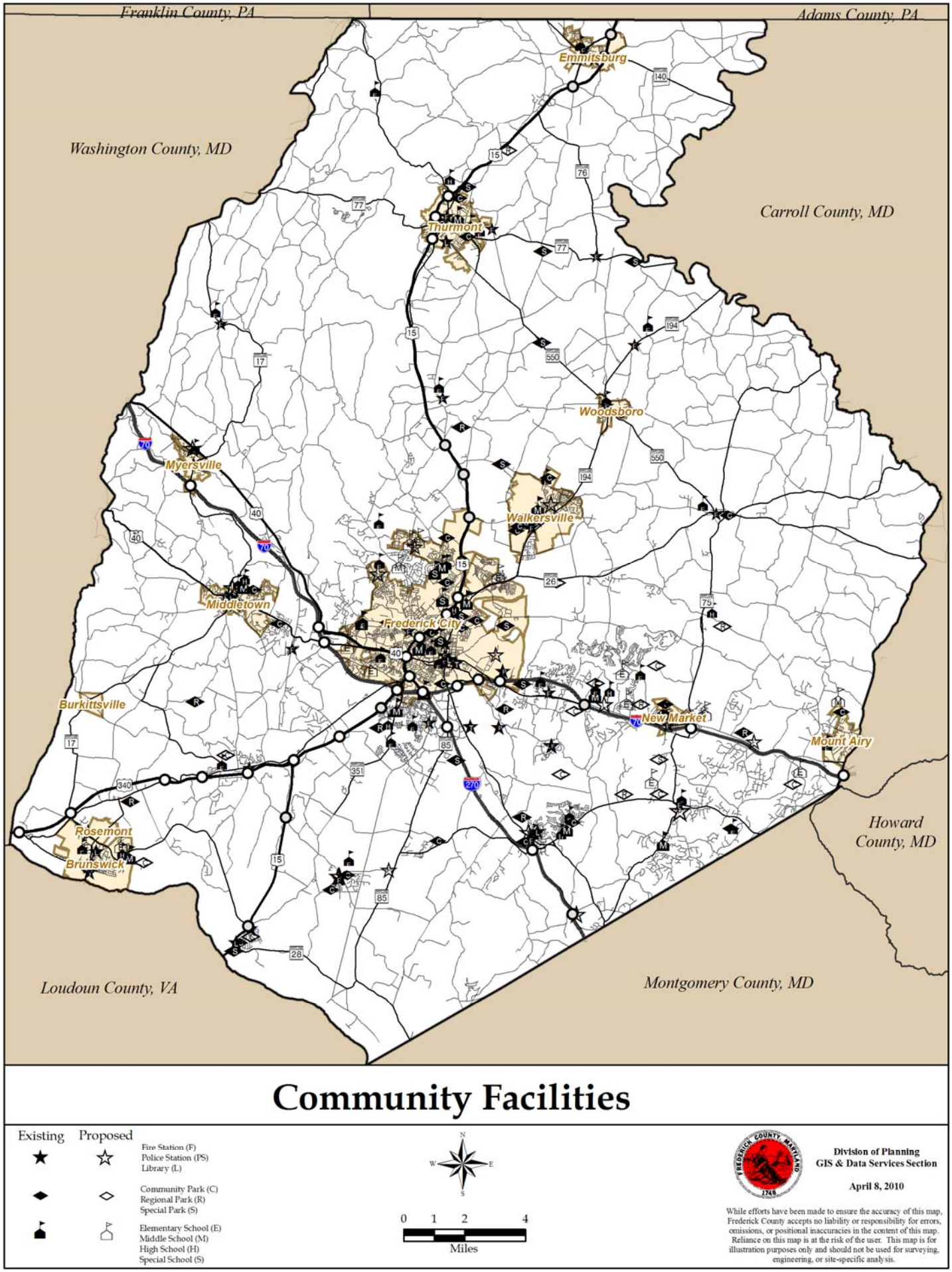
Park Classification	2009 Population: 233,439		
	2009 Existing Acreage	2009 Acreage Needs	2009 Acreage Deficit
Neighborhood	829	1,167	338
Community	1,475	2,334	859
Regional	1,119	2,334	1,215
Total	**3,423 acres**	**5,836 acres**	**2,413 acres**

Table 07-11: Projected Parkland Needs

Park Classification	2020 Population: 287,900		2030 Population: 331,700	
	2020 Cumulative Needs	2020 Acreage Deficit	2030 Cumulative Needs	2030 Acreage Deficit
Neighborhood	1,440	611	1,659	830
Community	2,879	1,404	3,317	1,842
Regional	2,879	1,760	3,317	2,198
Total	**7,198 acres**	**3,775 acres**	**8,293 acres**	**4,870 acres**

*2020 and 2030 populations are based on Maryland Department of Planning. October 2008.

Map 07-1: Community Facilities



PLANNED FACILITIES

This Plan identifies 15 planned park sites in the County, which assuming 100 acres for each Community Park and 200 acres for each Regional Park would add 2,000 acres to the County's system. In addition to new parks some of the parkland needs may be accommodated by adding land to existing parks. The locations indicated below are approximations and are not fixed on specific parcels.

Community Parks – 1,000 acres

- Brunswick – east side of the City south of MD 464
- Jefferson – between Broad Run Road and Old Middletown Road.
- Adamstown Commons – site identified in the development on north side of Doubs Road.
- Monrovia – vicinity of Ed McClain Road and MD 80.
- Harvest Ridge area - near Bill Moxley Road and Lomar Drive.
- Linganore – potential stream-valley park along Bens Branch and Crickenberger Road.
- Linganore – in the Linganore Town Center north of Meadow Road and I-70.
- Bartonsville - south of MD 144 and west of Ijamsville Rd.
- Urbana – north side of Ball Rd.
- Walkersville – south side of MD 26 to the east of MD 194.

Regional Parks – 1,000 acres

- Linganore – west side of Boyers Mill Rd. south of Summerfield.
- Urbana – along MD 80 between Urbana and Monrovia.
- Old Annapolis Road – in the vicinity of Linganore High School.
- North County – between Thurmont and Emmitsburg along the east side of US 15
- Point of Rocks – in the vicinity just north of the community

ELEMENT OF GREEN INFRASTRUCTURE PLAN

Parks are not only intended to serve as recreational and aesthetic amenities to County residents, but in some circumstances are intended to act as part of a larger Countywide effort for natural resource protection as described in chapter four of this plan, *Conserving Our Natural Resources and Green Infrastructure*. As described in that chapter, parks/protected lands are typically either large areas of preserved woodland, or "greenways" that follow the geography defined by a natural feature, such as a mountain ridge, river, or creek.

These areas serve a variety of non-recreational functions, such as water quality protection and supply, flood hazard reduction, aquifer recharge, preservation of habitat for wildlife, and erosion prevention. However, natural features also serve as parkland for the community at large because they provide scenic beauty and recreational opportunities such as hiking, hunting, camping, and picnicking.

The County park type most likely to serve as a green infrastructure element is the regional park. They are typically 200 or more acres and may be located adjacent to or contain water features such as rivers, stream valleys and ponds. While these parks are still primarily oriented to providing active recreational uses their larger size also allows for significant portions of a park to remain in a natural state for conservation-related purposes.

LIBRARIES

EXISTING FACILITIES

Frederick County Public Libraries currently operates the following eight public libraries in Frederick County:

- C. Burr Artz Public Library - system headquarters
- Thurmont Regional Library
- Urbana Regional Library
- Brunswick Branch Library
- Emmitsburg Branch Library
- Middletown Branch Library
- Walkersville Branch Library
- Edward F. Fry Memorial Library at Point of Rocks

Additional library services include a bookmobile that travels to senior centers and day care centers for at-risk children, and library operations for the County Detention Center.

LIBRARY TYPES

For the purposes of planning for new library facilities the County classifies libraries as either regional or branch libraries. At present each of the County's eight planning regions has at least one library facility and all are located in Community Growth Areas. This Plan does not specify the type of new libraries or the upgrading of existing libraries. The type of library as described below will be determined by the size of the surrounding community, available land, and opportunities for joint uses.

Branch Library

- Building size - 2,500 - 15,000 square feet. May be a standalone building or can be accommodated in a community center/multi-use building
- Parcel size – 2-3 acres
- Support smaller communities at pre-school through twelfth grade educational levels.

Regional Library

- Building size – 25,000 square feet minimum
- Parcel size – 3-4 acres
- Able to accommodate joint uses

PLANNED FACILITIES

This Plan identifies five planned library sites. The locations indicated below are approximations and do not reflect any actual holdings. They are to indicate future need and the general location of the facility.

Library Sites

- West Frederick City – new branch facility near the intersection of Kemp Lane and Christopher's Crossing near the Whittier development.
- Town of Middletown – replacement of an existing facility to the north side of Town east of MD 17.
- Linganore – new branch facility in the Linganore Town Center commercial area between Oakdale High School and Old National Pike.
- Town of Walkersville – replacement of existing branch facility currently on Frederick Street
- Town of Myersville – new branch facility to be located on site of old town hall.

PUBLIC SAFETY

POLICE

Public law enforcement agencies operating in Frederick County include the following:

- Frederick County Sheriffs Office
- Maryland State Police, Frederick Barracks
- City of Frederick Police
- City of Brunswick Police
- Town of Thurmont Police

The Frederick County Sheriff's Office provides the primary law enforcement services to the unincorporated portions of the County, in addition to providing security for the County Courthouse and operation of the County's Adult Detention Center. The Sheriff's Office also provides patrol services on a contractual basis to several municipalities including Emmitsburg, Myersville, and Middletown.

The Sheriff's Office is based in the Frederick County Law Enforcement Center located adjacent to the Frederick Municipal Airport. All major law enforcement service and administration is managed and operated from this facility, which is also home to the Department of Emergency Communications 911 Call Center and Barrack B of the Maryland State Police.

The facilities strategy pursued by the Sheriff's Office has shifted from the construction of fully staffed substation buildings located throughout the County. The only substation that is still planned to be constructed will be part of a new Green Valley Fire Station to be located in Monrovia.

The current strategy is to supply field offices. Unlike substations, field offices would not be fully staffed 24 hours a day, but rather would be spaces located in existing or planned County buildings such as libraries and fire stations where law enforcement personnel can perform follow ups, contact citizens, return phone calls, and prepare reports. There are field office's located at the Urbana Regional Library, and in the Point of Rocks Fire Station.

Measure of Service

There are currently 185 sworn, full time officers employed in the Sheriff's Office. Based on the July 2008 County population excluding the City of Frederick, (170,925 people) this results in a measure of service of approximately 1.1 officers per 1,000 population.

FIRE AND RESCUE

The County's Division of Fire and Rescue Services oversees all fire and rescue services and facilities in the County including those located in the municipalities. Fire and rescue services are provided through a combination of both volunteer and career responders. There are approximately 800 to 1,000 volunteer responders and 358 career fire/rescue personnel.

Fire/Rescue Facilities

There are 30 fire and rescue stations in Frederick County with ownership split between the County and the individual volunteer fire and ambulance companies. The County owns three of these, the Westview Station, Green Valley Station, and the Spring Ridge Station, while volunteer companies own the rest.

Measure of Service

In 2007 there were 27,456 calls for service. This results in an approximate measure of service for 2007 of 118 calls per 1000 population. Total call volume for 2005 was 22,824 and for 2006 were 25,136, which result in a measure of service of 103 calls per 1,000 population in 2005 and 111 calls per 1,000 population in 2006.

The highest concentrations of incidents are occurring within the City of Frederick. In fact, 51% of all incidents occurring in 2006 were located within the City of Frederick and the surrounding areas. This includes 52% of EMS incidents and 46% of fire incidents.

The current Fire and Rescue Service Master Plan, completed in 2008, recommends that while the current arrangement of facilities provides adequate coverage of the County, relocation and or consolidation of some stations may improve efficiency and overall response times.

PLANNED FACILITIES

There is one planned police station and there are eight planned fire stations. The locations indicated below are approximations and do not reflect any actual holdings. The corresponding symbols on the Land Use Plan map are to indicate the general location of the facility in the future.

Sheriff Substation

- Monrovia – near the intersection of MD 75 and MD 80. This substation would be part of a new Green Valley Station replace an existing station.

Fire stations

- Brunswick – relocation of the Brunswick Fire Co. from downtown Brunswick to MD 17 adjacent to the Brunswick Crossing development.

- Adamstown – relocation of the Carroll Manor Fire Co. from Adamstown to the intersection of New Design Rd. and Adamstown Rd.
- South Urbana – While a fire station symbol is not shown on the Land Use Plan map a station in this area between I-270 and MD 355 would be considered if the Hyattstown Fire Station is closed.
- East County – new station between New Market and Mount Airy along Old National Pike.
- East Frederick City – new station in the vicinity of the Frederick Municipal Airport.
- North Frederick City – new station in the vicinity of Christopher's Crossing and Walter Martz Rd.
- Middletown – relocation of existing station on MD 17 in downtown to a site adjacent to the Middletown Primary School on Franklin St.
- Monrovia – relocation of New Market/Green Valley substation currently located at the southeast corner of MD 75 and MD 80.

HEALTH AND HUMAN SERVICES

Health and Human Services is a new element to a County comprehensive plan and is relevant to the County's long range planning in several respects. Foremost is the trend of an aging population that is projected to increase as a total proportion of the County's population. This will have implications for the level of direct services that County government provides and for other issues such as transportation and housing. Including these services in the comprehensive plan will also establish a more coordinated effort for new facilities to consider shared space in other County facilities and to ensure the services are located in proximity to the population they would serve.

COUNTY GOVERNMENT SERVICES

The Citizens Services Division of Frederick County Government is comprised of the following departments that provide a variety of programs and services:

- The Office for Children and Families
- The Department of Aging
- The Department of Human Relations
- Family Partnership
- Head Start
- Child Advocacy Center
- The Department of Housing and Community Development

Office for Children and Families

The Office for Children and Families is the staff to the Local Management Board, a state and county legislated board. This office administers grants which fund a broad spectrum of children and families services in Frederick County. The office provides fiscal and programmatic oversight of all grant funded programs, including the ongoing provision of technical assistance to sub awardees. The office is also responsible for the administration of the Local Coordinating Council, a state mandated interagency body which reviews and oversees community-based and residential services for highly at-risk youth. Finally, every three to five years OCF/LMB is required to conduct a community needs assessment in order to gauge and guide all children, youth, and family services in the Frederick Community. During the most recent (2007) assessment childcare and childcare centers were indicated as a pressing need in the County.

Department of Aging

The Department of Aging serves the over 60 years of age population of Frederick County, their caregivers, and their family members. The State of Maryland projects that by 2030, the proportion of the total population in Frederick County that is over the age of 65 will almost double from 9.6% to 18.3%. This means that while one out of ten people in the year 2000 were over the age of 65, two out of ten will be over the age of 65 in the year 2030.

The Department of Aging operates five senior centers throughout the County. They are located in Frederick, Emmitsburg, Brunswick, Thurmont, and Urbana. These centers provide meals, recreation and education programs, health screenings, and a place to socialize with others in the community. Two additional senior centers are planned for Middletown and Walkersville. While some residents are able to access the senior centers by driving/carpooling and walking the Department also has a van at each center to provide door to door transportation. Residents may also use the County's TransIT paratranist service and only the Frederick senior center can be accessed on TransIT's fixed route service.

Family Partnership

Family Partnership (FP) operates two family support centers (Frederick and Emmitsburg) in leased facilities. FP serves both expectant mothers and young families with children age 0 to 4. Neither of the family support centers is a licensed day care center, so the parents must always be present when the children are on site. The services provided at the centers include: education and employment classes, developmental child care, parenting, life skills, health workshops, and service coordination. The County provides limited transportation for families using the centers. The Family Partnership staff also conducts home visits.

Head Start

Head Start is a federally funded early childhood education and family service whose primary target population is families, who have limited income (federal income guideline criteria applied), with children aged 3 and 4 years. Head Start operates 15 classrooms in 11 locations primarily in County facilities and elementary schools. Some services are conducted in families' homes. Three of the classrooms operate full days year round in order to assist underemployed working parents, while the others operate as half day for the ten month school year.

Center Name	Location	Facility Owner
Carroll Creek	401 Sagner Ave., Frederick City	Frederick County
Carver	Madison Ave. Frederick City	City of Frederick
Emmitsburg	Emmitsburg Community Center	Frederick County
Hillcrest	Hillcrest Elementary School	Board of Education
Market Street	Citizens Services building	Frederick County
North Frederick	North Frederick Elementary School	Board of Education
Riverside	Riverside Technology Park	Frederick County (leased)
Rock Creek	Rock Creek School	Board of Education
Sagner	Police Activity League building	City of Frederick
Walkersville	35 E. Frederick Street, Town of Walkersville	Children's Center of Walkersville
Waverley	Waverley Elementary School	Board of Education

Both Family Partnership and Head Start serve families with young children who require additional child care and other family oriented resources. Currently, the two Family Partnership sites in the Emmitsburg Community Center and the Riverside Technology Park are co-located with Head Start. Future sites for Head Start and Family Partnership facilities should allow for the joint use of these programs and should also be sited to serve families outside of the City of Frederick.

Child Advocacy Center

The Child Advocacy Center of Frederick County (CAC) is an agency set up to assist children who are victims of sexual and physical abuse. The CAC provides medical examines, counseling and advocacy for victims. The CAC also coordinates services from the Department of Social Services' Child Protective Services Division, local police agencies, and the Frederick County State's Attorney's Office. Victims and families also receive information and referrals to other appropriate community agencies. The CAC only receives referrals from the Frederick County Department of Social Services' Child Protective Services Division (CPS) or local law enforcement agencies.

Non-Profit and Charitable Organizations

Non-profit and charitable organizations provide a wide range of human services and play a significant role in advancing the vitality of communities throughout the County. These organizations greatly expand the range of human services offered in the County compared to those that the County itself provides. Some types of services offered by non-profit and charitable organizations in Frederick County are as follows:

- Aid and assistance for person with developmental disabilities.
- Adult daycare services for the elderly providing meals, transportation, care, and therapeutic activities.
- Provision of housing for people with developmental disabilities.
- Residential treatment for alcohol and drug dependant adults.
- Organizations that provide general services such as food, shelter, medical care, housing, and other forms of assistance to families and individuals who are low-income or homeless.

- Comprehensive services for victims and survivors of domestic violence, rape/sexual assault and child abuse.
- Education, training, and career services for people with disadvantages, such as welfare dependency, homelessness, and lack of education or work experience, as well as those with physical, mental and emotional disabilities.
- Provision of emergency food assistance, eviction prevention services, budget counseling, financial assistance for utility payments, and assistance with health care, dental care, and prescription medications.
- Services to promote and build family functioning.
- Umbrella services that organize other charitable and volunteering activities.

ACTION ITEMS

Schools

SC-A-01 Develop a school site land banking program as part of its overall land development review process.

SC-A-02 Promote Safe Routes to Schools program through plans and programs that enhance pedestrian accessibility and safety.

SC-A-03 Update the pupil yield factor study every two years.

Parks

SC-A-04 Establish standards for the provision of recreational amenities servicing commercial and employment projects.

Public Safety

SC-A-05 Periodically undertake comprehensive reviews of public safety needs based upon future growth projections to establish minimum standards for police and fire/rescue protection.

SC-A-06 Mutual aid agreements between Frederick County and all adjoining jurisdictions should continue to be sought and/or refined to clarify responsibilities and improve protection services.

SC-A-07 Establish Response Time Standards for fire and rescue services and ensure that fire and ambulance services are provided in accordance with these adopted standards.

Human Services

SC-A-08 Review the Zoning Ordinance to allow for implementation of human services in appropriate districts to further the delivery of the services to the community.

SC-A-09 Map (assess) human services components to better gauge issues and opportunities in an effort to identify, predict and prioritize county and community level needs.

PUBLIC UTILITIES ELEMENT

POLICIES

Water and Sewer Policies

PU-P-01 Compliance with the County's Water and Sewerage Plan and its policies is required of County Government agencies.

PU-P-02 Cooperate with the municipalities in joint planning of future water and sewerage services.

PU-P-03 Extension and interconnection of existing water and sewerage systems to facilitate infill development is preferred over establishment of new systems in order to maximize economies of scale and system flexibility.

PU-P-04 Protect public water impoundments, their watersheds, and public community groundwater systems from contamination due to incompatible land uses.

PU-P-05 Encourage water conservation measures in all County systems through the plumbing code and through establishment of programs for this purpose.

PU-P-06 Discourage the establishment of individual well & septic systems, and individual well & public sewer systems within Community Growth Areas.

PU-P-07 Discourage the construction of new water/sewer service that relies on individual wells with a community sewerage system.

PU-P-08 Consider, and when appropriate, encourage the use of well-demonstrated alternative technologies and methodologies for the treatment of wastewater (sewage) both municipal and private onsite disposal systems.

PU-P-09 Multi-use water and wastewater systems may be appropriate for permitted and special exception uses in areas outside of community water/sewer service areas if deemed consistent with the Comprehensive Plan. The determination of consistency may consider but not be limited to the size and intensity of the proposed use, the surrounding existing and planned development patterns and land uses, and the proximity to environmentally sensitive lands.

Solid Waste Management Policies

PU-P-10 Cooperate with other jurisdictions in developing regional solutions to solid waste management problems.

PU-P-11 Integrate solid waste management systems and programs to ensure reliable, safe and cost effective disposal and recycling services for Frederick County residents.

PU-P-12 Construction of a regional energy recovery facility or waste-to-energy (WTE) per the Board of County Commissioner approved plan and to be located in the McKinney Industrial Park adjacent to the Ballenger Creek Wastewater Treatment Plant and Division of Utilities and Solid Waste Management headquarters is consistent the County Solid Waste Management Plan and this Countywide Comprehensive Plan.

RELATED COUNTY PLANS

1998 Frederick County Solid Waste Management Plan

This plan provides the data and planning framework to make decisions about the implementation of capital construction and management programs for solid waste facilities. Additionally, the Plan also serves as a blueprint for accomplishment of Frederick County's goal to recycle waste as mandated by the State of Maryland. Finally, the Plan articulates and identifies issues that the County must address in the future.

2008 Frederick County Water and Sewerage Plan

The purpose of the Master Water and Sewerage Plan is to provide an overview of the planning policies, needs, and planned infrastructure related to community and individual water and sewerage systems. The Water and Sewerage Plan is organized into four chapters, appendices, and maps defining the various service classifications.

SOLID WASTE MANAGEMENT

The 1998-2017 Solid Waste Management Plan includes recommendations for the sizing and staging of needed management facilities, the organization of collections systems for solid waste and recyclables, and required modifications to County policies and regulations. The Division of Utilities and Solid Waste Management (DUSWM) is responsible for management of the County's solid waste facilities.

The County's sanitary landfill and allied waste management facilities is located at Reich's Ford Road to the southeast of Frederick City. Landfill operations include monitoring and managing a "closed" Site 'A' Landfill, the management of the operational Site 'B' Landfill, as well as the operation and maintenance of a waste processing and transfer station.

The County's solid waste management program includes the following operations, facilities and activities:

- Countywide curbside recycling program in the City of Frederick
- Maintain 12 residential recycling drop-off centers throughout the County
- Maintain two yard waste recycling centers (Walkersville and Reich's Ford landfill)
- Coordination of nine waste-oil recycling centers
- Organization of the Household Hazardous Waste Drop-off events

CURRENT AND PROJECTED NEEDS

The current and projected needs of solid waste management in Frederick County revolve around reorganizing solid waste management practices to solve the problem of an over-capacity landfill and the increasing waste disposal needs of a growing population. Several alternatives for meeting the demand for new capacity have been pursued including:

- Optimize the existing landfill capacity, through redesign of disposal cells in the County landfill.
- Increase the overall landfill capacity through an increase in height and side slope grade.
- Secure long-term waste disposal capacity in landfills outside the County and construct a transfer station to facilitate waste transfer operations.
- Expanding residential curbside recycling collection services to all residential properties in the County.
- Development of a regional (Carroll/Frederick) Waste to Energy (WTE) Facility, which provides for the recovery of energy from post recycling municipal solid waste.

All of these measures have been implemented or are underway. The modified liner design for the landfill cells increased the amount of landfill capacity by approximately 129,000 cubic yards or the approximate equivalent of 75,000 tons of disposal capacity. In March 2003 the DUSWM requested a permit modification to allow for a vertical expansion of the Site B landfill and to increase the landfill's design side slope from 4:1 to 3:1. The MDE approved the new permit in May 2007. By increasing the height of the landfill, approximately 2 million cubic yards of additional waste disposal capacity can be provided.

In April 2005 the County entered into a long-term waste transportation and disposal contract with Waste Management Incorporated, which provides the County with out-of state landfill capacity and waste transportation services until 2011. Additionally, the County has recently opened a transfer station at the Reich's Ford landfill to facilitate shipment of waste out-of-state and to improve its recycling efforts. Long term solid waste management strategies for the portion of solid waste that cannot be recycled should consider emerging technologies, which have been deemed as fully demonstrated at the scale necessary for Frederick County. Frederick County, through the Northeast Maryland Waste Disposal Authority, completed a comprehensive investigation of fully demonstrated solid waste disposal system technologies and in 2009 completed a multi-year procurement for a state-of-the-art WTE facility.

WATER AND SEWERAGE SYSTEMS

One of Frederick County's primary roles in protecting public health, safety, and welfare is to assure a dependable, safe, public supply of water to its citizens. The provision of public water and sewer service in an efficient manner not only protects public health and the environment but facilitates orderly and compact development patterns in Frederick County, consistent with the Comprehensive Plan. The primary means of planning for water and sewer is through the County's Water and Sewerage Plan, which was recently updated in 2008. The Water and Sewerage Plan includes goals and policies for water and sewer planning, identifies current and planned service areas and, documents system capacities and use.

WATER AND SEWERAGE PLAN REVISIONS

The Comprehensive Plan has resulted in revisions to the community growth area boundaries, land use plan designations, and zoning, which will be reflected in amendments to the Water and

Sewerage Plan classifications for individual parcels. The following types of amendments to the Water and Sewerage Plan will be made:

Service Area Boundaries

The service area boundaries for water and/or sewer service areas would be adjusted to match revisions to the community growth area boundaries. As parcels are shifted into or out of a water/sewer service area their water/sewer classification would also change.

No Planned Service Classification

Parcels removed from a water/sewer service area would be classified No Planned Service (NPS) on the Water and Sewerage Plan. This classification will also apply to parcels designated Agricultural/Rural but are within a community growth area and the water/sewer service area. The Agricultural/Rural land use plan designation within a community growth area is used as a development staging mechanism to indicate a longer term development time frame. Subsequent plan updates may apply a development land use plan designation that would be matched with the appropriate water/sewer classification.

Planned Service Classification

The Planned Service (PS) classification is applied to parcels within a community growth area that have a land use plan designation other than Agricultural/Rural or Natural Resource. These parcels could also be zoned Agricultural or Resource Conservation. The PS classification generally indicates that water/sewer service would be available in an 11-20 year time frame.

S-5/W-5 Long Range Plan Classification

The S-5/W-5 classification generally indicates that water/sewer service would be available in a 7-10 year time frame. An S-5/W-5 classification would be applied to parcels with a land use plan designation other than Agricultural/Rural or Natural Resource AND have zoning other than Agricultural or Resource Conservation.

COMMUNITY WATER SERVICE

Within the County are 15 regional community water service systems operated either by the County or a municipality. There are two major institutional uses, Ft. Detrick and Mt. St. Mary's University, that maintain their own systems. Not listed under the County Systems are several small community systems and individual subdivision systems that the County also maintains. These small community systems are not planned for expansion nor are they located so as to be easily and economically connected to a regional system.

County Systems

- New Design – serving the following community growth areas: Adamstown, Point of Rocks, Ballenger Creek, Urbana, Monrovia, Linganore, Spring Ridge/Bartonsville, and New Market.
- Fountaindale/Braddock Heights
- Jefferson (not a single water system; comprised of multiple systems within existing subdivisions)
- Libertytown (not a single water system; comprised of multiple systems within subdivisions)

Municipal Systems

- City of Frederick
- Walkersville
- Woodsboro
- Thurmont
- Emmitsburg
- Brunswick – serving Village of Rosemont and County areas of Knoxville and New Addition.
- Middletown
- Myersville
- Mount Airy

Independent/Institutional Systems

- Ft. Detrick (US Government)
- Mt. St. Mary's University

Frederick County's Division of Utilities and Solid Waste Management (DUSWM) operates the largest of the community water systems (referred to as the New Design system) which relies on surface water from the Potomac River. Several smaller community water systems, also owned and operated by Frederick County, rely on groundwater to serve individual subdivisions and unincorporated communities. The Potomac River provides approximately 80% of the County's public water supply, with the remaining 20% supplied by groundwater.

The City of Frederick is the largest municipal system and uses water from four sources: the Monocacy River, Linganore Creek, the Fishing Creek Reservoir, and several groundwater wells. In addition, the City of Frederick has an agreement with the County to purchase up to 8 million gallons per day of maximum day capacity from the County's Potomac River supply. The City is also seeking additional groundwater sources for its municipal supply.

Ft. Detrick relies on water from the Monocacy River, but this source may have limitations for their future expansion. Municipal systems rely on a combination of groundwater wells, surface water, or springs.

COMMUNITY SEWER SERVICE

There are 13 regional community sewerage service systems in Frederick County:

County Systems

- Central Frederick Service Area – serving the community growth areas of: Walkersville, Ballenger Creek, Linganore, Spring Ridge/Bartonsville, Adamstown, Buckeystown, Urbana, Frederick (portion), and Libertytown.
- New Market/Monrovia
- Fountaindale
- Jefferson
- Point of Rocks

Municipal Systems

- Brunswick – serving County areas of Knoxville and New Addition.
- City of Frederick
- Woodsboro
- Thurmont
- Emmitsburg
- Middletown
- Myersville
- Mount Airy

In addition, there are five smaller sewer systems outside of the community service areas. These small community systems are not planned for expansion nor are they located so as to be connected to a regional system.

- White Rock
- Mill Bottom
- Pleasant Branch
- Crestview Estates
- Blue Ridge Summit / Highfield (Washington County provides both public water and sewer service to this area)

The County's primary waste water treatment plant (WWTP) is the Ballenger Creek facility which discharges treated effluent to the Monocacy River. The City of Frederick and Ft. Detrick each have a WWTP discharging into the Monocacy River upstream of the Ballenger Creek WWTP. Most of the municipal systems discharge into tributaries of the Monocacy River, while the Myersville, Middletown, and the County's Fountaindale and Jefferson systems discharge into Catoctin Creek. The Brunswick system and the County's Point of Rocks system discharge directly into the Potomac River.

A planned expansion of the County's Ballenger Creek WWTP with Enhanced Nutrient Removal using membrane bioreactor technology will further reduce nutrient concentrations below pollutant loading limits for the Monocacy River. What will be known as the Ballenger Creek/McKinney WWTP will allow the County to eliminate the discharge of two sub-regional WWTPs in New Market and Monrovia and the Landfill Leachate treatment plant discharge to Bush Creek.

MULTI USE SYSTEMS

Multi-Use water and wastewater systems may be used to serve individual uses typically located outside of community (public) water/sewer service areas. These uses may include institutional uses such as schools, churches, and parks as well as residential, commercial, or industrial uses. Multi-use systems are specifically limited to only serve a single lot or parcel, compared to a community system that serves multiple lots/parcels.

Multi-Use water systems have a capacity in excess of 5,000 gallons per day and may utilize ground water or surface water sources. Locations of Multi-Use water systems are included and described in the County's Water and Sewerage Plan.

Multi-Use wastewater systems have a system capacity in excess of 5,000 gallons per day and may utilize a variety of treatment methods including septic systems or small wastewater treatment plants that discharge into adjacent streams. Locations of Multi-Use wastewater systems in the County are included and described in the County's Water and Sewerage Plan.
There are 20 Multi-Use Wastewater Systems and 26 Multi-Use Water systems serving individual businesses, institutional uses, and several County schools.

ACTION ITEMS

Water and Sewer

PU-A-01 Implement Source Water Protection Plans.

PU-A-02 Watershed Management Plans should be considered as part of the development review process.

PU-A-03 Work with the Health Department to accommodate new technologies.

Solid Waste

PU-A-04 Maintain representation on regional boards that evaluate the feasibility and implementation of regional solid waste acceptance and processing facilities.

PU-A-05 Construct a regional energy recovery facility or waste-to-energy (WTE) per the Board of County Commissioner approved plan in the McKinney Industrial Park adjacent to the Ballenger Creek Wastewater Treatment Plant and Division of Utilities and Solid Waste Management headquarters.

HOUSING ELEMENT

The purpose of this section is to address affordable and workforce housing issues and the County's role in provision of housing and housing related programs. This element will meet the State's required inclusion of a Workforce Housing Element in a jurisdictions comprehensive plan.

HOUSING GOALS

HO-G-01 Achieve a balance of housing choices that meets the needs of Frederick County individuals and families at all income levels.

HO-G-02 Support opportunities for people to live where they work.

HO-G-03 Strive to provide those with special needs (elderly, disabled, very low income) safe, sound and sanitary homes.

HO-G-04 Increase investment in existing neighborhoods and rural communities through revitalization efforts.

HO-G-05 Utilize infill and redevelopment to increase housing choices throughout the County.

HOUSING POLICIES

HO-P-01 Support construction of affordable housing in order to address projected shortfalls in availability.

HO-P-02 Continue to support efforts that promote and provide accessible, affordable housing options to residents.

HO-P-03 Reasonably accommodate the housing needs of all residents in an effort to allow them the option of remaining in the County.

HO-P-04 Support green building design for energy efficiency, health of occupants and housing long-term affordability.

HO-P-05 Encourage higher density, mixed-use and mixed-income development in designated growth areas where a balance of housing types and styles are offered to meet the diverse housing needs of residents.

HO-P-06 Provide the aging and elderly population with communities that offer direct access to public transportation and essential services.

HO-P-07 Encourage the work force to secure housing in close proximity to their jobs.

HO-P-08 Maintain the quality and unique character of its housing stock in existing neighborhoods and communities.

RELATED COUNTY PLANS AND STUDIES

2005 Frederick County Study of Workforce Housing Needs

The Frederick County Affordable Housing Council, in partnership with Lipman, Frizzell and Mitchell and Montgomery County Housing Opportunities Commission, produced a study of workforce housing needs including recommendations on inclusionary zoning implementation and a 25 item action plan for the Department of Housing and Community Development, subsequently approved by the County Commissioners.

BACKGROUND

Having decent and safe shelter is a basic necessity of life and Frederick County strives to achieve a balance of housing choices to meet the diverse needs of its residents and families at all income levels. Homeownership is recognized as the single most influential contributor to a community's quality of life and neighborhood stability. The County's owner-occupancy rate of more than 76% is reflective of the County's economic and demographic characteristics as well as its location in the Baltimore-Washington metropolitan area.

The Department of Housing and Community Development is responsible for the administration of many rental and home ownership programs for the lowest income to moderate-income residents. The Department manages the County-owned Bell Court, a senior rental- housing complex for very low-income residents, located in Woodsboro. Through the Housing Initiative Fund, the Department provides loans to developers of affordable housing for the acquisition, construction, preservation and rehabilitation of affordable housing. Rental subsidy programs require monthly rent check processing, unit inspections, and certification of program participants. Homeownership programs include down payment and settlement cost assistance for first time homebuyers and housing rehabilitation loans for existing homeowners. The Department administers the County's Moderately Priced Dwelling Unit Ordinance (MPDU), a program that requires the construction of moderately priced housing in every new development of 25 or more units in the county on public water and sewer.

Table 07-12: Frederick County Housing Availability*

Total Housing Units	86,154
Total Occupied Units	81,851
Owner Occupied Units	63,284
Renter Occupied Units	18,577
Vacant Housing Units	4,303

*U.S. Census American Community Survey, 2007

Frederick County is an attractive place to live due to its proximity to the nation's Capitol, scenic resources, cultural heritage and diverse options for housing. Those desiring to move to Frederick County can choose between vibrant downtowns, historic Main Streets, rural communities, and

new mixed-use neighborhoods. Relative to other Washington, D.C. area counties, Frederick County is still considered an affordable place to live with median home sales less than $100,000 that of adjoining counties, like Loudoun County, VA and Montgomery County, MD.

Table 07-13: Washington D.C. Area Housing Affordability*

County	2007 Median Sales Price
Frederick County, MD	$310,000
Prince George's County, MD	$320,000
Howard County, MD	$390,000
Washington, D.C.	$409,000
Loudoun County, VA	$440,000
Montgomery County, MD	$444,000
Fairfax County, VA	$459,000

*Frederick County Office of Economic Development, 2008

Since 2000, the County's population has increased on average 4,500 people per year and by 2030, the County's population is projected to grow by 105,348 people. Much of this increase has come from in-migration from other parts of the Washington metropolitan region. In fact, between 2002 and 2003, 39.9% of in-migration to Frederick County was from suburban Washington and accounted for a net increase of 3,919 people[1]. Regional job growth and a strong demand for housing have combined to increase land and construction costs, which contributes to the rise in the price of housing. Additionally, in-migration of more affluent individuals increases demand for more luxurious i.e. higher prices housing and discourages developers from offering a more diversified range of housing options.

The factors affecting the cost of housing in Frederick County include:

- Regional Job Growth
- High Demand for Housing
- Cost of Raw Land
- Increased Affluence
- Regulatory Barriers
- Development-related Fees
- Construction Materials, Labor, and Related Costs

The rising cost of housing in Frederick County has also produced an out-migration pattern. Residents who grew up in the County may have to move elsewhere to obtain affordable housing and those working here may not be able to afford to live here. From 2002-2003, 19.1% of out-migration from Frederick County was to surrounding states like Virginia, West Virginia and Pennsylvania and another 18.8% of people moved to western Maryland counties. For the approximately 84,731 jobs in Frederick County, 29% (24,459) are filled by in-commuters who reside outside of the County. The greatest source of in-commuters is Washington County where the median value of owner-occupied homes was $127,800 less than Frederick County in 2006[2].

[1] Frederick County Affordable Housing Council - Study of Workforce Housing Needs.
[2] U.S. Bureau of the Census. 2008. Fact Finder site, http://www.census.gov.

In Frederick County, average housing prices have risen 76% while average weekly earnings have only risen 22%[3]. As long as home prices outpace income, affordable housing and homeownership will continue to be out of reach for many of the County's residents.

The current economic conditions, which began in 2008 and may continue for several years, have resulted in a decline in median housing prices in the County. At this time it is difficult to conclude if the decline in housing prices will be significant enough and be in place long enough to reverse or even slow down the migration of residents in search of cheaper housing in other jurisdictions. Furthermore the decline in housing prices seems to have affected primarily existing houses and may not have an effect on new housing construction.

HOUSING NEEDS

Frederick County's primary housing needs are presented in this section. Topics include affordable housing, including definitions, housing the County's special needs populations, and workforce housing initiatives.

AFFORDABLE HOUSING

Affordable housing can generally be defined as: *Decent, safe and sanitary shelter, of adequate size so as to not cause overcrowding, and does not require any more than 30% of a household's annual gross income.*

In a very competitive housing market the guideline of no more than 30% of annual income for housing may not be obtainable even for those with incomes over the median for the area. However, because of scarce resources and the availability of other programs for higher income households, the appropriate focus of City and County programs should be on very low and low-income households and in certain cases moderate-income households. The rationale for this focus is that paying over 30% of annual income for housing has more severe consequences on the low-income household than on higher income households. When a very low or low-income household overpays for housing, it means fewer dollars are left at the end of a month for other essentials such as food, medicine, clothing, and childcare. The following definitions of affordable housing are specific to conditions in Frederick County.

- Very-low Income Housing – affordable to households earning between 0%-50% of the HUD Median Income for Frederick County (includes extremely low income households). This translates to an income range of $0 to $49,200 for a family of four in 2008.
- Workforce Housing - affordable to households earning more than 50% 120% of the HUD Median Income for Frederick County (includes moderate-income households). This translates to an income range of more than $49,200 to $118,800 for a family of four in 2008.

Based on findings from the *Frederick County Study of Workforce Housing Needs*, the County's Affordable Housing Action Plan (2006) concluded that to maintain an appropriate proportion of affordable housing over the 2005-2010 time period, a projected 2,384 new affordable homes would need to be produced. This projection was based on a detailed analysis of housing

[3]Presentation to the Frederick County Association of Realtors, Challenges and Solutions to Affordable Housing, 2006.

production, population growth and household income and served to maintain existing ratios of affordable to market rate housing at 2005 levels. The table, below, presents the types of affordable housing units that would be needed by income level and the total number of units needed to achieve the goals of the Action Plan. Similarly, the Metropolitan Washington Council of Governments' Housing Directors Advisory Committee (MWCOG-HDAC) projected a 13,766 total affordable housing unit shortfall for Frederick County between 2005-2015.[4] They reviewed employment and household data collected from their Cooperative Forecasting studies as well as the Consolidated Plans of member jurisdictions to arrive at their projections.

Table 07-14: Frederick County Affordable Housing Needs, 2005-2010*

Types of Affordable Housing Units Needed/ Income Levels	Units Needed over 5 Years	Units Needed per Year
Homeownership units for moderate income/workforce households	1,674	335
Rental units for low income households	60	12
Rental units for very low income households	650	130
Totals	**2,384**	**525**

*Affordable Housing Action Plan, 2006

HOUSING FOR POPULATIONS WITH SPECIAL NEEDS

Frederick County's populations with special needs include the elderly, physically disabled, homeless, and persons with very low incomes. Sub-groups of populations with special needs may include survivors of domestic violence, youth aging out of foster care, persons with severe and persistent mental illness, or those with developmental disabilities[5]. These individuals often have difficulty finding safe, affordable, accessible and permanent housing.

Many of those with special needs are in the very low-income bracket. According to the Frederick Community Action Agency (FCAA), there were an estimated 13,153 persons living under the federal poverty level ($10,400 for a single person and $21,200 for a family of four) in Frederick County in 2004, accounting for 5.9% of the population. The Environmental Systems Research, Institute, Inc (ESRI) estimates that there were 4,288 senior households in Frederick County in 2004 earning less than $25,000 per year, or about one-third (33.2%) of all seniors. Of those, 2,192 senior households (17.0%) had incomes less than $15,000.

Elderly

The elderly require different conditions and services related to housing than other special needs populations. Accessibility and affordability are essential to their quality of life. Some older persons are able to age in place in the home they have occupied for a lifetime where family and friends provide care and companionship. However, many others require housing assistance, 24-hour care, help with medications, meals, and transportation. As the proportion of elderly residents continues to increase, more emphasis will be needed on provision of housing and services.

[4] Metropolitan Washington Council of Governments' Housing Directors Advisory Committee. Affordable Housing Targets for the Region. 2007.
[5] Florida Housing Finance Corporation web site. 2008. http://www.floridahousing.org/SpecialNeeds

For the 81.5% of seniors (age 65+) in Frederick County who are homeowners the sale of their homes will most often provide them with sufficient cash equity to facilitate their transfer to a CCRC (Continuing Care Retirement Community) or a similar market rate facility. The recent *Study of Workforce Housing Needs* (2005) revealed that the greatest need for independent living senior apartments is for the lowest income seniors, many of whom have never owned a home. These households typically have fixed incomes, often only Social Security, and few assets. The greatest unmet demand for senior housing is not for market rate rental units, but rather at the subsidized rental and affordable end of the market.

People with Disabilities

The Frederick County Commission on Disabilities estimates that 38,000 County residents are living with disabilities. These disabilities range from neuro-muscular handicaps, mobility issues, and developmental disorders, visual and hearing difficulties, arthritis, and recovery from strokes or other challenging conditions. Of Frederick County's population 5 years of age and older, 11.4% are living with a disability. That percentage increases dramatically in the population 65 years and over, where 37.1% are disabled. Ensuring that the disabled population has access to a diversity of affordable, accessible housing options (including rentals, home ownership, group homes, and other arrangements) and services could mean the difference between independence and institutionalization.

Homelessness

Those individuals and families that are homeless or are at risk of becoming homeless require varying degrees of housing assistance from the community. Within the homeless demographic, there are those with even more specialized needs such as victims of domestic violence, runaway youth, veterans, individuals with mental illnesses or health conditions, and individuals with drug and/or alcohol problems.

A Point-in-Time Survey, conducted in 2008 by the Frederick Community Action Agency, identified 217 different adults and 85 different children living homeless in Frederick County. Seventy-four adults responded that they were chronically homeless during the survey. Additionally, 1,440 different men, women and children used homeless shelters and transitional housing programs in 2007. There are currently seven major agencies and facilities that address the needs for the homeless in the City and County including Heartly House, Frederick Community Action Agency, Advocates for Homeless Families, Linton Emergency Shelter/Religious Coalition for Emergency Human Needs, Beacon House/Frederick Rescue Mission, Hope Alive and the Frederick County Department of Social Services.

WORKFORCE HOUSING

Historically, affordable housing programs were targeted primarily to individuals and families with low to very low incomes through a variety of HUD subsidy programs. However, dramatic increases in housing prices between 2000 and 2005 have now priced out even moderate-income individuals and families from obtaining affordable housing. The relatively recent use of the term workforce housing is defined as follows:

- Workforce Housing - affordable to households earning more than50%-120% of the HUD Median Income for Frederick County (includes moderate-income households). This translates to an income range of $49,200 to $118,800 for a family of four in 2008.

The income range noted in the definition above is based on HUD's Washington Metropolitan Statistical Area median income for a family of four of $99,000 as of 2008. Using federal and industry guidelines, which dictate that no more than 30% of a family's income be spent on housing, a family making $99,000 should spend no more than $297,000 on housing. According to Metropolitan Regional Information Systems (MRIS), in 2001, the average sold price for homes in Frederick County was $182,576. By 2006, the average sold price had more than doubled to $363,854. While incomes rose over that period, increases in housing prices far exceeded wages. In fact, in 2007, 30% of owner-occupied households and 49% of renter-occupied households spent greater than 30% of their gross income on housing costs[6].

Examples of typical workforce jobs include child-care workers, nurses, fire personnel, police, administrative assistants, customer service personnel, first level supervisors, information specialists, help desk specialists, employment consultants, retail sales personnel, claim processors, construction trade workers, teachers, inspectors and loan processors. The table on the next page presents median wages for various occupations in the County, and the affordable rent and price of housing.

The County adopted a Moderately Priced Dwelling Unit (MPDU) Ordinance in 2002 to increase the supply of workforce and moderately priced housing. A MPDU is a dwelling unit for which the sales price or rental fee is capped and the unit is targeted to a household earning a moderate income. The Ordinance applies only to County developments and requires that all residential developments on public water and sewer with 25 or more dwelling units include a minimum of 12.5% of moderately priced units of varying sizes. The County's first MPDU's were constructed at the Whispering Creek development in 2007. Currently, there are ten residential development projects in the building pipeline with approximately 790 MPDU's planned for future development.

Table 07-15: Workforce Housing by Income

Frederick County Occupation[1]	Median Wage1 (Gross income)	% HUD Median Income, rounded up to nearest 10%[4]	Affordable Housing Price based on Wage	
			Rent per month[2]	House sales price[3]
Cashier	$18,600	30%	$465	$46,500
Pharmacy aide	$21,275	30%	$532	$53,188
Home health aide	$29,250	40%	$731	$73,125
Family social worker	$44,200	60%	$1,105	$110,500
Police, front line	$47,925	70%	$1,198	$119,813
Computer support specialist	$49,175	70%	$1,229	$122,938
Teacher, elementary	$57,425	80%	$1,436	$143,563
Registered nurse	$78,100	100%	$1,953	$195,250

Note: Affordable price is based on the single income for the household. 1) Source: Department of Labor, Licensing and Regulation. 2) Rent- 30% of gross annual income, including utilities/12. 3) House price- 2.5 times annual income. 4) Based on HUD Washington Metropolitan Statistical Area 2008 median income for a family of 2 - $78,700.

[6] American Community Survey (2007). U.S. Census Bureau.

CURRENT PROGRAMS AND STRATEGIES

The County's Department of Housing and Community Development (DHCD) oversees a diverse mix of housing programs tailored to renters, homeowners, developers and nonprofit organizations. The DHCD receives guidance from the Affordable Housing Council and works toward implementation of an Affordable Housing Action Plan. In 2008, the Department managed the following programs:

County Operated Affordable Housing Development

- Bell Court Senior Housing

Rental Assistance Programs

- Housing Choice Vouchers Program (Section 8)
- Bell Court Senior Housing
- Rental Allowance Program (RAP)
- Bridge Subsidy Program (Section 8)

Homeowner Rehabilitation Programs

- Frederick County Emergency Rehabilitation Revolving Loan Fund
- Maryland Rehabilitation Loan Programs
- Maryland Housing Rehabilitation (MHRP)
- Indoor Plumbing Program (IPP)
- Lead Hazard Reduction Grant and Loan Program (LHRGLP)
- Federal Lead Hazard Reduction Program (FLHRP)
- Special Targeted Applicant Rehabilitation (STAR)

Homebuyer Programs

- Frederick County Homebuyer Assistance Program
- Frederick County American Dream Initiative Program
- Moderately Priced Dwelling Unit (MPDU) Program

Developer Programs (Private & Not-for-Profit)

- Building Fee Deferral Program
- Deferred Loan Program
- Payment in Lieu of Taxes (PILOT)
- Tipping Fee Waiver Program

Other Programs and Services

- Frederick County Minimum Livability Code for Renters
- Service Linked Housing Grant
- Emergency Shelter Grant
- Housing Information and Referral

HOUSING IMPLEMENTATION

While no universal strategy exists to resolve the affordable housing crisis, a combination of government assistance, relief from regulatory barriers, fostering of public private partnerships, and leveraging funds in new and innovative ways, may make a significant contribution to resolving the local problems. It must also be understood that affordable housing is a regional issue which will require regional coordination.

HOUSING ACTION ITEMS

HO-A-01 Develop new and refine existing County affordable housing programs in response to consumer needs and demand.

HO-A-02 Review regulations and codes in order to alleviate potential barriers to the production of affordable, accessible housing.

HO-A-03 Explore amendments to the Zoning Ordinance to enhance the use of accessory apartments/dwelling units.

HO-A-04 Apply for additional Housing Choice Vouchers in response to any published Notice of Funding Availability, especially for very low income, senior citizens, and persons with special needs.

HO-A-05 Find opportunities for State and Federal funding in support of the production of affordable rental housing.

HO-A-06 Collaborate on affordable housing projects/partnerships to increase affordable housing or address housing issues.

HO-A-07 Facilitate a continued dialogue with municipal leaders on affordable housing issues, needs and priorities.

HO-A-08 Implement incentives, to facilitate affordable housing construction by private non-profits, such as reducing building fees and allowing for fast track permitting.

HO-A-09 Track and evaluate the availability of housing stock to ensure that choices and flexibility are being provided to consumers.

HO-A-10 Develop an outreach/marketing campaign to dispel negative stereotypes and perceptions associated with affordable housing.

HO-A-11 Determine the County's future role in the development and construction of new affordable housing, including the identification of properties owned by the County that could be utilized for affordable housing projects.

HO-A-12 Locate and prioritize infill and redevelopment areas that would be appropriate for affordable housing development.

HO-A-13 Coordinate with the private and nonprofit sectors to achieve affordable housing goals.

HO-A-14 Identify neighborhoods in need of revitalization and enhancement efforts and prioritize a set of achievable projects.

08 Supporting a Diversified Economy

The purpose of this chapter is to highlight the County's economic diversity. The chapter provides background on Frederick County's current economic conditions and its focus for economic development including targeted industries and projected growth industries. The goals, policies and action items provided are in keeping with the County's Economic Development mission to support, retain, foster the growth of existing businesses and to attract new business that enable Frederick County residents to work where they live.

	Amendment Status
Goals, Policies, Action Items	04/08/2010
Maps and Graphics	04/08/2010
Background Information	04/08/2010

A vision for supporting a diversified economy…

The citizens of tomorrow's Frederick County will be part of a community with a sustainable breadth of economic activity that has been intentionally cultivated through decades of careful planning, bold innovation, and solicitous opportunism. National food and energy policies have bolstered the efforts of dedicated farmers to maintain a thriving agricultural economy providing both economic and social stability to the community. The growth of information- and bio- technologies – and the County's ability to position itself as a physical epicenter of its development – has resulted in a more balanced employment environment in which those seeking jobs closer to home are able to secure more positions in their chosen fields. The decreasing necessity to place workers in a central location has eased price pressure on housing making the acquisition of affordable housing a less burdensome challenge for many Frederick County workers. Employers who seek a centralized location for their businesses and institutions increasingly choose Frederick County above all because of its efforts to maintain a high quality of life for residents. The citizens and leaders of tomorrow's Frederick County will look back to this time as the moment when the community determined its economic future by investing in those policies that created a strong sense of community.

GOALS

ED-G-01 Support a sustainable, local economy that creates diverse employment and income opportunities while respecting social and environmental assets.

ED-G-02 Expand employment growth in targeted industries to ensure the County's fiscal health.

ED-G-03 Provide sufficient land resources to accommodate long-term economic growth.

ED-G-04 Sustain a balance between growth in employment and housing.

ED-G-05 Maintain agriculture as a viable industry in Frederick County.

ED-G-06 Develop the transportation infrastructure and utilities necessary to support the County's targeted industries (agriculture, biotechnology, advanced technology, and manufacturing) and overall growth in the employment sector, including growth industries of tourism, education services, healthcare services and the retail industry.

ED-G-07 Redevelop and revitalize the County's existing employment areas.

POLICIES

ED-P-01 Protect industrial development opportunities adjacent to rail and highway access and support extensions to increase the number of properties with access.

ED-P-02 Locate employment uses in community growth areas where they can take advantage of existing/planned infrastructure and proximity to the workforce & other services.

ED-P-03 Integrate compatible employment, commercial and residential uses when possible to achieve a mixed-use environment.

ED-P-04 Encourage the development of sufficient commercial, office, industrial and retail space in various locations and settings to meet the diverse needs of the employment sector.

ED-P-05 Support mixed-use commercial facilities that offer affordable options to small business owners.

ED-P-06 Consider economic and employment needs when planning long-term transportation improvements.

ED-P-07 Advocate for the efficient use of limited land resources zoned for employment that accommodates the County's targeted industries.

ED-P-08 Promote agricultural businesses and industries to support Frederick County's farming economy, including the implementation of farm-friendly Land Use policies and programs.

ED-P-09 Protect the County's agricultural, cultural, scenic and natural resources in order to facilitate tourism, recreation and related industries.

ED-P-10 Promote businesses in all industry sectors that provide a range of jobs and incomes that allow people to live and work in Frederick County.

ED-P-11 Maintain industrial zoned land adjacent to rail access.

STATE VISION AND PLANS

This chapter addresses the following State Visions:

- *Growth Areas*
- *Infrastructure*
- *Economic Development*

RELATED COUNTY PLANS

The Frederick County Office of Economic Development (OED) prepares an Annual Report that details progress and accomplishments related to the Business Development Advisory Council's (BDAC) strategic priorities including the county's targeted industries and general economic outlook.

2008 Frederick County Agricultural Strategic Plan

This Plan was prepared through the County's Office of Economic Development (OED) as an update of an Agricultural Market Analysis and Strategic Plan prepared in 2001. The 2008 Strategic Plan conducted an assessment of the agricultural industry and sectors in the County including an analysis of the strengths, weaknesses, opportunities, and threats of the agricultural economy. The Plan includes recommendations under three areas: *market developments, training and education, and regulatory support for agriculture*.

BACKGROUND

From 2000-2007, Frederick County's job growth of 15,573 jobs was the 3rd highest among Maryland counties. The county's 5,760 businesses employ 78,000 workers. The county is home to companies such as State Farm Insurance, BP Solar, CitiMortgage, MedImmune, and Bechtel National. Frederick County's healthy economy results from its proximity to the Baltimore and Washington metropolitan areas, diversity of its industry base, access to transportation infrastructure, natural resources, labor force, and high quality of life, among other factors.

Located less than an hour from Baltimore, MD and Washington, D.C., Frederick County is intersected by four interstate and primary highways and is served by commuter rail (MARC) and freight rail lines (CSX and Maryland Midland Railroad). The Fort Detrick military installation, Frederick County's largest employer, is located in the City of Frederick and is responsible for attracting major federal funding to the area as well as private sector jobs in the biotechnology and research fields.

The County's pastoral landscape and prime soils have supported a long-standing agricultural industry. Frederick County is Maryland's largest dairy producer and provides one-third of the state's milk production. A strong mineral mining industry is present; there are six active limestone, shale and stone aggregate quarries.

Frederick County is rich in human resources. More than 90% of the population has a high school diploma and nearly 40% has a Bachelor's degree or higher. The county boasts the 3rd lowest unemployment rate, as of 2007, of counties in the state (3.1%). For businesses looking to relocate, the County has a total inventory of commercial, office, and industrial space of

approximately 19.5 million square feet. In 2007 the vacancy rate for flex/industrial space was 13.9%. A variety of business parks, industrial parks and research parks offer diverse opportunities for businesses in a variety of industries.

FREDERICK COUNTY'S TARGETED INDUSTRIES

Frederick County will continue to see increased economic opportunity and growth. The County's diverse industry and job base insolates it to a certain extant from economic downturns experienced on a regional or national scale. The County targets four industries that strengthen and diversify our local economy: bioscience, advanced technology, manufacturing and agriculture. A focus on these industries is not intended to detract from or exclude other types of jobs that also contribute to a healthy and diversified economy. The County's goal is to support, retain and foster the growth of existing businesses in Frederick County and to attract new businesses that bring career opportunities that enable Frederick County citizens to work where they live. The County has also projected increases in a number of growth industries, including: tourism, education services, healthcare services and the retail industry.

To support new bioscience and technology companies the County has established an incubator program to encourage technological innovation and accelerate the development of commercially viable technology-based business by providing a nurturing and supportive environment. There is now a single site, the Frederick Innovative Technology Center @ Monocacy located on Metropolitan Court off of MD 85 south of Frederick.

AGRICULTURE

The agricultural industry is a vital part of the economy and quality of life in Frederick County. As the county grows and is able to provide more and better services to its citizens, so can the agriculture industry. The traditional farm is changing to meet the needs of a growing population by producing desired crops and becoming more efficient. The County's agricultural industry is diverse and is a significant component of the State's agricultural resources.

- Soybean crop total production and corn for grain total production doubled from 2002 to 2004.
- Turkey production has increased to 700,000 turkeys produced each year.
- Nursery and greenhouse crops more than tripled in value from 1992 to 2002.
- The large agricultural base covers more than 195,000 acres of farmland. This makes Frederick County the largest agricultural county in Maryland, accounting for 10% of Maryland's total farmland.
- There are 1,200+ farms in Frederick County accounting for the largest number of farms in the state.
- Frederick County ranks #2 in Maryland for both number of equine facilities (2,180) and number of acres used solely for equine purposes (22,000).
- Frederick County ranks #3 in Maryland for number of equine (8,290).
- Dairy farmers sell more than $50 million of dairy products each year. This makes Frederick County one of the top 75 counties in the country for the production of dairy products.
- Frederick county farmers produced approximately $133 million of agricultural products in 2006.

BIOSCIENCE INDUSTRY

Frederick County is a prime location for biotechnology companies to establish and continue their dynamic success in a global marketplace. In fact, the State of Maryland has the highest concentration of federal research and development facilities in the United States. In 2007, there were more than 60 bioscience companies located in Frederick County, representing over 16% of the total bioscience and federal research institutions in Maryland.

Frederick County has the 3rd largest cluster of bioscience companies in Maryland, according to MdBio (2007). Many new and expanding biotechnology companies choose Frederick County as their preferred business location for the following reasons:

- An excellent transportation system for local & international travel
- A highly skilled and educated labor force
- Fort Detrick is home to the National Cancer Institute (NCI) and the U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID). A new National Interagency Biodefense Campus is under construction. 50% of the most cited biomedical scientists in the world are located in Maryland; of those, 40% are affiliated with the National Cancer Institute in Frederick

ADVANCED TECHNOLOGY

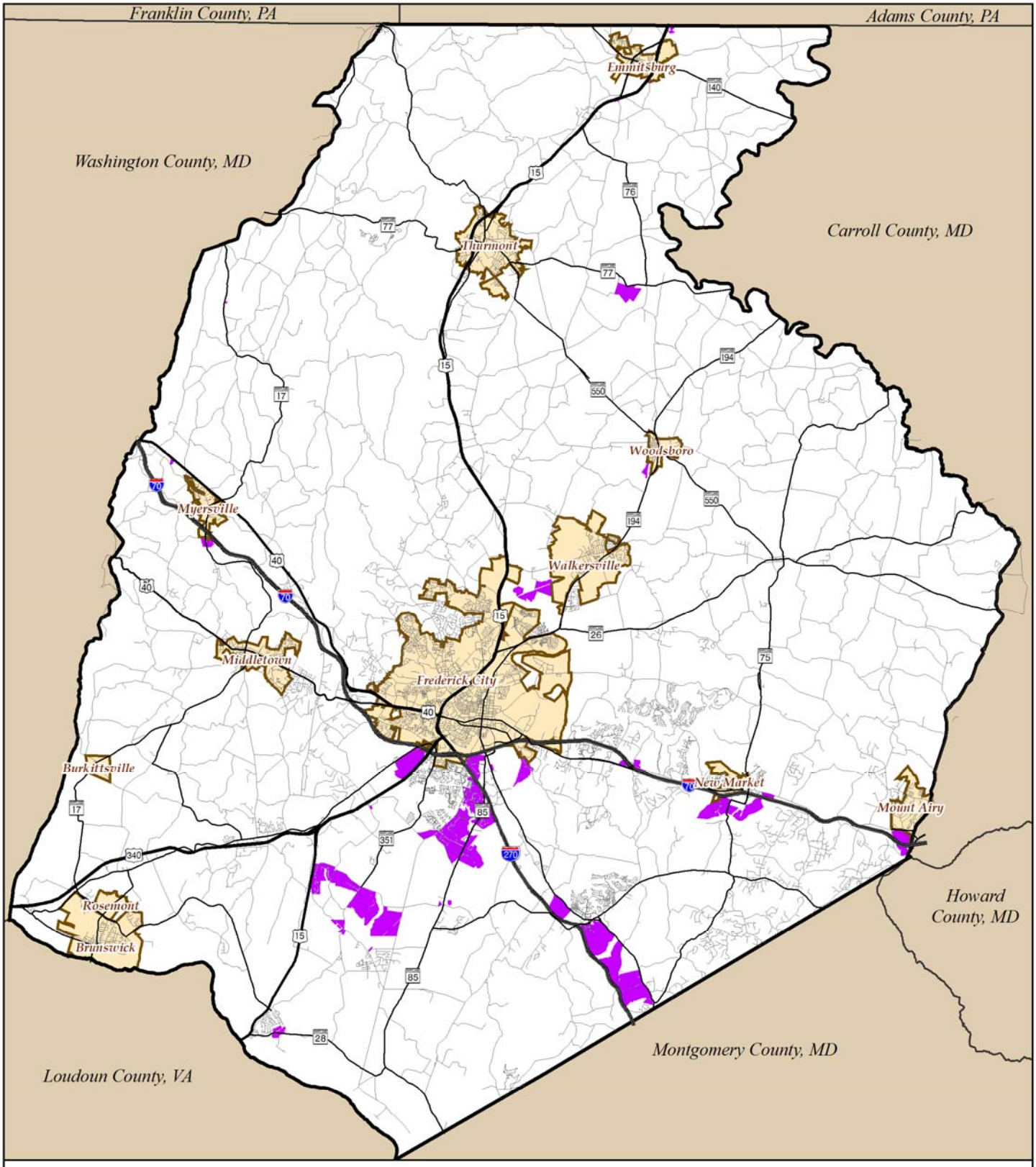
Frederick County is building and promoting technology driven and research-intensive industries. There are currently more than 1,900 established information technology (IT) firms with a presence in Maryland. The IT industry in Frederick County is comprised of various telecommunications, networking, web development and consulting firms. Frederick County ranks 2nd in Maryland for the number of new information technology jobs created per capita from 2002 to 2005. Frederick County is also seeing an increase in the number of businesses that are focused on alternative and renewable energies, which will continue to increase as demand in the marketplace drives the need for more alternative energy options.

MANUFACTURING

Manufacturing is a vital industry for Frederick County. The County is committed to providing the resources needed to assist in the development and growth of our manufacturing companies and to continue Maryland's 150 year-old manufacturing traditions. Some statistics on Frederick County's manufacturing as reported by the State's Department of Labor, Licensing and Regulation (DLLR) for 2007:

- Manufacturing represents approximately 7% of the private sector employment for Frederick County.
- There are a total of 190 manufacturing establishments employing 5,592 people with $291 million in annual wages.
- The average annual wage per manufacturing worker is $52,104 (27% greater than the annual wage per worker in the private sector).

Map 08-1: Employment Areas



Employment Areas

Existing/Planned Industrial/Employment Areas

N W E S

0 1 2 4 Miles

Division of Planning
GIS & Data Services Section

April 8, 2010

While efforts have been made to ensure the accuracy of this map, Frederick County accepts no liability or responsibility for errors, omissions, or positional inaccuracies in the content of this map. Reliance on this map is at the risk of the user. This map is for illustration purposes only and should not be used for surveying, engineering, or site-specific analysis.

FREDERICK COUNTY'S GROWTH INDUSTRIES

TOURISM

Together, Frederick County's scenic, cultural, historical, and recreational resources attract millions of visitors a year to the area. In 2005, the tourism industry brought more than 1.9 million visitors to Frederick County and generated $280 million in revenue. Tourism is a sustainable industry that protects our rich history and healthy environment. Tourism accounts for nearly 6,500 industry-related jobs in the Frederick area. The county's tourism resources and attractions are countless. A partial list of these resources includes:

- Outdoor recreation – Catoctin Mountain Park, C&O Canal towpath, Cunningham Falls State Park, Gambrill State Park, Gathland and Washington Monument State Parks, Sugarloaf Mountain, and the Appalachian Trail ;
- Museums and historic sites - C&O Canal National Historical Park, Mt. Olivet Cemetery and the grave of Francis Scott Key, Rose Hill Manor, Barbara Fritchie House, Brunswick Railroad Museum, Schifferstadt Architectural Museum, Mother Seton Shrine, and the National Shrine Grotto of Lourdes;
- Battlefields and Civil War sites - Monocacy National Battlefield, National Museum of Civil War Medicine, Heart of the Civil War Heritage Area;
- Arts and culture – Delaplaine Visual Arts Center, Weinberg Center for the Arts, Cultural Arts Center, , and numerous events supporting independent artists and collectives; and
- Sports and entertainment - Frederick Keys, the Baltimore Orioles' minor league affiliate, the Catoctin Wildlife Preserve and Zoo, and Adventure Park USA.

EDUCATION SERVICES INDUSTRY

The education services industry is comprised of establishments that provide instruction and training on a wide variety of subjects. Education careers fall into five areas: elementary and secondary schools, community colleges, universities and professional schools, business schools, and technical and trade schools. The State estimates that employment in the education industry in Frederick County will increase 24% between 2004 and 2014.

In Frederick County employment for postsecondary teachers is expected to increase by 31%, primary, secondary, and special education teachers by 22%, teacher assistants by 23%, middle school teachers by 18%, secondary school teachers by 20%. Currently, the Frederick County Board of Education is the County's second largest employer, with 5,384 employees.

HEALTHCARE INDUSTRY

The healthcare industry includes careers that focus on helping people achieve physical, mental and emotional well being, with clusters ranging from dentistry to nursing to community health services. The State projects an increase of over 2,100 new jobs by 2010, for the County, in the health care industry. Specific job types that are projected to see significant growth in Frederick County through 2010 include: *Medical Assistants (59%), Physicians Assistants (49%), Home Health Aides, including Nursing (48%), Medical Records and Health Information Technology (47%), Physical Therapy Aides & Assistants (46%), Dental Assistants (33%), RNs (27%), LPNs (26%), and CNAs (25%).*

RETAIL INDUSTRY

The retail trade industry is made up of establishments engaged in retailing merchandise and rendering services incidental to the sale of merchandise, and is the second largest industry sector in the U.S. both in the number of establishments and in the number of employees. Retail continues to be an industry with enormous growth with e-commerce activity and new technological job opportunities.

According to the State, retail occupations expected to expand based upon projected growth in Frederick County between 2002 - 2012 are: *advertising sales managers, pharmacy technicians, sales managers, waitpersons, retail salespersons, counter rental clerks, and first - line supervisors.*

ACTION ITEMS

ED-A-01 Evaluate and facilitate a permanent, year-round farmers' market in Frederick County where people can purchase locally produced goods and services in a setting similar to Lexington Market (Baltimore, MD) or Pike Place Market (Seattle, WA).

ED-A-02 Coordinate with the Office of Economic Development (OED) to identify short and long-term needs for employment-zoned land.

ED-A-03 Identify strategic locations for future light industrial uses.

ED-A-04 Revise the LI-Limited Industrial Zoning District into several different zoning districts to distinguish the diversity of uses currently permitted within the LI district.

ED-A-05 Review County regulations to identify obstacles to revitalization of older commercial and industrial employment areas.

ED-A-06 Identify an area to create an Alternative Energy Demonstration Project to educate and promote the use of alternative energies and energy conservation.

ED-A-07 Continue to explore amendments to the Zoning Ordinance to promote agricultural and heritage tourism.

ED-A-08 Identify obstacles in zoning & land preservation requirements that may preclude the agricultural industry from increasing the sale of products directly to the consumer.

ED-A-09 Address through the Zoning Ordinance means of encouraging and supporting mixed-use and transit-oriented development.

ED-A-10 Implement the Heart of the Civil War Heritage Area Management Plan.

ED-A-11 Coordinate with municipalities to promote their historical, cultural and natural assets.

ED-A-12 Further expand Frederick County's '*Homegrown Here' label, 'Buy Local Challenge'* week, and other efforts including review of the County's procurement process to support buying local products, especially for the school system.

ED-A-13 Consider a redevelopment overlay zone as a tool to encourage redevelopment of underutilized commercial and employment areas.

ED-A-14 Determine the ideal jobs to housing ratio for Frederick County.

09 Assessing Our Water Resources

	Amendment Status
Goals, Policies, Action Items	**04/08/2010**
Maps and Graphics	**04/08/2010**
Background Information	**04/08/2010**

This chapter summarizes the County's Water Resources Element, which is provided in a separate report document. In order to coordinate growth management and water resources planning efforts in the Comprehensive Plan. The Water Resources Element (WRE) primarily addresses the County owned and operated water and wastewater systems although data is included for municipal systems and municipal growth areas. The County's WRE addresses the requirement for a Water Resources Element for the Town of Burkittsville and the Village of Rosemont.

The Water Resources Element is divided into three sections:

- *Drinking Water Assessment*
- *Wastewater Assessment*
- *Managing Stormwater and Non-point Source Pollution*

Recommendations for sound land and water resource management practices that contribute towards the health and sustainability of our major watershed systems and communities are addressed in the following goals, policies, and action items.

GOALS

WR-G-01 Maintain a safe and adequate drinking water supply to accommodate the needs of the current population as well as future generations.

WR-G-02 Protect and enhance the quality of Frederick County's surface waters, ground water resources, and wetlands.

WR-G-03 Invest in water and sewer infrastructure that will provide adequate treatment capacity and reduce pollutant loading in rivers and streams.

WR-G-04 Promote coordinated planning between jurisdictions and agencies responsible for drinking water, wastewater, and storm water management.

WR-G-05 Engage the public in watershed conservation and promote a stewardship ethic.

POLICIES

General

WR -P-01 Provide community water/sewer service only within Community Growth Areas.

WR -P-02 Stage developments within Community Growth Areas according to the adequacy of drinking water and wastewater treatment capacities.

WR -P-03 Consider including developed properties on well and septic within adjacent Community Growth Areas to facilitate connections to community water/sewer service.

WR -P-04 Minimize new development utilizing individual well and septic systems to protect the quality and quantity of ground water resources.

Drinking Water

WR-P-05 Diversify sources of public drinking water and explore alternatives in order to meet future demand.

WR -P-06 Employ demand management strategies and conservation measures to maximize use of existing water resources.

WR -P-07 Protect community groundwater-based systems and individual wells in karst (limestone) areas.

WR-P-08 Support compatible land uses within designated wellhead protection areas.

WR-P-09 Consider reductions in the size of community growth areas based on the adequacy of drinking water supplies.

Wastewater

WR-P-10 Prohibit the construction of new sub-regional wastewater treatment plants.

WR-P-11 Promote measures to reduce inflow and infiltration into the wastewater collection system.

WR-P-12 Coordinate with Frederick County municipalities to evaluate solutions that ensure future wastewater capacity and adequate management planning.

WR-P-13 Where feasible as part of wastewater treatment plant improvements, exceed state and federal regulatory requirements.

WR-P-14 Recognize and support the use of new septic system technologies and the use of alternatives to septic systems.

Stormwater

WR-P-15 Require the use of best available technologies for storm water management.

WR-P-16 Minimize impervious cover related to new development located within watersheds that have greater than 10% impervious cover.

WR-P-17 As part of the construction of new County roads, government buildings and facilities use innovative storm water management practices and technologies.

WR-P-18 Integrate watershed planning and management in the comprehensive planning process.

STATE VISION AND PLANS

The companion Water Resources Element is a stand-alone, technical document prepared to serve as the County's Water Resources Element mandated through House Bill 1141 by the Maryland State Legislature in 2006. It provides a more detailed presentation of the County's water resources limitations, challenges, and solutions than is offered here and will be updated concurrently with the Comprehensive Plan to reflect current demographic, economic, and development conditions.

This chapter addresses the following State Visions:

- *Quality of Life and Sustainability*
- *Infrastructure*
- *Environmental Protection*
- *Resource Conservation*
- *Stewardship*

RELATED COUNTY PLANS

2004 Lake Linganore Source Water Protection Plan

This plan addresses water quality and quantity issues of Lake Linganore and Linganore Creek, which are used as a drinking water source by the City of Frederick and the County. The plan looks at the portion of the Linganore Creek watershed that drains into Lake Linganore and addresses issues related to agriculture, land development, infrastructure and maintenance, homeowner impacts, and education/outreach.

In 2006 an Action Plan for the Linganore Source Water Protection Plan was prepared that identifies specific action items to address the issues noted above.

2008 Frederick County Water and Sewerage Plan

The purpose of the Water and Sewerage Plan is to provide an overview of the goals, policies, and procedures for implementing water and sewerage plans. The Plan includes descriptions of both County and municipal water and sewerage systems including assessments of current demands/use and available capacities. The mapping component includes the various water/sewerage plan classifications, which identifies existing service areas and planned service areas. This Plan is required by the State and is updated every three (3) years.

2010 Frederick County Water Resources Element

This element is prepared in conjunction with the Countywide Comprehensive Plan and provides te detailed analysis for the water and wastewater assessments and the management of storm water management and non-point source pollution. The plan element also includes detailed descriptions of the County and municipal water and sewerage systems.

PLANNING FRAMEWORK

The County's land use plan designates twenty-two Community Growth Areas (CGAs) where residential, commercial, and employment uses will be concentrated. Ten of the CGAs are municipalities and their future annexation areas; the remaining twelve are unincorporated communities located in the county. The intent of the land use plan is to direct development to the designated CGAs while protecting the county's green infrastructure and agricultural/rural resources. CGAs will be targeted for public facility and infrastructure financing and improvements. A higher level of available community services is to be expected within a CGA. Water and sewer service is provided or planned for all CGAs whereas areas beyond the CGA will only be served by future individual well and septic systems. The only exception to this policy, referenced in the County Water and Sewerage Plan, is reconciliation of a public health emergency, where public water or sewerage service would be required to maintain health, safety and welfare.

IMPORTANCE OF WATER RESOURCES PLANNING

With an additional 1.1 million people expected to reside in the State of Maryland over the next 25 years, population growth and its associated water resources challenges are anticipated in Frederick County. In addition to addressing the competing needs of residential, agricultural, and commercial/industrial development, local governments will need to review their land use plans to ensure delivery of adequate water and sewer service to a larger customer base. Alternative supplies and additional storage may be needed to augment smaller community systems and wastewater treatment facilities may require upgrades to reduce the concentration of pollutants in their discharge. There will be additional well and septic development on rural lands, which will affect groundwater levels and transport additional nutrients to local streams. The conversion of forests and agricultural land for development will impact watershed health and new rooftops, roads, and driveways will increase our total impervious surface area, inhibiting natural recharge of water.

In addition to the challenge of providing adequate drinking water and wastewater services to a growing population is the environmental impact of development on the water quality of our streams and rivers. This impact extends to the larger Chesapeake Bay watershed, which includes the County's two major tributaries, the Monocacy River and Catoctin Creek. The County's streams and rivers are impacted by both non-point runoff sources from farm fields, parking lots, and residential lawns and from point sources such as wastewater treatment plants. Non-point runoff contributes sediment and topsoil, fertilizers and pesticides, oil, and pet waste to the storm water discharges. An emerging contaminant, not easily addressed in current wastewater treatment technology, include pharmaceuticals and endocrine disruptors, though nitrogen and phosphorus continue to be the primary concern to the health of the Bay.

The challenges associated with growth are not new or unique to Frederick County; in fact, communities across the country and region are dealing with many of them and have found solutions. The County's Water Resources Element takes into account the diversity of water resources issues, limitations and vulnerabilities that Frederick County and its twelve municipalities are facing and offers recommendations for potential solutions.

FREDERICK COUNTY WATERSHEDS

Water in Frederick County flows across two major watersheds: the Catoctin Creek watershed to the west of the Catoctin Mountains and the Monocacy River watershed to the east. Both watersheds lie within the larger Potomac River Basin, which drains to the Chesapeake Bay.

The headwaters of the Monocacy River are in the Gettysburg, PA vicinity; the free flowing river then meanders 58 miles south to its confluence with the Potomac near the Montgomery County line. Approximately 75% of Frederick County's land area drains to the Monocacy River. There are seven municipalities within the watershed including Emmitsburg, Frederick, Mount Airy, New Market, Thurmont, Walkersville and Woodsboro. In addition, ten unincorporated communities are located in the watershed, which include: Adamstown, Ballenger Creek, Buckeystown, Holly Hills, Libertytown, Linganore, Monrovia, Point of Rocks, Spring Ridge/Bartonsville, and Urbana.

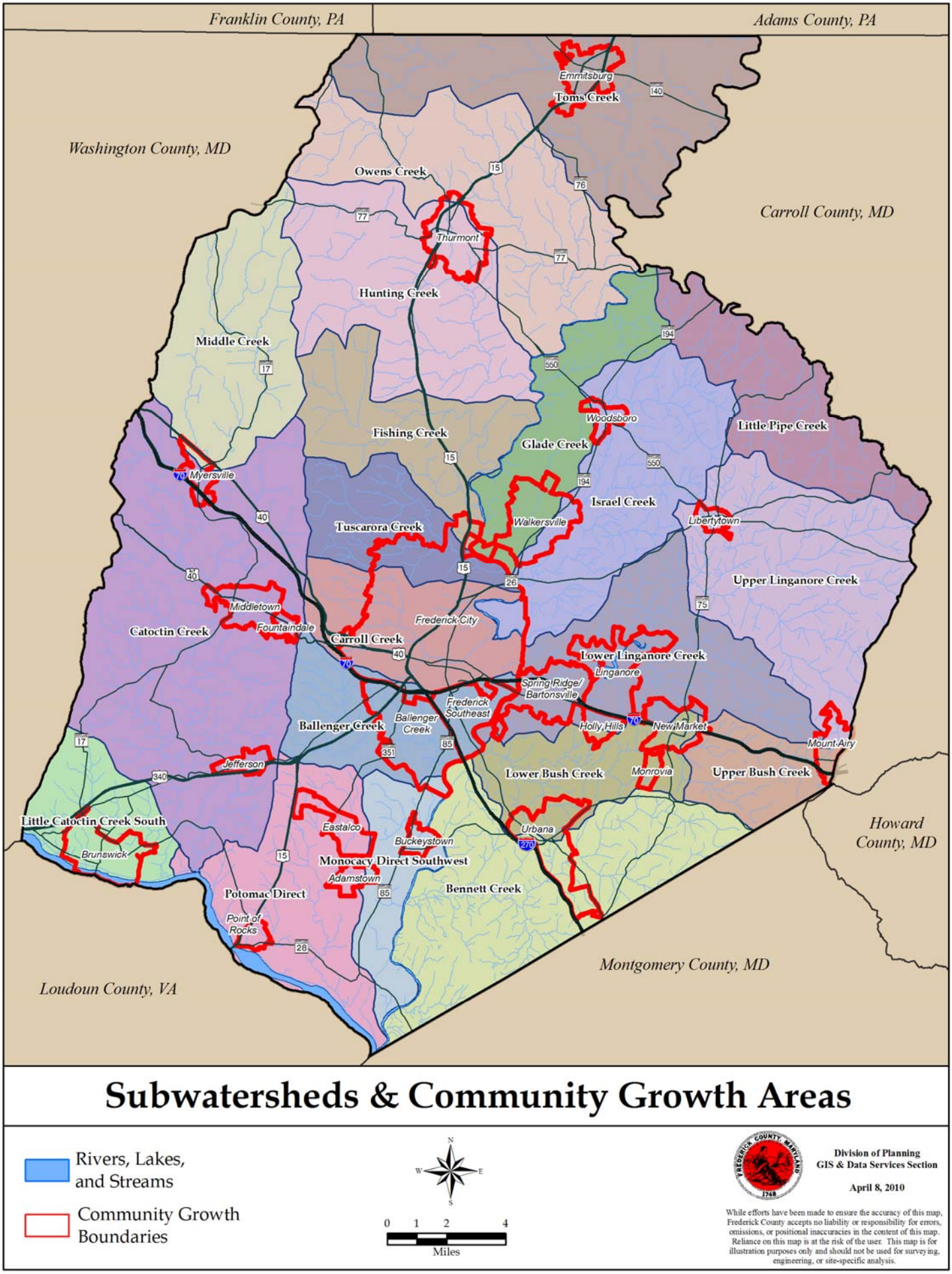
Table 09-1: Frederick County Watersheds, Potomac River Basin

Monocacy River	
Ballenger Creek	Israel Creek
Bennett Creek	Linganore Creek
Bush Creek	Little Pipe Creek
Carroll Creek	Owens Creek
Fishing Creek	Toms Creek
Glade Creek	Tuscarora Creek
Hunting Creek	
Catoctin Creek	
Little Catoctin Creek	Middle Creek

The Monocacy River is an impaired stream and Total Maximum Daily Loads (TMDLs) have been issued by the Maryland Department of the Environment (MDE) for fecal coliform bacteria and sediment in both the upper and lower reaches of its watershed. Other Draft TMDLs are under development for biological impairment (fish and stream insects) and nutrients. Two sub-watersheds, Linganore Creek and Double Pipe Creek, have been issued TMDL's for sediment and phosphorus as well as sediment and fecal coliform bacteria, respectively.

Catoctin Creek flows through the Middletown Valley, an intermountain area characterized by heavily rolling land and narrow streams. The valley is surrounded on three sides by the Catoctin and South Mountain ridgelines. These mountain ranges form the boundary of the Catoctin Creek watershed, which accounts for approximately 25% of the county's total land area. The creek's confluence with the Potomac River is located just east of Brunswick. There are five municipalities in its watershed: Brunswick, Burkittsville, Middletown, Myersville, and Rosemont and two unincorporated communities: Braddock Heights and Jefferson.

Map 09-1: Subwatersheds & Community Growth Areas



MDE has listed streams in the Catoctin Creek watershed as impaired for sediments, nutrients, bacteria, and impacts to biological communities. A TMDL for sediment was approved by the Environmental Protection Agency (EPA) in July 2009.

Improvements to the health of the Monocacy River and Catoctin Creek watersheds are needed to meet regulatory requirements and support a diverse ecological environment. Watersheds provide natural functions to communities such as flood control, reduction of carbon dioxide, sources of food and water, and recreational opportunities. Some of the watershed management issues that citizens, farmers, schools, governments, and businesses are tackling in Frederick County include:

- Reducing urban and storm water runoff;
- Restoring stream corridors;
- Controlling sediment and erosion during the land conversion process;
- Reducing impervious surfaces in new developments;
- Protecting habitat for birds, mammals, and aquatic life;
- Conserving water; and
- Planting trees, shrubs and herbaceous plants that are native to the area.

DRINKING WATER ASSESSMENT

Healthy watersheds provide a safe and sustainable drinking water supply. With more than 1,400 miles of rivers and streams in Frederick County, water appears abundant. The perception of abundance highlights the importance of water resources planning. While water may be plentiful certain days or seasons of the year, supplies may be dramatically lower in others. Summertime demand, in particular, puts pressure on our water resources when supplies are lowest, but demand is high.

DRINKING WATER SUPPLY AND AVAILABILITY

In Frederick County, drinking water is obtained from surface water and ground water sources. The two supplies are intimately related; ground water is stored in aquifers and crevices beneath the ground that are recharged by precipitation. In an unconfined aquifer, the most common in Frederick County, ground water moves horizontally before it is discharged into a stream or other surface water body, such as a seep, spring, or wetland. Stream flow directly correlates with the rise and fall of the water table; both are impacted by climatic and drought conditions.

Disruptions to the natural hydrologic cycle by land use affects availability of both supplies. The steady increase in the County's population that is expected over the next twenty years poses limitations to the resource. Increased development reduces water recharge areas and has the potential for introducing new pollutants and contaminants to watersheds. This section assesses the availability of ground water and surface water and presents the limitations of each.

Ground Water

The available supply of ground water in Frederick County is dependent upon the underlying geologic conditions. In most areas, the water bearing characteristics of the geology offer low storage capacity and low transmissibility. An extensive stream network and the nature of fine

particle soils contribute to these characteristics. The United States Geologic Survey (USGS) and Maryland Geological Survey have generalized the water yielding character of the County's aquifers and organized them by hydrogeomorphic region. The four regions located in Frederick County are Blue Ridge, Piedmont Crystalline, Piedmont Carbonate, and Mesozoic Lowlands.

Each region is further defined by its Hydrologic Unit, which is numbered I – III. The most productive aquifers, Hydrologic Unit I, include the karst aquifers of the Frederick and Glade Valley (Piedmont Carbonate). The poorest aquifers, in terms of yield and capacity, include fractured rock aquifers in the Mount Airy, Ijamsville, and Jefferson areas (Piedmont Crystalline). Table 09-3 presents the estimated yield and availability by acreage for the four regions during both average and dry years.

While karst aquifers provide the highest storage and capacity, they are more vulnerable to surface water contamination than most other aquifers. As a result, ground water in these areas can be contaminated with pathogenic organisms from septic systems and animal waste. Public water systems served by these relatively unprotected ground water sources are required to meet certain treatment requirements; however private wells serving homes and small businesses are less able to meet the complex treatment requirements.

In addition to geology, climatic conditions impact the county's supply of ground water. With water table conditions being most prevalent, seasonal variation in groundwater is a limitation to its use as a reliable supply. In a recent evaluation of the Catoctin Creek watershed, it was concluded that groundwater may be an adequate source during average precipitation years, but under drought conditions, groundwater supplies are not adequate to meet existing demand and support the biological and natural resources of the watershed[1]. Ground water limitations are accentuated during the summer months.

Table 09-2: Annual Water Budget Estimates of Annual Recharge by Hydrogeomorphic Region

		Piedmont Crystalline (PCR)	Mesozoic Lowland (ML)	Blue Ridge (BR)	Piedmont Carbonate (PCA)
Average Year	Yield (gpd/acre)	630	390	910	1,000
	Total Acres	179,514	81,284	111,747	54,851
	Total Availability (gpd)	113,093,801	31,700,861	101,690,198	54,850,650
Dry Year 20 Yr Drought	Yield (gpd/acre)	390	180	510	1,000
	Total Acres	179,514	81,284	111,747	54,851
	Total Availability (gpd)	70,010,448	14,631,167	56,991,210	54,850,650

In sum, ground water supplies in Frederick County have diverse limitations affecting a broad range of users. The most limiting factor in the near future will be the difficulty in locating sufficiently high yielding well sites necessary for public water supplies. The County has already moved towards providing public drinking water from more reliable surface water sources and many well sites are currently off-line and only used as a back-up supply. For several municipalities that rely on groundwater either additional sources would need to be secured or their projected development will need to be moderated based on available supply.

[1] 2006. MDE. An Evaluation of Water Resources in the Catoctin Creek Watershed, Frederick County, Maryland.

Surface Water

The most abundant surface water supply available to Frederick County is the Potomac River. The river drains a watershed of 14,679 square miles encompassing parts of West Virginia, Virginia, Maryland, Pennsylvania, and the District of Columbia. The river originates at Fairfax Stone, WV and runs 383 miles to its confluence with the Chesapeake Bay at Point Lookout, MD. It is estimated that the Frederick County land area contributes 419 billion gallons of water per year via runoff to the Potomac River or 1.15 billion gallons per day (Frederick County Water and Sewerage Plan 2008). Frederick County's use of the Potomac River is relatively as non-consumptive, compared to other downstream users of the river. Return flow discharges from the County's WWTP's are typically at or near the County's withdrawal rates from the Potomac River. According to the Interstate Commission on the Potomac River Basin (ICPRB), the Potomac's highest recorded flow was 275 billion gallons per day (March 1936) and its lowest recorded flow at the same Washington, DC location was 388 million gallons per day (September 1966) (ICPRB Facts & Figures). Before water supply withdrawals, the Potomac's average flow is approximately 7 billion gallons per day.

The Potomac River supply is augmented by two water supply reservoirs: Jennings Randolph located on the North Branch of the Potomac in Garrett County, MD and Mineral County, WV and Little Seneca Lake located on Little Seneca Creek near Boyds in Montgomery County, MD. Releases are made from the reservoirs when low flow conditions are present. Low flow conditions result from low summer rainfall, low groundwater levels, and low precipitation levels over the previous 12 months (ICPRB Water Supply Outlook, October 2008). The Potomac River has a minimum flow-by requirement of 100 mgd (the minimum flow needed to maintain suitable conditions for fish and aquatic communities); summertime demand ranges between 400 and 700 mgd. Flow on the Potomac would need to drop below 600-700 mgd to trigger a reservoir release.

The volume and consistency of the Potomac River's flow has leveraged it to become the County's principal source of public drinking water. Other sources of surface water in the County such as the Monocacy River, Catoctin Creek, Linganore Creek, Turkey Creek, and Fishing Creek have availability limitations that restrict their use as a primary source. Those limitations include seasonal variability of stream flow, inability to meet flow-by requirements, and lack of adequate storage capacity. Linganore Creek, Turkey Creek and Fishing Creek are also augmented by reservoirs, however, the size of these relatively small reservoirs provide limited safe yields.

Like ground water levels, surface water flows vary seasonally and daily. These seasonal variations in flow can be exacerbated by short term seasonal droughts typical during the summer and long term droughts that may extend over a year or more. For example, a USGS stream gage on Catoctin Creek measured zero (0) for 17 consecutive days during the 1966 drought of record and visual observations during the 2002 drought confirmed dry conditions on tributaries of Catoctin Creek. The County's smaller streams and even the Monocacy River are more sensitive to seasonal variability in flow. The lack of reservoirs within the Catoctin Creek watershed would not allow Catoctin Creek to be used for a continuous reliable surface water supply.

An additional limitation to developing a pubic drinking water source using surface water is meeting the flow-by requirements mandated by the State of Maryland. This requirement, which protects the biological integrity of the stream, is based on the 7 day, 10-year low flow (7Q10). Without a reservoir or adequate storage, streams cannot meet the minimum required flow all of

the time[2]. Through a consent order, the City of Frederick and the Maryland Department of the Environment set a flow-by requirement of 50 cubic feet per second (cfs) for the Monocacy River at the Jug Bridge stream gage for the City's upstream intake. During the 2002 drought, when levels dropped to 20 cfs, there was not adequate flow in the river to meet the flow-by; therefore, use by the City was restricted.

Surface Water Appropriations

Surface water is appropriated by the Maryland Department of the Environment for twelve-year periods. The County holds a Water Appropriation and Use Permit (WAUP) for the Potomac River and Linganore Creek. The combined permitted withdrawals total 17.2 mgd (daily average) and 28 mgd (maximum daily). A portion of this appropriation is used by the City of Frederick. The following Frederick County jurisdictions hold individual WAUP's for surface water withdrawals: City of Frederick (Monocacy River, Fishing Creek, Tuscarora Creek, and Linganore Creek), City of Brunswick (Potomac River), Town of Emmitsburg (Turkey Creek), and the Town of Myersville (Little Catoctin Creek). Fort Detrick in the City of Frederick also maintains its own water system and has a withdrawal permit from the Monocacy River.

SOURCE WATER PROTECTION

The quality of drinking water varies by source. Different issues exist for ground and surface water sources. With the exception of ground water in karst aquifers, which is under the influence of surface water, surface water is vulnerable to contamination from non-point sources such as run-off from parking lots and roads and from agricultural lands. Therefore, water quality concerns like sedimentation, potential spills, and fecal contamination are more prevalent. Ground water quality can be negatively impacted by naturally occurring radon or iron, but can also be contaminated by fecal coliform, particularly from septic systems. Groundwater may also be impacted by active quarry operations that exist in the County. The State has delineated zones of dewatering influence (see Map 09-2) where quarry operations may impact wells of individual residences and for community water systems.

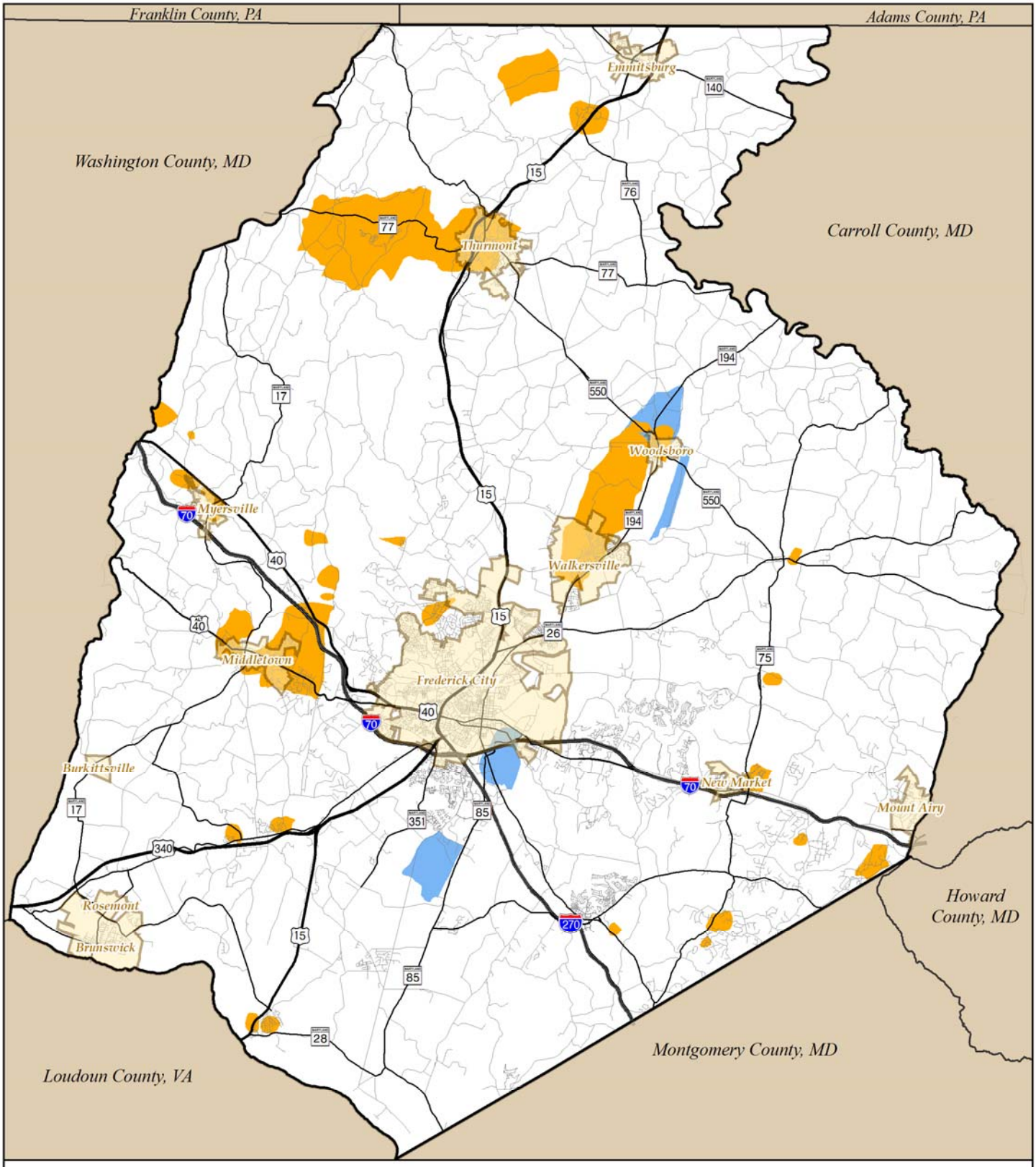
Table 09-3: Common Water Quality Concerns

Sedimentation	Nitrates
Human pathogens	Natural organic matter
Fecal contamination (*Cryptosporidium* and *Giardia*)	Algae
Potential spills	Taste and odor compounds
Fecal coliforms	Gasoline-related compounds

Water quality standards are in place for community systems using ground and surface water. Regular testing of drinking water is a requirement. The federal Safe Drinking Water Act amendments of 1996 require that public systems conduct a Source Water Assessment to better understand the vulnerabilities of their source. The State of Maryland has prepared Source Water Assessments for all public systems in the state. These plans list in detail the vulnerabilities of the supply and offer recommendations for continued protection.

[2] 2004. Advisory Committee on the Management and Protection of the State's Water Resources. *Appendix D - Monocacy River Watershed – Pilot Study.*

Map 09-2: Wellhead Protection & Zones of Dewatering Influence



Wellhead Protection & Zones of Dewatering Influence

Wellhead Protection Areas

Zones of Dewatering Influence

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Miles

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April 8, 2010

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A Source Water Protection Plan was prepared in 2004 for the Linganore Creek/Lake Linganore watershed in response to issuance of TMDLs for sediment and phosphorus. This plan presents the water body's vulnerabilities in detail and proposes a set of recommendations for agriculture, development, infrastructure and maintenance, homeowners, and outreach. These recommendations will address water quality and quantity issues at the Lake. With TMDLs pending at the federal level for most streams in Frederick County, it is likely that additional watershed management plans will be conducted in the future.

When surveyed, several municipalities in the County reported an interest in increased source water protection through wellhead, springhead or headwater protection ordinances. With ground water wells, springs, and streams often located outside of municipal boundaries, County regulations and ordinances are needed for adequate source water protection of municipal water systems.

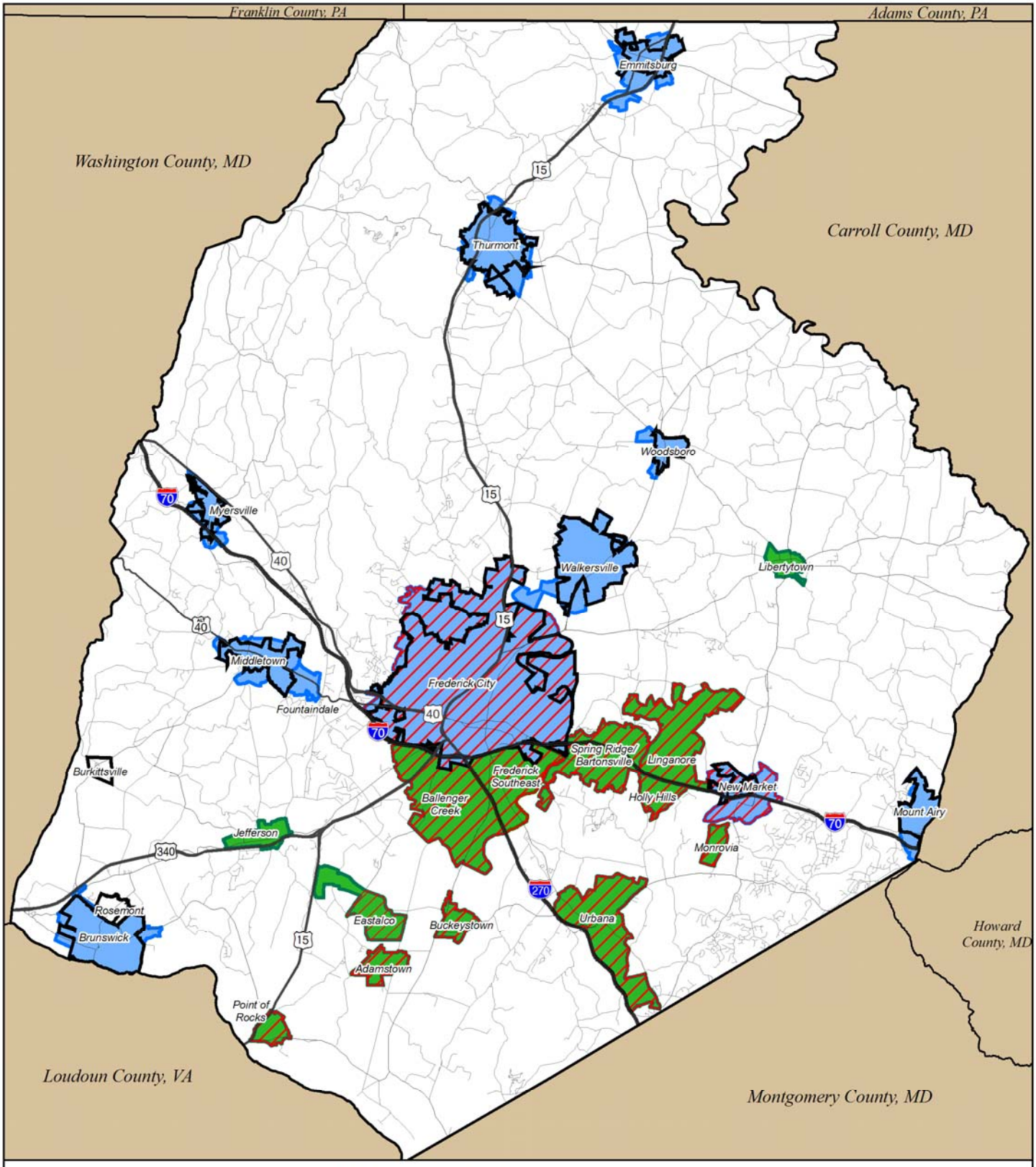
DRINKING WATER CAPACITY AND DEMAND

In Frederick County, community drinking water is either currently provided or planned for properties within the municipal and unincorporated community growth areas. The designated community water service areas generally mirror the particular community growth area boundaries. Nearly 60% of the County's residents obtained their drinking water from community water systems in 2006 with the remaining 40% of the population relying on individual wells.

The separate Water Resources Element report includes a detailed assessment of the current capacities of the County and municipal community water systems. The assessment includes the available capacities, which are then compared with the build-out potential of the community growth areas. This comparison is able to highlight water supply deficits that would be addressed through increasing the water capacity and applying appropriated development staging mechanisms. The build-out potential of the community growth areas only focuses on the residential development potential though most communities will also have additional non-residential development potential.

Map 09-3 shows both the municipal and unincorporated growth areas, which also serve as the community water service areas.

Map 09-3: Current/Planned Water Service Areas



Current/Planned Water Service Areas

Municipalities
New Design Water Service Areas
Municipal Growth Areas
Unincorporated Growth Areas

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DRINKING WATER (DW) ACTION ITEMS

DW -A-01 Explore the application of water recharge easements as a complement to existing agricultural and land preservation easement programs.

DW -A-02 Explore the use of impoundments to supplement other drinking water sources.

DW -A-03 Coordinate with Frederick, Middletown and Walkersville regarding the feasibility of interconnections with the County distribution system for mutually declared emergencies.

DW -A-04 Implement the Linganore Source Water Action Plan and consider countywide source water protection efforts.

DW -A-05 Develop a water conservation education program for residents and businesses of Frederick County.

DW -A-06 Develop a water-resources-based GIS database for staff to review in regard to development plans and proposals.

DW -A-07 Explore options such as providing public water and limiting permitted land uses in karst areas.

DW -A-8 Conduct an assessment of the availability and reliability of groundwater resources in the County.

DW -A-9 Coordinate the development of GIS mapping and drinking water data with the municipalities.

WASTEWATER ASSESSMENT

Community wastewater systems will continue to experience pressure from population and employment growth in Frederick County. Also at issue is the continuing use of individual septic systems and how to address failing septic systems. The larger issue is how the County can balance the ability to provide wastewater treatment capacity based on current and future limitations of pollutant loading, which can be discharged into the County's streams and rivers.

QUALITY OF EFFLUENT/IMPACT TO WATER RESOURCES

Wastewater treatment plants (WWTPs) treat raw wastewater to meet effluent requirements established by the Maryland Department of the Environment (MDE). WWTP's are considered point sources since they discharge the effluent directly into streams at single point. MDE issues a National Pollution Discharge Elimination System (NPDES) permit for each WWTP, which specifies the allowable ranges for chemical, physical and biological parameters of discharge. Permits are issued on a five-year planning horizon and set discharge limits for WWTPs.

The contribution of nutrients (nitrogen and phosphorus) from WWTPs is a major water quality problem facing Frederick County streams and impacts the larger Chesapeake Bay watershed.

Frederick County WWTPs discharge to main stem sections of the Monocacy River, Catoctin Creek and the Potomac River as well as their tributaries. The type of treatment required at each WWTP is determined by the ability of the receiving stream to assimilate effluent discharge and the overall impacts to the watershed. The County's major streams have limited ability to assimilate pollution due to low flow, seasonal variation in flow, and slow moving stream conditions.

Catoctin Creek has reached its maximum capacity of permitted pollutant loads from the existing WWTPs. Expansion of the WWTPs serving Middletown, Myersville, Fountaindale and Jefferson would require a corresponding reduction in nutrient effluent concentration. The Monocacy River is close to reaching its nutrient load limitations. Upgrades to existing plants and diversion of flow from sub-regional plants to the Ballenger/McKinney WWTP where major Biological Nutrient Removal (BNR)/Enhanced Nutrient Removal (ENR) facilities are in progress to reduce overall nutrient loading. Smaller plants are also going offline as flow is diverted into the regional WWTPs, reducing pollution in smaller tributary streams. Emmitsburg, Fort Detrick, Frederick, Thurmont, Woodsboro, and Frederick County (Ballenger Creek/McKinney, Crestview, Mill Bottom, Monrovia, New Market, Pleasant Branch, and White Rock) operate treatment facilities that discharge either directly to the Monocacy River or its tributaries.

As with drinking water supply, the Potomac River has emerged as the panacea for meeting future wastewater disposal needs in Frederick County. Two wastewater treatment plants currently discharge directly into the Potomac River (Brunswick and Point of Rocks) and both the Monocacy River and Catoctin Creek flow directly to the Potomac. The City of Frederick and Frederick County may utilize an outfall line to the Potomac River from the Ballenger/McKinney WWTP to handle the excess of treated effluent that cannot be assimilated by the Monocacy River.

Discharge permits for the Potomac River require the use of denitrification plants to reduce the nitrogen loadings into the river. This requirement protects downstream water users and serves to protect the Chesapeake Bay.

WATER QUALITY REGULATORY FRAMEWORK

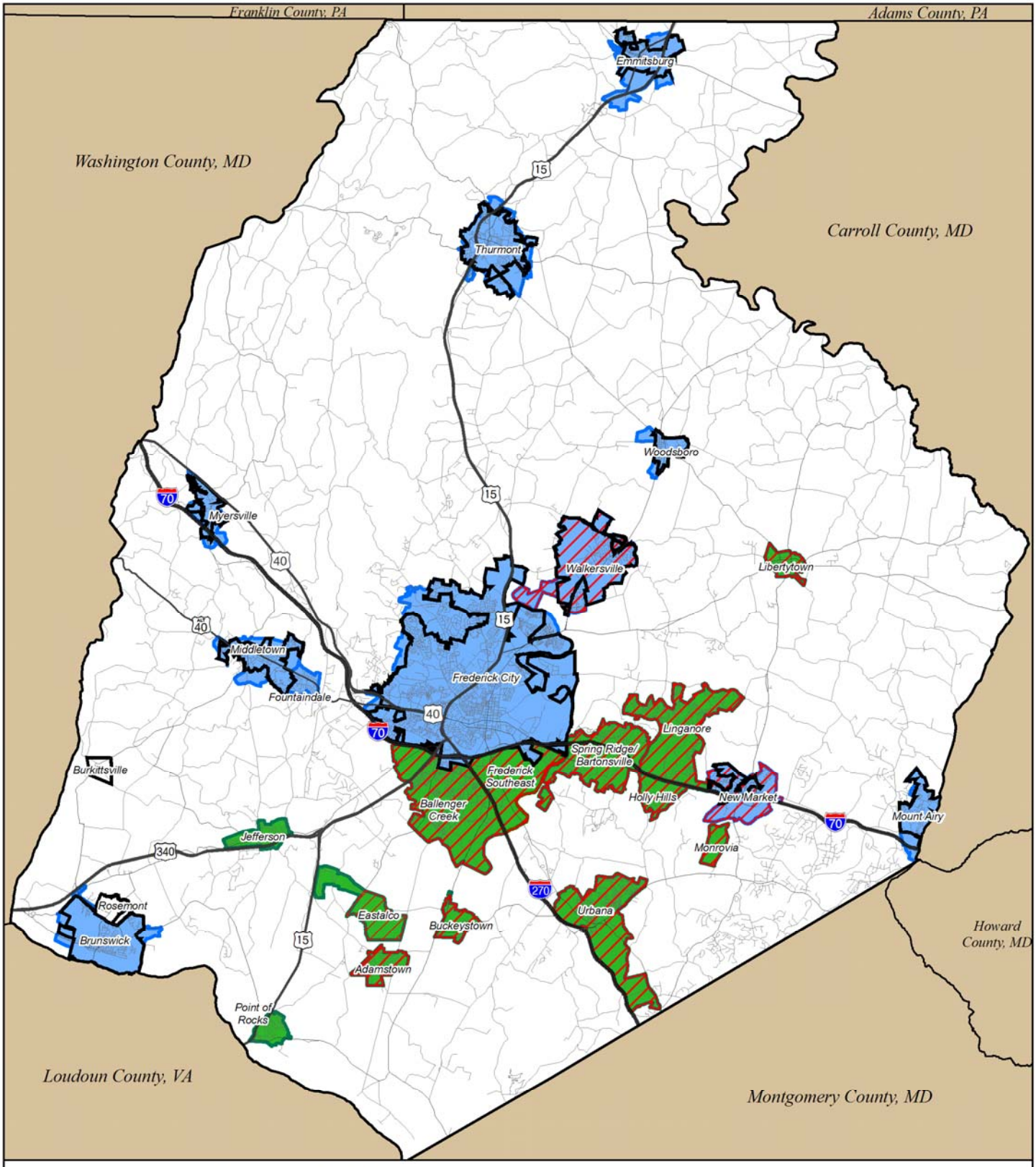
As an active participant in implementation of the 2000 Chesapeake Bay Agreement, the State of Maryland has agreed to reduce its nitrogen and phosphorus (nutrient) contributions to the Bay by a specific number of pounds to improve water quality conditions in the Bay. The State's framework for meeting nutrient reduction goals is described in the Tributary Strategies Statewide Implementation Plan. To date, Maryland has made significant progress through upgrades of major wastewater treatment plants with Biological Nutrient Removal (BNR) and Enhanced Nutrient Removal (ENR) treatment technology. These new technologies reduce the overall pounds per year of nitrogen and phosphorus that are discharged from wastewater treatment plants.

In addition to plant upgrades, Maryland has set nutrient caps on wastewater treatment plants through a point source tributary strategy. New or expanded discharges must meet these permitted limitations. Point sources are required to obtain a National Pollutant Discharge Elimination System (NPDES) discharge permit from the MD Department of the Environment in accordance with federal and state law. To meet the rigorous water quality goals of the Chesapeake Bay Agreement, Maryland has set up the Bay Restoration Fund, a dedicated fund financed by individual households and businesses served by community sewerage systems or served by individual septic systems. The Fund is used to upgrade wastewater treatment plants to ENR technology so that they are capable of achieving effluent quality of 3.0 mg/l total nitrogen (TN) and 0.3 mg/l total phosphorus (TP). The Bay Restoration Fund appropriated approximately $40 million towards the County's Ballenger-McKinney WWTP project. Bay Restoration funds are also used to fund the installation of nitrogen-reducing septic systems and for planting cover crops on agricultural lands to assimilate excess nutrients.

WASTEWATER TREATMENT CAPACITY AND DEMAND

The separate Water Resources Element report includes the detailed comparison of wastewater treatment capacities with the projected build-out of the community growth areas. The analysis in the WRE report will reflect the current design capacities compared with the residential development potential of the build-out of the Plan to highlight the need for either expanded treatment capacity and/or the application of appropriate development staging mechanisms. Map 09-4 identifies the community growth areas, which serve as the sewer service areas.

Map 09-4: Current/Planned Wastewater Treatment Service Areas



Current/Planned Wastewater Treatment Service Areas

- Municipalities
- Ballenger/McKinney Wastewater Service Areas
- Municipal Growth Areas
- Unincorporated Growth Areas

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WASTEWATER (WW) ACTION ITEMS

WW-A-01 Explore funding sources and programs to address inflow and infiltration problems in wastewater collection systems.

WW-A-02 Identify and prioritize retrofitting failing septic systems using the Bay Restoration Fund (flush tax) and other programs.

WW-A-03 Require that new septic systems use the best technologies available to reduce nitrogen pollution.

WW-A-04 Identify means to reduce pharmaceuticals and other compounds believed to be endocrine disruptors out of the County's wastewater streams and/or develop treatment strategies, which have been demonstrated to remove or destroy the contaminants.

MANAGING STORMWATER AND NON-POINT SOURCE POLLUTION

The use of land for development, industry, transportation and agriculture contributes non-point source pollution to our streams. Land disturbance related to development tends to exacerbate stream impacts, while forest and wetlands protection maintains or improves watershed health and function. This Plan mitigates non-point source pollution through concentration of growth into existing communities and protection of natural resources.

NON-POINT SOURCE POLLUTION

Non-point source pollution such as sediment, nutrients, fertilizers, oil, grease and other contaminants is transported to surface and ground water as a result of storm events. On naturally vegetated (forests, meadows) and agricultural lands, stormwater is able to permeate the soil and many pollutants are captured and filtered. Healthy streamside buffers composed of forest are particularly effective in this function. In developed areas, where much of the landscape is impervious (rooftops, driveways, parking lots, compacted or clay soils, and roads) direct ground water recharge is reduced and the volume of stormwater runoff to streams increases.

Non-point source pollution is detrimental to water quality and wildlife habitat and in our region its cumulative impacts are degrading the Chesapeake Bay. Since land use conditions affect the amount and extent of non-point source pollution, future development patterns should take into account their potential impact in order to protect the Chesapeake Bay resource.

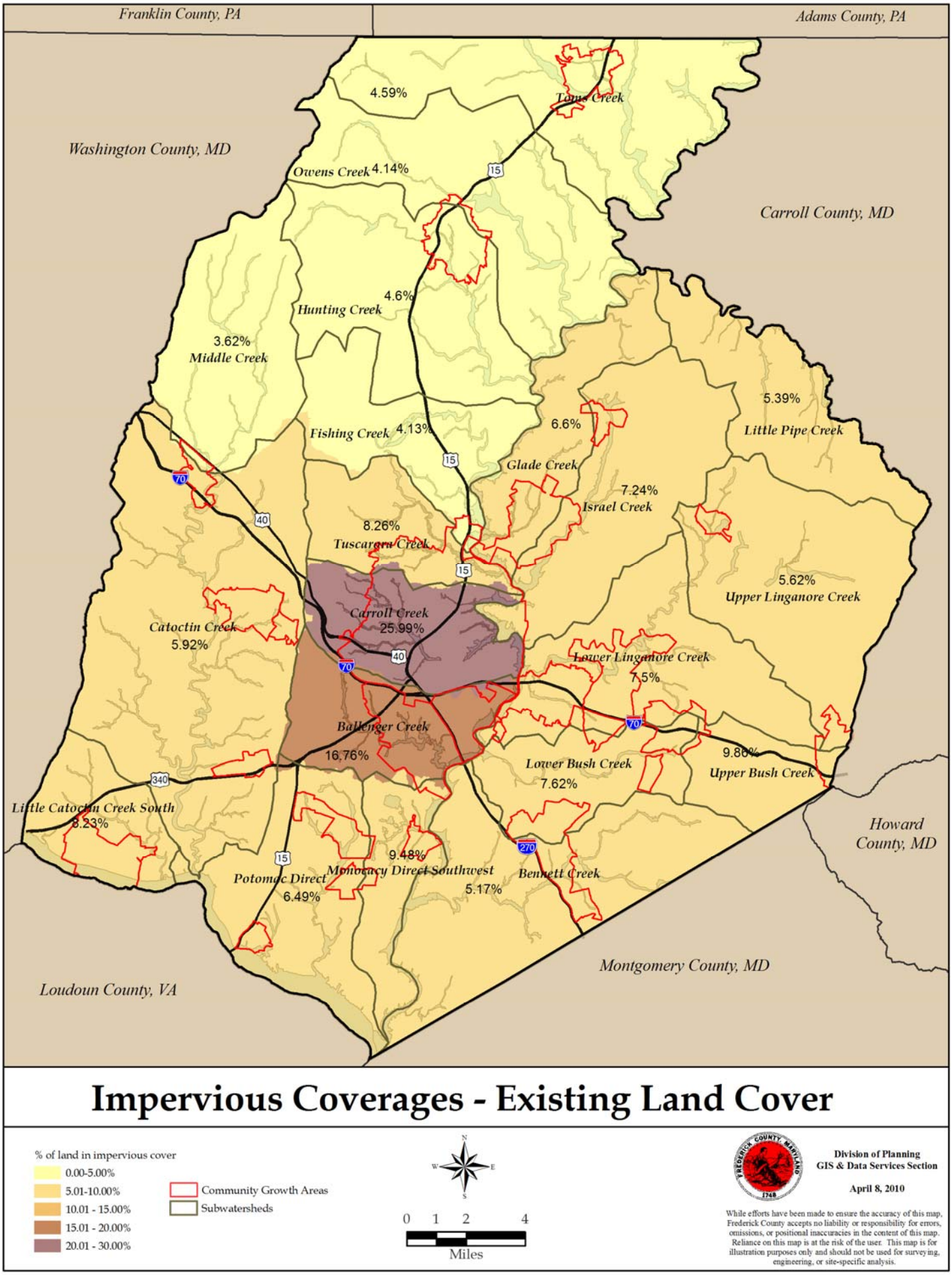
The following section includes two assessments of the impacts from various land use/cover conditions. The first is an assessment of the County's current levels of impervious cover; the second estimates the potential discharge levels of nutrient pollution.

IMPERVIOUS COVER

A wide range of negative impacts to stream hydrology, biological habitat, and water quality has been linked to the degree of impervious cover in a watershed. Impervious cover includes land that is paved as parking lots and roads and areas covered by buildings. Research reveals that when impervious cover within a watershed exceeds approximately 10%, sensitive stream elements are degraded. In cold-water regions supporting native brook trout reproduction, impervious cover of greater than 1% results in the loss of native trout populations. Once imperviousness reaches 25 to 30%, studies show that most indicators of stream quality shift to a poor condition as a result of severe impacts from erosion, channel instability, severe habitat degradation and decreasing biological integrity.

Frederick County's current impervious cover was measured from planimetric data taken from 2005 aerial photography. Planimetric data depicts man-made and natural features including such things as buildings, roads, trees, and water. The 2005 data was amended with additional features including: railroads, sidewalks, and quarries. Methodologies were derived from the Center for Watershed Protection's *Impervious Cover and Land Use in the Chesapeake Bay Watershed, 2001* and the US EPA Office of Research and Development, Ecosystems Research Division's *Estimating Impervious Cover from Regionally Available Data, 2005*. This provides a baseline to compare to future build-out conditions from the 2010 adopted Comprehensive Plan. This analysis also identifies which watersheds would be approaching or exceeding the 10% and 25% thresholds, where mitigation measures may be necessary.

Map 09-5: Impervious Coverages – Existing Land Cover



Impervious Coverages - Existing Land Cover

% of land in impervious cover
- 0.00-5.00%
- 5.01-10.00%
- 10.01 - 15.00%
- 15.01 - 20.00%
- 20.01 - 30.00%

Community Growth Areas
Subwatersheds

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Table 09-7: Existing Impervious Cover (2005)

Watershed	% Impervious	Watershed	% Impervious
Ballenger Creek	16.7	Lower Bush	7.6
Bennett Creek	5.1	Lower Linganore	7.5
Carroll Creek	25.9	Middle Creek	3.6
Catoctin Creek	5.9	Monocacy Direct	9.4
Fishing Creek	4.1	Potomac Direct	6.4
Glade Creek	6.6	Owens Creek	4.1
Hunting Creek	4.6	Toms Creek	4.5
Israel Creek	7.2	Tuscarora Creek	8.2
Little Catoctin	8.2	Upper Bush Creek	9.8
Little Pipe	5.3	Upper Linganore Creek	5.6

As expected, developed watersheds, such as Carroll Creek and Ballenger Creek, which include the City of Frederick, had the greatest level of impervious cover at 25.9% and 16.7% respectively. Suburban or developing watersheds like Lower Bush and Upper Bush Creek, Tuscarora Creek, and Lower Linganore Creek are very near the 10% threshold. These watersheds should remain a priority for restoration efforts such as stream buffer plantings, storm water retrofits and other best management practices. Only five (5) of the County's watersheds have impervious cover less than 5% and efforts should be made to maintain these low values through the land use planning process.

NUTRIENT POLLUTION

Excessive amounts of nutrients, particularly nitrogen and phosphorus, are the main cause of the Chesapeake Bay's poor health. [3] Nutrient pollution leads to algal growth and oxygen depletion, which create an uninhabitable environment for most aquatic life. The County's current land use plans (region plans adopted 1997 to 2008) were evaluated to determine the impact from the build out of the projected land uses on nitrogen and phosphorus pollution.

The methodology was provided by MDE and incorporated loading rates by land use category derived from the Chesapeake Bay Program Watershed Model (Phase 4.3) for the Potomac River basin. Estimated septic system loads for residential and non-residential development are included in the data. The current land use/cover conditions are derived from the Maryland Department of Planning (MDP) 2002 land use/cover analysis from the interpretation of high altitude photography and satellite imagery. Generally, only land uses greater than 10 acres in size are identified and measured. Summary results for nitrogen and phosphorus loads are provided in Tables 09-8 and 09-9 below.

[3] 2008. Chesapeake Bay Program web site. http://www.chesapeakebay.net/nutrients. "Nutrients".

Table 09-8: Nitrogen Loading	
Land Use/Cover[1]	**Discharge/Loading (lbs/year)**
Development	428,918
Agriculture	2,520,798
Forest	292,832
Water	23,433
Other	70,286
Subtotal Terrestrial Load	**3,336,267**
Residential Septic	485,802
Non-residential Septic)	18,439
Subtotal Septic Load	**504,242**
Total Nitrogen Loading	**3,840,509 lbs/year**

Table 09-9: Phosphorus Loading	
Land Use/Cover	**Discharge/Loading (lbs/year)**
Development	38,062
Agriculture	260,301
Forest	3,211
Water	1,625
Other	6,407
Total Phosphorus Loading	**309,606 lbs/year**
Maryland Department of Planning, 2002	

FREDERICK COUNTY'S STORMWATER MANAGEMENT PROGRAM

Frederick County first adopted stormwater management (SWM) regulations in 1984 and maintains its current program in accordance with State codes. The County implemented the policies, practices, principles, and methods of the *2000 Maryland Stormwater Design Manual* through the County's Stormwater Management Ordinance and its Design Manual in 2001. The Board of County Commissioners adopted the County's *Storm Drainage and Stormwater Management Design Manual* in 2003.

The SWM regulations are applied to development projects to control the quantity and quality of storm water runoff both during the construction of new developments and when once the development is completed. Proper management of stormwater runoff minimizes damage to public and private property, minimizes stream channel erosion, reduces local flooding, and maintains after development, as nearly as possible, the predevelopment runoff characteristics.

The County continues to work with the development community to implement the goals of the *2000 Maryland Stormwater Design Manual*. Enhancements will continue to be made as the manual is updated to comply with the Stormwater Management Act of 2007.

STORMWATER (SW) ACTION ITEMS

SW-A-01 Develop a GIS database to refine methods for calculating impervious cover to provide baseline data and aid in prioritizing restoration efforts.

SW-A-02 Develop an action plan to improve watershed health in watersheds where impervious cover is reaching or exceeding 10%.

SW-A-03 Develop a strategy for protecting native brook trout populations that includes an impervious cover threshold, minimum distance between roads and habitats, and reduced road density for those watersheds where native brook trout are present.

SW-A-04 Continue to retrofit untreated impervious surface area in the County with storm water management in accordance with the NPDES permit.

SW-A-05 Increase staffing and capabilities for stormwater management inspections and the review of sediment control and grading plans.

SW-A-06 Investigate the feasibility of a Stormwater Management Utility Fee to pay for inspection/enforcement.

SW-A-07 Incorporate the use of non-structural storm water management best practices (vegetated swales, rain gardens, cooling buffers and bio-retention) with maintenance and monitoring agreements.

SW-A-08 Reduce regulatory barriers to implementation of low impact development measures and create incentives to facilitate their use where appropriate.

SW-A-09 Continue to explore and implement new techniques and technologies to reduce the impacts to streams during mass grading for development.

SW-A-10 Work with Natural Resources Conservation Service and Maryland Department of Agriculture to identify additional incentives or measures that would reduce direct cattle access to streams.

SW-A-11 Showcase examples of low impact development and environmental site design techniques to increase public awareness of best practices.

SW-A-12 Expand the County's watershed planning and management capabilities.

SW-A-13 Amend County ordinances to reference stormwater management best management practices and implement the 2007 Storm Water Management Act guidelines.

SW-A-14 Continue implementation of the Lower and Upper Monocacy River Watershed Restoration Action Strategies (WRAS) and the Maryland Chesapeake Bay Tributary Strategies.

SW-A-15 Monitor pollutant loads and conduct Use Attainability Analyses on those watersheds with Total Maximum Daily Loads (TMDL's).

SW-A-16 Develop a monitoring system of local ground water conditions, aquifer recharge, watersheds and streams.

10 Managing Our Growth

This chapter establishes both the broad planning goals and the targeted land use policies necessary to ensure that Frederick County's neighborhoods and communities can continue to grow and develop in ways that improve the quality of life for all residents. The identification of Community Growth Areas, the institution of Development Staging Principles and Mechanisms, and the definition and mapping of Land Use Designations are each discussed in this chapter presenting a clear and understandable guide for current and future elected officials, citizens, planners, and land developers.

	Amendment Status
Goals, Policies, Action Items	**04/08/2010**
Maps and Graphics	**04/08/2010**
Background Information	**04/08/2010**

A vision for managing our growth…

In a world of communities united by heritage, profession, economic status, or knowledge, Frederick County residents share a critical common interest through the oldest of these community bonds – geography. Our community is defined by its physical location and in this way its residents share common advantages, common interests, and common challenges. The County's many special places - rural villages, historic neighborhoods, farms, mountain trails, urban parks, stream valleys, and country churches – each contribute to the vitality of this community and provide structure, respite, and value in our lives. This vision of Frederick County sees these many places not as escapes *from the challenges that face us, but as potential* solutions *as we grapple with the ever increasing pressure to grow and develop.*

GOALS

MG-G-01 Establish plans and policies that consider Frederick County within the context of the metropolitan region.

MG-G-02 Develop a consensus with municipalities to determine how much new residential growth is desired in municipality-centered Community Growth Areas.

MG-G-03 Ensure that adequate infrastructure is provided – concurrently with development - in order to accommodate long-term land use plans.

MG-G-04 Reduce non-rural development outside of Community Growth Areas while maintaining opportunities for compatible agricultural support services and uses in the Rural Communities.

MG-G-05 Manage land use planning and development in a manner that is compatible with the conservation, protection, and enhancement of the County's Green Infrastructure. The design and layout of our communities will draw inspiration from – and not suppress or subjugate - those natural features that define Frederick County.

MG-G-06 Increase the proportion – and 'per acre' unit density - of new residential development occurring within Community Growth Areas while minimizing new residential development outside of the County's Community Growth Areas.

MG-G-07 Establish as a targeted goal for the development and redevelopment of lands within Community Growth Areas, an average density of 7.5 residential dwellings/acre by the year 2025.

MG-G-08 Increase the number of properties – both vacant and underdeveloped lands - available for employment uses in order to support policies that emphasize the reuse and revitalization of previously developed sites.

MG-G-09 Emphasize Mixed Use development within Community Growth Areas.

MG-G-10 Emphasize reinvestment in our growth areas by encouraging infill and redevelopment projects which are compatible with existing neighborhoods and districts.

MG-G-11 Facilitate the growth management strategy of increasing density in growth areas by employing sound community design principles that enable comfortable, efficient, and accessible communities.

MG-G-12 Support the desire of residents to live, work, and play in communities whose designs are: inspired by the pattern and layout of traditional and neo- traditional neighborhoods; nurturing of the distinct, locality-inspired character of Frederick County; arranged according to the time-tested model of neighborhoods, districts, and corridors; and, optimized to enable walking, biking, and the use of public transit for personal transportation.

MG-G-13 Employ compact community design that supports the conservation of natural and historic resources, reduces the consumption of energy, and results in the efficient provision and use of community infrastructure.

POLICIES

MG-P-01 Size - and ultimately develop - Community Growth Areas in direct relationship to infrastructure capacity, green infrastructure elements, and the relationship to surrounding agricultural uses.

MG-P-02 Community Growth Areas are not to be extended into Priority Preservation Areas.

MG-P-03 Pursue redevelopment strategies as a way to minimize the need to expand existing Community Growth Areas or establish new Community Growth Areas.

MG-P-04 Further expansion of the designated Rural Residential areas into the surrounding Agricultural/Rural or Natural Resource designated areas is not permitted.

Policies regarding development type and character

MG-P-05 Locate and design development so as to foster the formation of communities that respect Frederick County's traditional growth patterns characterized by distinct and clearly-defined neighborhoods and commercial districts, pedestrian and bicycle-friendly circulation patterns, and a vital mix of residential, business, and civic uses.

MG-P-06 Locate highest density commercial and employment centers around access to major thoroughfares and public transportation systems and transit hubs.

MG-P-07 Facilitate development of Community Growth Areas to include a variety of local employment opportunities in order to provide favorable conditions for residents to live and work in their neighborhood or community.

MG-P-08 Encourage, and where appropriate regulate, redevelopment such that the design character and functional traits of the existing adjacent neighborhoods or districts are not diminished.

MG-P-09 Allow for flexibility throughout the development process to facilitate mixed-use development patterns as well as to promote innovative design concepts that protect and maintain environmental and cultural resources.

Policies to guide zoning decisions

MG-P-10 Incorporate existing and proposed residential zoning in Community Growth Areas to allow for a minimum density of 3.5 dwellings/acre to maintain consistency with the State's Priority Funding Area criteria.

MG-P-11 In order to provide a disincentive to development occurring without municipal annexation, lands within Municipal Growth Areas, but outside of current municipal boundaries, should remain – or be rezoned to – 'Agricultural'.

Policies related to infrastructure

MG-P-12 Public, community water and sewer service shall not be extended to properties outside of a Community Growth Area.

MG-P-13 Include development staging plans that relate the pace of development to the availability of community facilities and infrastructure as part of all community and corridor plans.

Policies related to employment and commercial development

MG-P-14 Limit the development or expansion of general commercial activities along US 15 to land within Community Growth Areas.

MG-P-15 Industrial and general commercial development will be located within Community Growth Areas or defined Employment Areas.

MG-P-16 Discourage 'Strip Development' - development in which each commercial establishment is afforded direct vehicular access to a major thoroughfare.

MG-P-17 Design new commercial and employment development to promote the identity of individual communities and reinforce traditional neighborhood design patterns within the community.

MG-P-18 Locate major industrial areas where there is direct access to existing or planned arterial or interstate highway facilities or freight rail facilities.

MG-P-19 Substantially limit development along major highway corridors such as I-270 and US 340 to those uses that maximize employment opportunities.

Policies regarding community design

MG-P-20 Organize public space - in the form of streets, plazas, parks, and squares - to facilitate the social, economic, and civic activities within our communities.

MG-P-21 Locate neighborhood centers within walking or bicycling distance from a majority of residences – and be transit-serviceable - to provide convenient access to a variety of goods, services, and community activities.

MG-P-22 Maximize transportation network connectivity and enhance the design of new and redeveloped communities by providing an interconnected street and transportation network within and between new and existing development.

MG-P-23 Include a variety of housing types in all communities.

MG-P-24 While a variety of building types should be incorporated into the design of our neighborhoods and communities, local vernacular forms shall be utilized and respected during the land development process. The logical regularity of building height, architectural articulation, yard setbacks, construction materials and landscaping shall be informed by the character of traditional cities, towns and villages throughout Central Maryland and Frederick County.

MG-P-25 Human scale will serve as the first - and primary - point of reference in the design of communities and neighborhoods in Frederick County.

MG-P-26 Design development proposals in conformance with the Frederick County Community Design Guidelines. These Community Design Guidelines are intended to provide direction to land planners and designers that assists them in implementing the policies contained within the Countywide Plan.

MG-P-27 Use every available regulatory and policy tool available to ensure that community design issues are a high priority in the review of land development proposals.

MG-P-28 Place underground all utility lines located within any new development or substantially redeveloped area of the County, where practicable.

MG-P-29 Ensure that the day-to-day application of the County's zoning, subdivision, adequate public facilities, and other land development ordinances results in the creation of distinct, diverse, compact, and interesting communities.

MG-P-30 Promote community design that creates places characterized by universal accessibility for seniors and people with physical disabilities.

MG-P-31 Incorporate elements of Form-Based Codes in County Ordinances in instances where this type of codification would result in regulations that more clearly and effectively convey the intent of the standards.

MG-P-32 Promote low-impact, sustainable development practices such as: the use of non-invasive, native, and drought-tolerant landscaping; utilization of stormwater management techniques that include natural drainage patterns and bio-retention techniques; and, integration of energy-efficient site design and deployment of energy-conserving building technologies including alternative energy sources.

STATE VISION AND PLANS

This chapter supports all of the State Visions.

- *Quality of Life and Sustainability*
- *Public Participation*
- *Growth Areas*
- *Community Design*
- *Infrastructure*
- *Transportation*
- *Housing*
- *Economic Development*
- *Environmental Protection*
- *Resource Conservation*
- *Stewardship*
- *Implementation*

GROWTH MANAGEMENT IN FREDERICK COUNTY

A functional long range planning document provides policy makers, citizens, and land owners with the background, knowledge, and understanding necessary to make the informed decisions that will create the communities of tomorrow. If this Comprehensive Plan is to successfully serve as a basis for guiding planning decisions in Frederick County for the foreseeable future, it must answer four fundamental questions about the growth that awaits us – and it must do so clearly and without equivocation:

Where?

Where will future growth occur in Frederick County? The first question addressed in this section of the Plan identifies the location of new and redeveloped neighborhoods and communities and how this Plan may be used to identify the types of areas – as well as the specific places – where growth is most appropriate. The Location of Growth provides both a conceptual and literal map of the County's future growth areas and looks at the geography of our community from three vantage points – growth areas (*The Community Plan*), rural community and agricultural vitality (*The Agricultural and Rural Communities Plan*), and natural and recreational resources (*The Green Infrastructure Plan*).

What?

What form will new growth and development take? The second question addressed in this section focuses upon those traits and characteristics that define the best of today's communities and serve as models for our future growth. A set of core Community Development Principles, are described with an eye toward the ways in which this County evolved in the past. The *Characteristics of New Growth* and *Patterns of New Growth* provide a recipe for the development of vital, efficient and beautiful places in Frederick County.

When?

When and at what rate will new growth take place in the County? The third question wrestles with the timing of new development. Issues related to the timing of new growth will have impacts upon community finances, public services, and the quality of life of both residents and employers. This section introduces the concept of *Development Staging*. Through the descriptions of *Staging Principles*, a *Priority Growth Tier* system, and *Staging Mechanisms*, the County constructs a means of managing the timing element at the comprehensive planning stage.

How?

How will new growth take form in both the existing neighborhoods and the new communities? The final question looks squarely into the physical development of the County and provides a valuable template for future growth and redevelopment. This section states clear directives and policies about how the County may best work with its development partners to improve the design, look, and feel of our existing and future neighborhoods and communities.

THE LOCATION OF GROWTH

The question of where new growth and development will occur in Frederick County is of primary importance to the many citizens, public officials, and landowners who rely on this Plan to guide future land use decisions. In the section *Identifying Community Growth Area*s, this Plan considers the characteristics of existing and future Community Growth Areas (CGA's) while the section entitled *Types of Community Growth Areas* discusses the key similarities - and differences - between the County's two kinds of growth centers: the Municipal Growth Areas (MGA's) and Unincorporated Growth Areas (UGA's).

In order to demonstrate how the County intends to manage its future growth and development, this section of the Plan also presents three fundamental vantage points from which to consider the geography of future growth:

- *Community View*, which describes the location of the County's designated centers for development, 'Community Growth Areas';
- *Agricultural and Rural Communities View,* which describes how future growth will complement the rural character of this traditionally agricultural county; and,
- *Green Infrastructure View*, a strategy for enhancing the critical links between our growth centers, natural areas, and recreational assets.

IDENTIFYING COMMUNITY GROWTH AREAS

Although Community Growth Areas have been identified around municipalities and in existing non-municipal communities, the County has carefully considered the opportunities and constraints of focusing future growth in any given area before making these designations. For example, municipalities such as Rosemont and Burkittsville are unlikely to support future growth and development at a level commensurate with the infrastructure investment needed to support such new growth. Neither of these communities is designated as Community Growth Areas in this Plan. By the same token, many of the county's smaller unincorporated Rural Communities are ill positioned to accommodate the requirements of intensive residential development and are similarly not well suited for designation as Community Growth Areas.

A key step in the process of determining Frederick County's Community Growth Areas considered the appropriate criteria for making sound decisions regarding where growth will occur. Criteria used to identify Community Growth Areas are:

Character

Community Growth Areas should be designated across a broad range of the County's cities, towns, and villages. Frederick County residents – and the developers who will make substantial investments in developing the neighborhoods of the future – will demand variety in the places they choose to call home. In determining where our most intensive future growth will occur, the County has aimed for the designation of a broad range of community types seeking the diverse physical and social character inherent in the best communities in America.

Location

Several factors have influenced the location of Community Growth Areas in this Countywide Comprehensive Plan, but chief among these are community identity, transportation access, and availability/cost of facilities and services.

- *Facilities and Services* – While a basic tenet of Smart Growth dictates that new growth and redevelopment should occur in existing communities, the fiscal and technical reality often interferes. If existing infrastructure in a community can be affordably and practically improved or expanded to accommodate growth, the community has been identified as a potential growth area. If the development of new infrastructure can reasonably be expected to be provided cost-effectively and efficiently in a new planned community or growth area, these too have been looked upon as a potential Community Growth Area.
- *Transportation Access* – With an interstate highway network struggling to meet current demands and a metropolitan region-wide transit system severely under built to accommodate current commuting patterns, transportation access has been a key component in the decision to designate Community Growth Areas.
- *Community Identity* – The County has considered the impacts of future growth on the character of its existing communities as well as upon the surrounding rural landscapes. While growth brings with it some elements of change, it cannot be argued that to allow development to proceed in outlying rural lands will forever alter the ability of those areas to support a viable agricultural economy, create burdens upon our sensitive natural systems, and severely degrade the aesthetic and spiritual nature of these place-defining landscapes.

Scale

The scale of Community Growth Areas identified in this Plan is varied in order to accommodate both the need to respect existing settlement patterns as well as the need to remain open to changes in the marketplace. Several factors influence the planned size and scale of Community Growth Areas including historical development patterns, transportation access, and ability of infrastructural systems to serve these communities. Some communities will find great difficulty in providing adequate water while others will remain relatively inaccessible given current transportation networks. Where one community finds its future expansion blocked by natural features another may find that its locational advantages spur intensive and compact development. Ultimately, the County will strive to maintain communities of various sizes if only to allow the traditional townscape pattern to be maintained.

Spread and Distribution

The original 'Community Concept', as articulated in previous County Comprehensive Plans, designated growth areas in a hierarchy of regional, district, and rural communities. This system produced a map of well-distributed growth centers spread throughout the County, favoring no one region over another. While this democratic approach mirrored, in many cases, the delineation of the regions as originally conceived, it did not necessarily convey a sense of prioritization in the choice of potential growth areas. In this Plan the County has diminished the importance of regional distribution and instead ensured that there is sufficient geographic distribution of the Community Growth Areas to accommodate locational choice in the marketplace.

TYPES OF COMMUNITY GROWTH AREAS

This Plan identifies two types of Community Growth Areas (CGA's). These distinctions will not necessarily limit the expected or ultimate characteristics of the CGA's such as population range, mix of land uses, functionality, availability of services, access to infrastructure, or physical scale. Instead the two types of growth areas listed below will provide a framework for understanding the existing conditions in each of the growth areas and allow the development of policies, guidelines, and regulations that will be more responsive to the specific issues present in each case.

Municipal Growth Area

A Municipal Growth Area is the prevalent type of growth area designated in the County and would include a municipality and its environs planned for future growth. While the County would maintain short-term control over those areas adjacent to the municipalities, the land use control would eventually be ceded to the municipal government at the time of annexation. In other situations, particularly in the areas surrounding the City of Frederick, the County may retain control over development not identified within the City's own municipal growth area.

Municipal Growth Areas:

Brunswick, Emmitsburg, Frederick, Middletown, Mount Airy, Myersville, New Market, Thurmont, Walkersville, & Woodsboro

Unincorporated Growth Area

An Unincorporated Growth Area is identified in a non-municipal community (such as Libertytown, Jefferson or Linganore) where the County is responsible for public infrastructure such as water and sewer service, as well as primary land use regulations such as zoning. An Unincorporated Growth Areas might also be designated in places considered transition areas – places not traditionally thought of as communities, but having some potential for evolving into employment centers, mixed use transit corridors, or new residential neighborhoods. Transition Areas may include under-developed commercial corridors and former industrial lands that would benefit greatly from the targeted physical planning efforts as part of a corridor planning process.

Unincorporated Growth Areas - Communities:

- Adamstown
- Ballenger Creek
- Buckeystown
- Fountaindale
- Jefferson
- Libertytown
- Linganore
- Monrovia
- Point of Rocks
- Spring Ridge/Bartonsville
- Urbana

Unincorporated Growth Areas - Areas in Transition:

- Eastalco Employment Area
- MD 85/MD 355 Commercial Triangle
- MD 85 Employment Corridor (between I-270 and English Muffin Way)
- MD 180/Jefferson Technology Park (between I-70 and Mt. Zion Road)
- I-270 Employment Corridor
- Old National Pike East (Meadow Road to New Market)
- Old National Pike West (Frederick City to Meadow Road)

THE COMMUNITY VIEW

Building upon the 'Community Concept' developed and refined in County plans since the 1970's, this Plan seeks to establish an improved framework for identifying the location, configuration, and character of the places in Frederick County that will accommodate future growth and development in distinct, geographically-defined areas. The most intensive residential and employment growth – as well as the infrastructure needed to support such development – will be directed to growth areas, leaving much of the County's agricultural and natural landscapes intact for future generations.

The Community View framework - much like the Community Concept framework before it – focuses on the creation of distinct communities that foster:

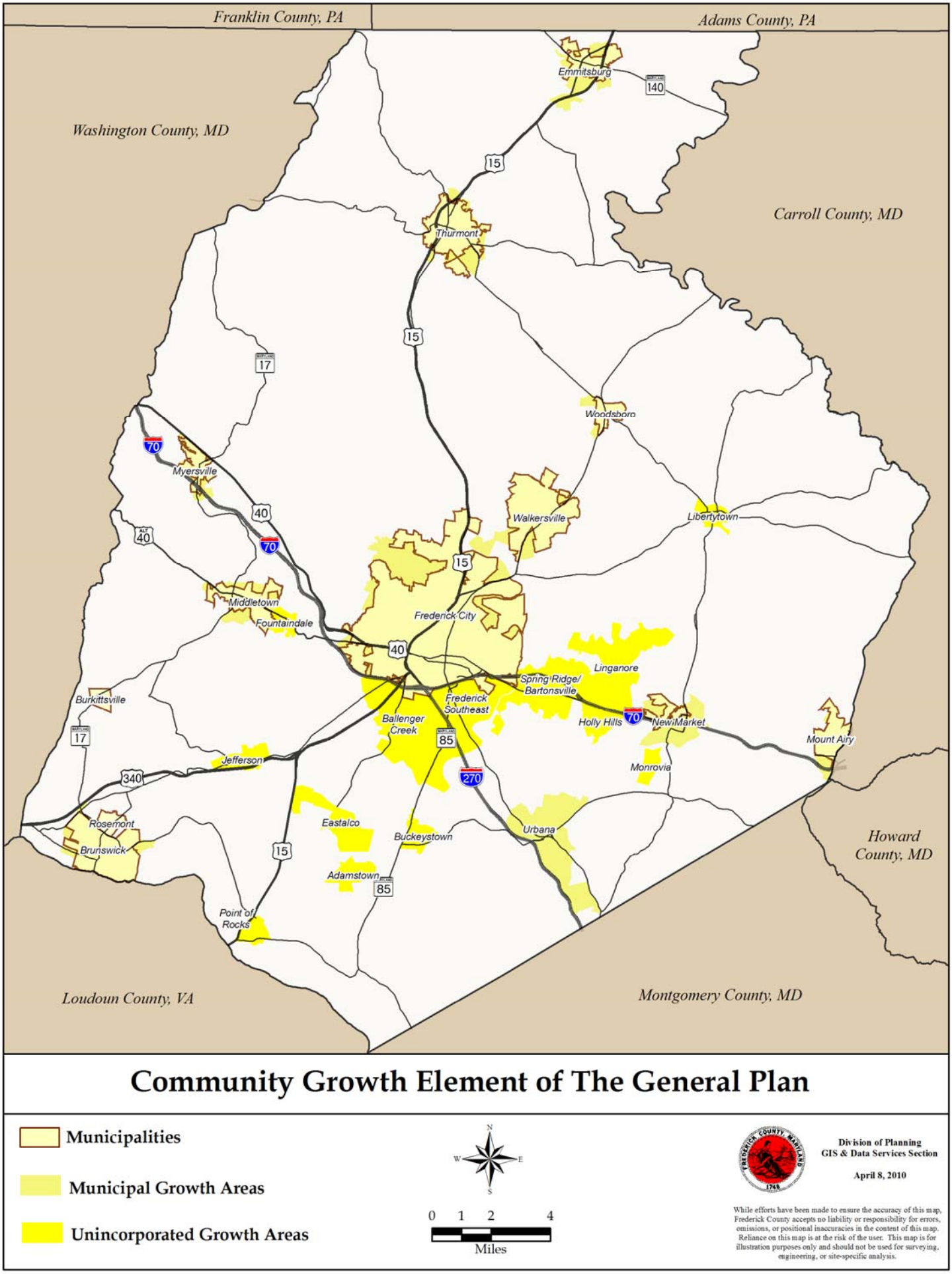
- safe, healthy, and vital neighborhoods;
- robust systems of public facilities and infrastructure;
- ample and convenient connections to parks, trails and natural landscapes; and,
- excellence in design and efficiency.

Simply put, Frederick County's future growth and development will occur within, and proximate to, existing communities. Cities and towns like Frederick, Brunswick, and Thurmont - as well as unincorporated settlements such as Libertytown and Jefferson - will continue to grow and thrive in future years providing ample growth and redevelopment opportunities. The County, and its municipal partners, will focus the public and private resources necessary to make certain that such growth occurs only as the infrastructure needed to support it is available.

The Municipal and Unincorporated Growth Areas and will be the focus of County efforts to:

- Provide for the development, refurbishing, and maintenance of the physical and social infrastructure necessary to sustain communities;
- Establish detailed plans for the orderly development of these places;
- Create and nurture vital and healthy mixed use neighborhoods;
- Provide creative, clear, and fair regulations and guides for use by our place-making partners in the development community;
- Establish a Green Infrastructure linking neighborhoods, parks, natural features, through an interconnected system of trails, waterways, and natural corridors; and
- Concentrate available community fiscal and other resources with the intent of creating well-designed, well-serviced, efficient, safe, accessible, and – above all – interesting places where residents will want to live, work, and play.

Map 10-1: Community Growth Element of the General Plan



THE AGRICULTURAL AND RURAL COMMUNITIES VIEW

The County's rural, agricultural landscapes and small crossroads villages are significant features of our heritage and our economy. Where growth is planned to occur in Frederick County, great care should taken to maintain the character and integrity of our rural communities, protect agriculturally significant lands, and provide the land use opportunities for farmers and other rural residents to thrive economically without abandoning the practice of agriculture or degrading the cultural and environmental qualities of rural places.

Rural Communities

Rural Communities are small, compact villages located throughout the County in the agricultural areas generally comprising homes, a church or other community organization, and on occasion, some small businesses. These communities, often located at the intersection of rural highways, developed in large part, prior to the twentieth century as centralized locations for area farmers to meet and trade.

Given the deep roots of these communities in the history of Frederick County, this Plan maintains the land use designation - *Rural Community* - for these identifiable places. While these Rural Communities are not identified as Community Growth Areas, this designation acknowledges that limited, and mostly residential, growth may continue to occur in these villages as infill development. Private well and septic systems are the intended means of providing the infrastructure necessary to service existing, and any additional, homes or small businesses.

Agricultural support businesses such as farm equipment repair, farmer's supply stores, and feed and grain operations are critical to the farming community, providing access to needed materials, equipment, and ultimately, access to markets beyond the borders of the County. Rural Communities often provide advantageous locations for these types of uses and should be accommodated where feasible.

Rural Communities:

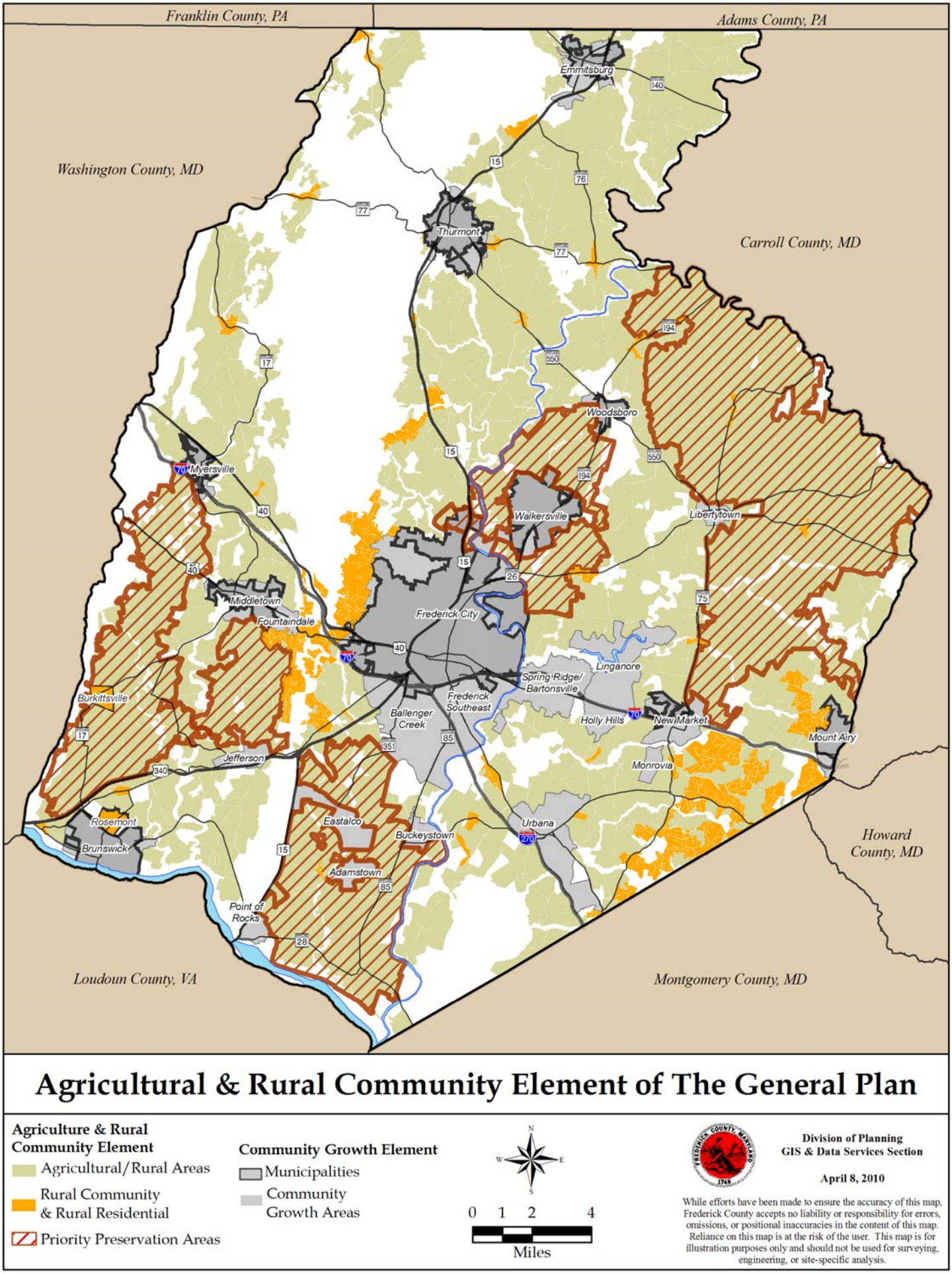
Araby	Feagaville	Ijamsville	New London	Saint Anthony
Blue Ridge Summit	Flint Hill	Johnsville	New Midway	Unionville
Burkittsville	Foxville	Knoxville	Petersville	Wolfsville
Catoctin Furnace	Graceham	Lewistown	Rocky Ridge	
Creagerstown	Hopeland	Mount Pleasant	Rosemont	
Doubs	Hyattstown	Mountaindale	Sabillasville	

Priority Preservation Areas

The County's Priority Preservation Areas (PPA's) have been identified in areas to create a greater focus for agricultural preservation. The five areas designated are based on existing blocks of agricultural preservation easements, prime farmland soils, and where large, 100+ acre, parcels exist. Where a PPA adjoins a Community Growth Area boundary they will function as a greenbelt.

To maintain the permanence and function of the PPA's where they adjoin a Community Growth Area it is important that the CGA boundary be located to accommodate long-term growth needs. If a CGA is too small then there will be pressure to expand into an adjacent PPA. CGA's and PPA's are conceived of as complementary land use concepts that, when deployed and implemented in tandem, will allow the County to grow and develop without compromising the history, culture, and economic vitality of its agricultural lands.

Map 10-2: Agricultural and Rural Community Element of the General Plan



GREEN INFRASTRUCTURE VIEW

This Plan element addresses the County's network of natural resources and protected lands and the ways in which this network is protected from encroaching development while maintaining critical natural and recreational linkages to our Community Growth Areas. This Green Infrastructure is no less valuable to the success of a community than its roads, sewers, or schools.

If our Green Infrastructure is treated as an afterthought in the planning process, the County's Community Growth Areas will fail to be truly livable places. The following principles will insure that our cities, towns and villages remain connected to the surrounding natural world.

Connect People to Places

The design and development of our Community Growth Areas shall provide multiple ways in which residents and visitors may gain access to parks, open spaces, and natural areas. Multi-use trails, sidewalks, bicycle paths/lanes, streets, and public transit services must be planned and maintained in a way that provides convenient, intuitive, and proximate access to our Green Infrastructure. Linkages between communities via multi-use trails, greenways, or habitat corridors will serve to connect Community Growth Areas for environmental, recreational, and transportation purposes.

Bring People to the Resources

We cannot value resources that we do not know to exist. To encourage individual – and community – stewardship of our natural areas, our Community Growth Areas must be planned not just to protect natural features, but to open and expose them to potential stewards.

Showcase Green Elements in Neighborhood Design

People do not need to be told to visit a forested hillside, a shaded stream bank, or a quiet trail. These places should become focal points of neighborhood and community design. Playing fields, community gardens, pocket parks, and urban streams are examples of green elements that should be showcased as neighborhood focal points and every effort should be made to integrate these places into the fabric of everyday life in our Growth Areas.

Respect Natural Boundaries

Community Growth Area boundaries should be established in a way that does not adversely impact a natural feature. While it is critical for our compact, high-density neighborhoods and town centers to include green elements, the built environment should not extend beyond the physical limits and inherent natural capacity of our landscapes to absorb and survive such growth.

Map 10-3: Green Infrastructure Element of the General Plan

COMMUNITY DEVELOPMENT PRINCIPLES

A series of core Community Development Principles will guide County leaders as they lay the groundwork for the new growth that will physically, socially, and economically define this community in the future. These principles do not reflect a passing fad or follow on the heels of a popular notion that may change tomorrow. Instead, these principles build upon the accrued knowledge of planners, builders, economists, engineers, businessmen and citizens, to help us make better places.

In the *Characteristics of New Growth* this Plan establishes five traits of community growth that will become the reference point for all new development in the County. The section describing *Patterns of New Growth* highlights three alternative growth models to the prevailing pattern of low density land uses, greenfield development, automobile oriented layouts, piecemeal development of land, branching street systems, and separation of land uses.

THE CHARACTERISTICS OF NEW GROWTH

Characteristic I. Density of Development

New growth in the County shall occur at densities that support a broad range of daily activities in a compact, human-scaled, and well-designed place.

Development density - at a level at least as intensive as that put forward by Maryland's Smart Growth policies – can allow Frederick County to grow and develop without the associated impact upon our natural and agricultural landscapes and avoid the sprawl development pattern that is prevalent in lower density development areas.

- The social, environmental, and economic benefits of higher density development can be enjoyed in both new neighborhoods and those that are redeveloped.
- Amenities that would otherwise be unaffordable and unavailable to a broad range of citizens can be supported in denser neighborhoods since the associated costs of such amenities can be shared by a greater number of users.
- Shops, services, restaurants, parks, and other hallmarks of vital neighborhoods, can be developed – through higher densities - in close proximity to one another.
- Higher development densities support efficient street layouts, pedestrian networks, and convenient transit services.

Characteristic II. Mix of Land Uses

New growth in the County shall incorporate a mix of uses, placing homes, shops, offices, schools, civic activities, and parks in close proximity to one another.

Whether it's the traditional apartment over a neighborhood shop, or a block of contemporary live-work units, the County will take the necessary steps to facilitate mixed use development as part of new developments and with redevelopment opportunities.

- A mixture of compatible and interrelated uses in newly developed or redeveloped neighborhoods provides opportunities for residents to live, work, and play in a compact geographic area minimizing the need to depend on the automobile.
- Mixed use projects provide a valuable economic benefit to businesses that can flourish given the proximity of nearby customers.
- A mix of uses can ensure that activities occur throughout the day and not simply during business hours (in the case of a dedicated business area) or morning/evening time (in the case of residential neighborhoods).

Characteristic III. Sense of Place and Community

Support the development of recognizable places that create a strong civic identity, foster excellent design, provide community civic-focused facilities like schools and libraries, encourage pedestrian activity, and promote human interaction.

The creation of unique and identifiable places cannot be reduced to a formula, nor can the building of a true community be left to chance. As we seek the development of new neighborhoods - and the revitalization of older ones - the County will work to ensure that this new growth maintains the unique identity and character of our communities.

- Frederick County must at all times be cognizant of the impact of development decisions not just upon the safety, efficiency and utility of a new community, but upon its sense of place as perceived by those who will live, work and play within its boundaries.
- While there are economic benefits to the standardization and mass production of housing and commercial buildings, the aesthetic cost is often boring and monotonous architecture. The architecture of our new communities shall maintain a special relationship to the place in which it is located
- The County shall pursue the building - or re-building - of community facilities within the central part of the communities to provide a civic focus and identity.

Characteristic IV. Function and Efficiency

Pursue the efficient and wise use of our limited land and fiscal resources by directing new development into existing communities and by coordinating the physical planning and development of greenfield sites when such development is deemed appropriate.

While both function and efficiency have played a primary role in the development of past communities in the County, the new realities of economics, environment, and energy will bring a sharpened focus to this characteristic of our new growth. Increased development density, the deployment of the most efficient infrastructural systems, and seeking to maximize the use of public and private facilities will all contribute to the development of more efficient and functional communities.

- The prevalent, piecemeal land development process often results in the creation of unnecessary and inefficient fractures in the physical layout of growth centers. The County must create an appropriate physical framework within Community Growth Areas - through its Community and Corridors Plans - so that new development is physically and functionally connected to existing, and future, development.
- It is imperative that new growth be considerate not just of the up-front cost of improvements in community infrastructure but the longer-term costs to maintain and replace this infrastructure as well.
- Whenever feasible, long-term savings shall trump short-term expedience in the provision of public facilities.
- As we seek to reduce our reliance upon unsustainable energy resources, our new growth should lead the way through the use of renewable energy, the re-use of existing land, buildings and materials, and the establishment of regulations and covenants that do not restrict the deployment of energy-saving or energy-harvesting technologies.
- Within Community Growth Areas, single-use zoning shall be used judiciously and with great care so as to minimize the fracturing of neighborhoods and other activity centers.

Characteristic V. Accessibility

Support a physical framework for communities that facilitate convenient and universal access to jobs, shopping, schools, and community services that is not solely dependant on the automobile.

- Support compact growth areas with increased residential and commercial/employment density, which can support greater public transportation use.
- A broader range of housing types shall be accessible to citizens of various economic means and life situations as a result of higher density, mixed use communities.
- Create an interconnected street network within and between new and existing neighborhoods that supports safe and convenient bicycle and pedestrian access to schools, shopping, and jobs.

THE PATTERNS OF NEW GROWTH

Development patterns are characteristic arrangements of buildings, infrastructure, and land use that reflect a particular set of social and material conditions. In a very real way, our lives are shaped by these patterns which dictate where we live and work, what kinds of activities may or may not take place in a given location, and how we access jobs, shopping, and community services.

Prevailing development patterns are characterized by low density land uses, greenfield development, standardized architecture, automobile oriented layouts, disconnected street networks, and the separation of land uses. Taken as a whole, the end result can present a seemingly disorganized community layout and a marginalized status for the local community amenities of walkability, variety, public space, and aesthetics.

In response to the need for a new way to manage future growth in the County – and to foster the continued redevelopment of existing growth centers – the following alternatives have emerged that provide sound models for new development and redevelopment in the County.

Traditional Neighborhood Design (TND)

Traditional neighborhood design is a modern approach to the form of growth that draws from the physical forms of community layout historically employed, not only in pre-industrial America, but throughout the history of town building. The fundamental building block of this approach is the neighborhood.

The term "neighborhood" has many meanings and uses, and includes geographic, social, and perceptual elements. It can be used to refer to the small group of houses in the immediate vicinity of one's house or to a larger area with similar housing types and market values. It is used to describe an area surrounding a local institution such as a church or school and it can be defined by political boundaries or physical features such as roads or stream corridors. Individuals often base their definition of a neighborhood on the mental map they conjure when thinking about physical landmarks and personal associations in their daily lives whereas planners and policy makers may have legal or bureaucratic criteria for identifying neighborhoods.

All of these definitions are valid and meaningful however, the resulting physical appearance of each definition can be very different. Therefore, in terms of visualizing an alternative development pattern, consensus must be reached regarding the physical configuration of neighborhoods.

The Traditional Neighborhood Design approach offers a basis for agreement about the principles that should govern the physical form of neighborhoods. These principles include a shift in focus from the automobile to the pedestrian, from single use to mixed land uses, from generic, mass produced architecture to unique, locally inspired architecture, and from disconnected street patterns to an interconnected street network.

Traditional Neighborhood Design dictates that an overarching and comprehensive physical plan be employed that uses a model of 'central place organization' – a model that is based on defined edges and a hierarchy of centers, rather than collections of subdivisions. Some of the principles that influence the traditional neighborhood design approach are as follows:

- Neighborhoods have centers anchored by elements such as public squares, greens, commercial or institutional landmarks, or a significant intersection or crossroads from which transit can be accessed.
- Within a five-minute walk of a neighborhood center, land is developed at higher densities to provide convenient pedestrian connections between residences and other land uses.
- Neighborhoods are host to a rich variety of dwelling types to serve a broad range of household incomes and lifestyles.
- A complementary mix of land uses, consisting of various types of shops, offices, and civic facilities, are the norm in a traditional neighborhood.
- Centrally-located parks and open spaces are integrated into neighborhoods and are not relegated to the geographical periphery.
- Streets within a neighborhood form an interconnected network, which disperses traffic and provides more direct pedestrian and bicycle access to any given destination.

- Neighborhood streets are relatively narrow and shaded by rows of trees, effectively slowing traffic and creating an environment suitable for pedestrians and bicycles.
- Buildings in a neighborhood center are situated close to the street, creating a well-defined 'outdoor room'.
- Parking lots and garage doors rarely face the street. Parking is relegated to the rear of buildings and typically accessed by alleys.
- Certain prominent sites at the termination of street vistas or in the neighborhood center are reserved for civic buildings such as schools, libraries, and government buildings. These locations help to create an identity and sense of place for the surrounding community.

Traditional neighborhood design is a model of planning the form of new growth that can be implemented in many different ways. If executed on open land within a community growth area, it is a form of greenfield development. Two other ways of employing this development pattern is through redevelopment, and Transit Oriented Development.

Infill and Redevelopment

Historically, the emphasis in the County has been on how best to manage and accommodate new development and not on how to redevelop what has already been built. This is clearly demonstrated by the manner in which growth boundaries have readily accommodated expansion into vacant lands surrounding existing communities. Indeed, growth management in the County has, in large part, been implemented through the use of these growth boundaries, the stated purpose of which has been to contain development around existing built-up areas and thereby preserve rural land. However, this strategy has largely resulted in what is referred to as "greenfield" development - the expansion of new development into vacant rural land around the periphery of a growth area.

It is in relation to this issue that redevelopment gains relevance in planning Frederick County's future - not simply as a remedy for blight, but as a method of providing for future growth that can maintain compact community growth areas and in turn better preserve the County's agricultural and rural lands. Rather than solely emphasize the development of rural land around the periphery of the community growth areas, the demand for more residential and employment development should also be accommodated through infill of vacant parcels and redevelopment of existing built-up areas. Redevelopment also provides an opportunity to create mixed used areas that were previously developed for a single use.

Redevelopment is the process of changing existing uses, buildings, or lands that have previously been developed. When existing development is no longer supportive of the needs of a community because of changes such as economic or demographic shifts, or the functional obsolescence or deterioration of buildings and structures, redevelopment is often undertaken to restore value to the land.

An infill development approach concentrates on finding opportunities to maximize the utilization of land through any or all of the following: the rehabilitation of existing buildings; the construction of new buildings on vacant lots; or, the selective replacement of buildings that are beyond salvage or functionally obsolete. In this sense, the physical "neighborhood fabric" - composed of patterns of such things as building massing and street layout - may be kept intact. Any redevelopment, be it new construction, rehabilitation, or demolition and replacement, essentially "fills in" or extends the patterns in the existing community.

Redevelopment can also be undertaken, not just as infill to an existing collection of buildings, but as a wholesale conversion in the uses, street patterns, and structures located along a corridor or in a larger district or planning area. Aging commercial corridors, light industrial districts, and obsolete institutional sites can all lend themselves to this type of larger scale redevelopment process. Identification by the County of Priority Redevelopment Areas may present an opportunity to channel growth into previously developed corridors and communities by providing incentives to developers seeking approvals for such projects. For example, projects occurring in a designated Priority Redevelopment Area might enjoy an expedited approval process or alternative APFO requirements that work to lessen the burden of developing a previously improved property.

Often many years in the making – and closely following a master physical development plan – focused infill and redevelopment activity can result in the rebirth of neighborhoods, sites or corridors, re-imagined and reconfigured in forms relevant and useful in today's economic and social climate.

Transit Oriented Development (TOD)

Another alternative development pattern is the concentration of development surrounding transit stations. A TOD is a concentration of mixed-uses with an emphasis on residential within walking distance of a fixed rail system transit station. The primary focus is to support greater use of public transportation by locating higher density residential and employment uses, typically within a ½ mile radius of a transit station. TOD can occur as redevelopment or on greenfields, but always involves a planned approach that is centered around a transit station.

Design measures are also employed to enhance the use of transit. For example, streets are laid out to maximize access from all parts of the development using an interconnected pattern. Streets that are attractive, convenient, and safe for pedestrians and bicyclists will increase the likelihood of walking or bicycling. Buildings that are located close to the street with entrances directly connected to the public walkway and retail located on the ground level with businesses and housing above, add to the perception of safety and creation of interest.

Short term opportunities for implementing TOD in Frederick exist around the County's four MARC stations. While the Brunswick and Frederick MARC Stations are within municipalities and outside the purview of the County, the Monocacy and Point of Rocks MARC Stations are not. With a sizeable residential community surrounding the Point of Rocks station and a rapidly intensifying commercial corridor bounding the Monocacy site, there may be opportunities for enhancing and amplifying the TOD potential at these two locations currently under County regulatory control. While the current focus of the MARC service is to provide southbound service in the AM and northbound service in the PM – essentially one-way commuter service – Transit Oriented Development would be most successful with, and may indeed help to encourage, two-way service between Frederick County and points south such as Gaithersburg, Rockville, and Washington, DC.

A longer term opportunity for implementing TOD may emerge in the Urbana community and the I-270 Employment Corridor. This Plan maintains a planned transitway alignment along the east side of I-270 terminating either at the Monocacy MARC station or in downtown Frederick. The transitway within Frederick County would be an extension of Montgomery County's Corridor Cities Transitway (CCT) that is planned to connect the Shady Grove Metro station with Gaithersburg, Germantown, and Clarksburg. The CCT has been included in the State's I-270/US 15 Multi-Modal Study that addresses highway widening and improvements to I-270 and

US 15 and transit improvements including the CCT. The transit modes under consideration include Light Rail Transit (LRT) and Bus Rapid Transit (BRT), both operating on a fixed guideway alignment with stations at regular intervals.

This Plan identifies several transit station locations within the I-270 Employment Corridor and the Urbana community that would provide opportunities for TOD. However, the Frederick portion of the tranistway will be a very long-term project, perhaps beyond 20 years that will make it difficult to support TOD for development occurring now.

DEVELOPMENT STAGING

This Plan proposes to include a Development Staging framework that will be used to manage the timing of growth and development at the comprehensive planning level rather then solely fostering a reliance on the County's development review process to accomplish this important planning goal. This Development Staging framework will be used during subsequent community plan and corridor plan updates in an effort to more closely link the timing of development with the provision of adequate infrastructure and community facilities and to ensure the most effective and orderly expansion of our neighborhoods and communities within the County's Community Growth Areas. These staging concepts would apply primarily to the unincorporated growth areas where the County controls zoning, the development review process, and the provision of public water and sewer services. Within municipal growth areas, the primary staging tool is the annexation process itself, which is under the control of the individual municipalities.

Through its ***Staging Principles***, the County establishes broad policies for managing the timing of growth and development. Through the application of its ***Priority Growth Tier*** designations, the County may clearly link its policies to the available tools via the Community and Corridor Plans. And finally, in its ***Staging Mechanisms***, the County describes the various timing tools available to manage its growth.

STAGING PRINCIPLES

The following general Staging Principles provide a framework within which the County can develop a more detailed – and parcel specific – set of development staging policies as individual community and corridor plans are prepared.

Principle #1 – Coordination of development with public facilities and infrastructure at the comprehensive planning stage

Managing the timing and funding of infrastructure is necessary to support the best and most efficient development of designated growth areas. This shall be done as part of the comprehensive planning process in order to provide a high degree of predictability as to when and where this development would occur.

Significant infrastructure needs - including but not limited to water and sewer service, schools, roads, parks, and public safety facilities – shall be identified in the appropriate long range planning documents.

The County recognizes the need to identify a sufficient amount – a critical mass - of developable land in a given community growth area in order to facilitate the provision of infrastructure improvements. The scale and intensity of development in these areas must be planned such that the costs to develop and maintain the infrastructure can be reasonably borne by the development.

Principle #2 – Funding for infrastructure improvements

This Plan recognizes the responsibilities of both the County and the land development community to provide the funding necessary for infrastructure improvements in Community Growth Areas.

This Plan also recognizes that County approval for development in the Community Growth Areas is conditioned on the ability of land developers to fund a significant portion of the cost for infrastructure improvements and that developers should identify funding mechanisms and sources.

Principle #3 – Public water and sewer infrastructure

The County is committed to establishing planning consistency between the water and sewer system capacities and the overall development capacity of individual community growth areas. These efforts shall be coordinated as well with Countywide growth and development potential so that public services and facilities can be made sufficient to serve both residents and employers.

Key elements of community infrastructure shall be planned – and constructed – during the build out of community growth areas, with the understanding that current community growth boundaries may, in future generations, expand beyond those currently envisioned.

The County shall incorporate into its infrastructure planning efforts - and preserve during the engineering and construction of such systems and facilities - the opportunity to provide additional water and sewer capacities beyond those necessary to serve current or short-term needs.

Principle #4 – Balance residential and employment development

Assuring the provision of infrastructure that provides for predictable and planned development opportunities for both residential and employment uses throughout the life of this Plan - and beyond – is critical as the County strives to provide an equitable allocation to both job and housing sectors.

The County's growth staging policies and tools should respond to varying short and long term demands for residential and employment development and should be used to focus the limited collective resources of the County and the land development community to create high quality, well-balanced, vital neighborhoods and communities.

THE PRIORITY GROWTH TIER SYSTEM

In considering the many complex and necessary mechanisms by which planners, land owners, developers and elected officials may exercise control over the staging of development, the following Priority Growth Tier (PGT) system is presented as a guidance tool for establishing the preferred order in which development would occur *within* the County's Community Growth Areas. The system also serves as a framework for additional, or alternative, development staging policies that may develop during the life of this planning document.

Examples might include:

- Reference to the Priority Growth Tier could be used when considering an application for a floating zone or overlay zoning designation within an area slated for growth (Planned Unit Development PUD or Mixed Use Development MXD);
- Incorporation into future regulations of preferences – or preconditions – regarding a parcel's Priority Growth Tier designation in order to steer such development into preferred areas or to prevent extensive 'leap-frog' development;
- The Priority Growth Tier may also be considered as part of revisions to other planning tools – such as the Adequate Public Facilities Ordinance – in order to create incentives and encourage development or redevelopment in appropriate areas.

The application of a Priority Growth Tier (PGT) system would occur as part of the County's community and corridor plan updates and would result in the mapping of PGT's to specific properties based on the ability to serve those properties with adequate facilities and services. As a non-regulatory staging mechanism the PGT concept could also be used to identify the specific infrastructure needs necessary for a property to progress to a higher tier, and thereby assume a higher priority in the County's land development plans.

An outline and brief description of the Tiers:

Priority Growth Tier 1

Character of Growth:	Primarily Infill and Redevelopment of vacant or underdeveloped lands and structures
Infrastructure:	Existing and adequate (or easily upgraded) infrastructure.
Timeframe:	Now to 6 years (consistent w/ CIP)
Application:	Properties within current municipal boundaries or within, or immediately adjacent to, previously developed lands in County Growth Area Communities. Includes Priority Redevelopment Areas. Will have existing zoning.

Priority Growth Tier 2

Character of Growth:	Undeveloped lands utilizing proposed infrastructure.
Infrastructure:	Not presently served or adequate, but planned
Timeframe:	Mid term, 10-20 years
Application:	Most likely in planned annexation areas of municipalities and in planned unincorporated County Growth Area Communities

Priority Growth Tier 3

Character of Growth:	Maintain current agriculture and/or open space lands. Land Banking for future generations.
Infrastructure:	Neither currently served nor planned
Timeframe:	Long term, beyond 20-year timeframe of this Plan
Application:	Within Growth Area Communities (municipal or unincorporated) but within a Future Growth Area i.e. designated Agricultural/Rural.

STAGING MECHANISMS

Staging Mechanisms are the primary tools used to ensure that development activity does not outpace the ability to adequately serve it with critical services. These mechanisms can employ either regulatory devices or planning level strategies to determine when development should occur relative to the availability of infrastructure and community facilities. The regulatory means, which act as staging mechanisms to control the timing of planned development, are generally employed once a property is proceeding through the development review process. Planning level strategies, such as the establishment of Community Growth Areas, the application of land use plan designations, or the identification of Priority Growth Tiers, seek to establish staging mechanisms well before the development review process. A summary of the Development Staging Mechanisms follows:

Community Growth Area

The delineation of *Community Growth Areas* (CGA's) is the first step in development staging. Properties falling within a Community Growth Area are expected to develop at some point in the future. The CGA boundary is not meant to delineate an ultimate limit for development but is generally sized to accommodate projected residential, commercial, and employment needs for period of approximately 20 years.

Land Use Plan Designation

A second planning strategy that serves as a development staging mechanism is the application of a *land use plan designation*. This strategy may be used within Community Growth Areas to differentiate between properties expected to develop within the time horizon of the Comprehensive Plan (approximately 20 years) versus properties that may be considered for development in the future. The application of a land use plan designation other than Agricultural/Rural, such as residential, commercial, industrial, or institutional would generally indicate that development would be appropriate on those properties within a 20-year timeframe subject to completion of other staging mechanisms.

To indicate development timing beyond a 20-year timeframe the County uses the term 'Future Growth Area' term to describe properties within a CGA but designated Agricultural/Rural. This reference identifies appropriate growth needs beyond 20 years in order to provide some predictability as to where future growth will occur when adequate infrastructure and community facilities are available to serve those properties.

The following Land Use Plan Designations are used in this Plan to illustrate the general pattern of land uses in Frederick County:

Mixed Use Designations

Village Center- The intent of this designation is to accommodate a mix of low intensity commercial uses and residential uses within existing communities.

Mixed Use Development - The intent of this new designation is to accommodate a mix of medium to high intensity commercial, civic, employment, and residential uses within new and existing Community Growth Areas.

Residential Designations

High Density Residential - The intent of this designation is to provide for multi-family and other attached housing and to encourage opportunities for moderate priced residences. This designation represents the most dense residential land use pattern in the growth areas at a density range of from 12 – 20 dwellings/acre with public water and sewer service.

Medium Density Residential - This designation would serve to accommodate attached dwellings such as townhouses as well as smaller detached homes at a density of from 6 – 12 dwellings/acre with public water and sewer service.

Low Density Residential - This designation is applied only within Community Growth Areas (CGA) and represents the least dense residential land use pattern in the growth areas at a density range of from 3 – 6 dwellings/acre with public water and sewer service.

Employment Designations

Office/Research - The intent of this designation is to support business, professional, and corporate office uses as well as research and development uses typically as part of a campus style development. This designation is primarily applied on properties that have visibility from interstate highways and are in close proximity to interstate highway interchanges.

General Commercial - The General Commercial designation provides for general retail, small-scale office and business/personal service uses.

Limited Industrial - This designation provides opportunities for warehousing, wholesaling, and limited manufacturing uses in addition to corporate office and research/development uses. These areas should have close access to the arterial highway network.

General Industrial - This designation supports heavy industrial and manufacturing uses in addition to uses typical in Limited Industrial developments. The potential high intensity of these uses dictates their general separation from residential uses.

Mineral Mining - This designation is primarily applied to areas under active mining operations and areas where future mining and associated activities may occur.

Institutional – The intent of this designation is to accommodate academic, governmental, utility, or civic uses and to accommodate expansion of existing institutional uses.

Agricultural and Rural Designations

Agricultural/Rural - This designation is applied to areas outside of the Community Growth Area's (CGA's) that may include active farmland, fallow lands, and residential subdivisions that have been developed under the Agriculture zone.

Natural Resource - This designation is generally applied to environmental features including 100-year floodplain, large contiguous tracts of woodlands, and steep slopes (> 25%).

Public Parkland/Open Space - This designation is applied to lands primarily under public ownership for local, state, or federal parklands. It is also applied to publicly owned open space lands devoted to watersheds as well as to large property holdings under private ownership, which have some degree of protection from development.

Rural Community - This designation recognizes existing rural communities that have historically developed as cross road communities with an identifiable concentration of residences and, in some cases, continue to support commercial and civic uses.

Rural Residential - The intent of this designation is to recognize areas of existing well/septic residential development, generally zoned R-1, and to distinguish these areas from residential development within Community Growth Areas. The designation would also apply to the county's rural subdivisions to insure that they are not expanded into surrounding farmlands.

Zoning

The application of specific zoning designations on lands within Community Growth Areas allows the County the greatest degree of control over land development while providing optimal leverage in requiring developer-funded infrastructure improvements. This leverage is severely limited - if not eliminated - when Euclidean zoning is applied through a comprehensive zoning process. Floating Zones, such as the Planned Unit Development (PUD) and Mixed Use Development (MXD) zones, are not applied during the course of a comprehensive process and thus offer the greatest opportunity to control the development timing as well as require infrastructure improvements by the land developer. Properties that fall within a CGA and that are assigned a land use plan designation indicating a plan for future growth may, in some cases, remain zoned Agricultural and are considered as 'Future Growth Areas'.

Water and Sewerage Plan

The primary purpose of the County's Master Water and Sewerage Plan is to provide for public water and sewer service in the County. The classification system used by the County provides a

relative indication of timing for the extension of public water/sewer service to a particular property. As a staging mechanism, the following classifications would be applied as part of a comprehensive plan update.

No Planned Service (NPS) – indicates service beyond 20 year timeframe and would be applied to properties designated Agricultural/Rural but within a community growth area (Future Growth Area).

Planned Service (PS) – indicates that service is expected in an 11-20 year timeframe and would be applied to properties within a community growth area having a land use plan designation other than Agricultural/Rural or Natural Resource.

W-5, S-5 – indicates that service is expected in a 7-10 year timeframe and would be applied to properties within a community growth area with a development land use plan designation as well as a zoning designation other than Agricultural or Resource Conservation.

Public Facility Financing Plan

The level of infrastructure improvements needed for the development of a Community Growth Area should be identified at the comprehensive planning stage. A Development Staging Plan for a community growth area would identify specific infrastructure improvements necessary for development to proceed in that area.

It should be the policy of the County that land developers proposing significant land development projects are required to prepare a financial plan as part of any rezoning application in order to provide County officials with a clearer picture of how and when the public facilities and infrastructure would be funded and constructed.

A financial plan could include the following elements:

- Land dedication
- Cash contributions to the County for specific public facilities/infrastructure
- Specific facility/infrastructure improvements to be constructed by the developer
- Proposal for an additional property assessment i.e. a Community Development Assessment (CDA) subject to appropriate County and State authorizations.
- Identification of facility/infrastructure improvements proposed by the County in its CIP.
- Identification of other funding sources and/or projects by the State.

Adequate Public Facilities Ordinance

The County's Adequate Public Facilities Ordinance (APFO) serves as a staging mechanism at the point that a project reaches the development review process. Ultimately, approval of a Planned Unit Development (PUD), a preliminary subdivision plan, or a site plan is contingent upon having adequate school, road, and water/sewer capacity as defined in the APF ordinance. The APFO approval for a specific land development proposal generally establishes phasing conditions that are linked directly to the provision of critical infrastructure including: This approval is formalized through the execution of a Letter of Understanding between the developer and the County government.

Schools

All elementary and secondary schools are required to be at less than 100% of capacity including the pupils generated by the proposed development and any 'background development' (other land development emerging concurrently with the regulated proposal).

Roads
Roads adequacy is currently focused primarily on intersections, however the APFO also addresses the capacity of roadway links. The APFO approval may also identify specific road improvements which would need to be constructed to address increased traffic generated by the proposed land development.

Water Supply
The APFO addresses the adequacy of the water source facilities, storage tanks, and pumping stations. The water system is considered adequate if improvements to or construction of facilities are scheduled in the first two years of the County's Capital Improvements Program (CIP).

Sewerage Facilities
The APFO addresses the adequacy of the wastewater treatment and the associated conveyance systems. The system may be considered adequate if improvements to or construction of facilities are scheduled in the first two years of the CIP.

Priority Redevelopment Areas
Alternative APFO standards, or differentiated APFO testing benchmarks, may be considered for properties located within a County-designated Priority Redevelopment Area. This approach can be useful in efforts to create an attractive environment for the infill and redevelopment activity crucial to the revitalization of older neighborhoods and corridors within Community Growth Areas.

COMMUNITY CHARACTER & DESIGN

The built environment is not constructed and laid out randomly. All built environments are designed. They are configured by a process of decision making that incorporates the goals, objectives, and principles of involved stakeholders. The result of this process - the built environment – is the collection of neighborhoods, villages and commercial districts that comprise any community.

This Plan considers how Community Character and Design are related to the creation of places that are both attractive and functional in *Community Design Defined*. The *Need for Community Design* and its practical *Implementation* are made more urgent as the County seeks to increase the density and efficiency of its Growth Areas. *Community Design and Density* sets the stage for the seven core Community Design Principles identified and articulated at the conclusion of this chapter.

COMMUNITY DESIGN DEFINED

While the entire built environment is designed, the scale and extent of design activity varies. Some typical scales of design activity include building design (architecture), site and open space design (landscape architecture), and infrastructure design (civil engineering).

Community design (also called urban design) concerns the physical configuration of such things as buildings, streets, and parks. When arranged with forethought, these elements constitute Neighborhoods - the typical building blocks of a community. While the architectural design of individual buildings is critically important in the creation of interesting and functional places, it is

those basic principles of sound Community Design that are the foundation of the County's goal to nurture higher density, mixed use Community Growth Areas. The following Community Design issues are some of those addressed in this Plan:

- How public space is defined through the interrelation of buildings,
- How streets are designed in relation to pedestrians,
- How neighborhoods are defined by the continuity of streets and buildings,
- How residential density and intensity of land use should be physically configured,
- How different activities can be accommodated through physical design of public space,
- How the size, pattern and design of individual buildings determine the scale and texture of communities.

This Plan establishes a renewed emphasis on physical form. To this end, the articulation of core Community Design principles is seen as an extension of the complex planning process that determines the need for, and location of, new infrastructure, schools, parks, dwellings, and businesses by proposing how those needs can be accommodated in the built environment.

THE NEED FOR COMMUNITY DESIGN

All design is influenced by a particular set of ideas, conditions, or assumptions that determine the physical form of the end product. In Frederick County, like in most communities in the U.S. facing pressure for growth and urban expansion, the design of contemporary development is influenced by its own set of assumptions, concepts, values, and practices. The result has been general agreement among many communities today that the latest wave of development is lacking in character and efficiency. Some of the criticisms of contemporary development form include:

- Commercial and employment centers characterized by giant buildings and large parking lots,
- Repeated use of standard building designs across different communities, no locality inspired character,
- Commercial districts designed to be experienced solely from the automobile with little or no priority given to other modes of transportation,
- Fragmented and disorderly impression from environments where the scale and extent of design consideration is limited to single parcels or subdivisions.

In Frederick County, as in much of America, it is apparent that this new wave of development is unattractive and chaotic in character. Historically speaking, this situation is quite recent. Many communities developed prior to the Second World War are striking for their order and beauty. Yet this cannot be said of many of the areas with contemporary development. For this reason, there is merit to an emphasis on community design-oriented policies and planning.

COMMUNITY DESIGN AND DENSITY

In the State of Maryland, the rate of population growth is outpaced by the rate of land development by a factor of three. We are simply using more land to accommodate our

population than is sustainable. In a climate of limited resources – land, and otherwise - there is a strong demand on the part of local governments for efficiency. In terms of planning communities, the common sense assumption is that the same population is more effectively organized into higher density rather than lower density development patterns. This is influenced by the following factors:

- Even though infrastructure may have to be upgraded to accommodate higher density, the expense per person served could be much less when equated with the cost per linear foot of new construction associated with the longer runs of low density development.
- Higher density development could mean that public services would have smaller services areas. For example, police and fire/rescue would have shorter distances to travel to get to an emergency, thus saving critical response time and limited energy and human resources.
- The concentration of people, activities, and uses could result in the viability of alternative forms of transportation, such as walking, biking, and transit, greatly reducing the amount of new roads needed.
- The concentration of residences and jobs that could result from higher density development could also result in the full time use of infrastructure. Rather than road, water, and sewer systems lying fallow while the occupants of a bedroom community commute to work, those same systems could serve a population throughout the day.

Community design is a vital consideration when encouraging higher density development. This is because increasing density not only means increasing the number of people in a particular area, but also increasing the proportion of the built environment that is occupied by buildings. Therefore, the configuration of the built environment - through community design - will have a much larger impact on citizens' daily lives than in lower density areas where buildings occupy less of the space people experience on a day to day basis.

As Frederick County seeks to increase development density, community design will play an increasingly important role in making certain that the communities we create are both livable and sustainable.

COMMUNITY DESIGN PRINCIPLES

IMPLEMENTING COMMUNITY DESIGN

Fundamental principles of good design, articulated so that future development is designed and carried out in a way that meets the high standards and expectations of our community, must be integrated at all levels of the planning and development process in Frederick County. Community design policies and planning can be implemented through design review commissions, non-legal design guidelines, legal regulations, community and corridor plans, and long-range comprehensive planning documents. Regardless of the specific implementation tools used, any effort regarding community design in Frederick County needs to be fully integrated into the land planning and development process.

Plans and Policies

County planning documents establish the appropriate parameters to achieve excellence in community design through a plan's goals and policies. Elected and appointed officials can increase the chances of successfully implementing community design standards by including references to design excellence in all appropriate public policies. Land use plans – long term or short term, countywide or neighborhood based – should directly address issues of community design and provide specific guidance for implementation.

Guidelines and Procedural Incentives

Non-regulatory tools such as Design Guidelines or development process-related incentives should be created and used as a bridge between the County's general community design policies and the more specific design standards in County land use regulations. Illustrated Design Guidelines can be an effective way to communicate County expectations to those seeking to develop or redevelop properties in the community. The County should consider establishing procedural incentives for those developers who choose to meet a higher standard of design than that established by the County in its regulations. In this case, Design Guidelines can be used as a means of determining the 'triggers' for such incentives.

Standards and Regulations

Ultimately, the County may choose to exercise its strongest land use planning tools – standards and regulations – in pursuit of good community design. The Zoning Ordinance, Subdivision Regulations, and various other development and building codes can be used to establish quantitative as well as qualitative parameters for development in existing neighborhoods and on vacant lands.

COMMUNITY DESIGN PRINCIPLES

These Community Design Principles are based upon eight core elements of community and neighborhood design that:

- guide the creation of new neighborhoods
- establish design priorities for the redevelopment of new and existing sites or buildings
- inform local officials in their land use decision-making and provide a framework for public policy related to growth and development
- identify key characteristics to be reinforced in community and corridor planning efforts, and
- articulate the legislative intent of revised or amended design-related regulations.

1. A PATTERN OF BLOCKS

The arrangement of neighborhoods into a pattern of pedestrian-scaled blocks reinforces key elements of traditional Community Design and allows for the most direct implementation of an interconnected network of streets. The block pattern also provides a template for allowing a variety of lot shapes and sizes while maintaining an ordered and structured framework for town design.

2. Buildings & Structures

The buildings and other structures in our neighborhoods serve our day-to-day needs for homes, businesses, and civic functions. In terms of Community Design, buildings define spaces, provide visual interest, and serve as spatial landmarks in our communities. Key design issues for buildings and structures include: massing, scale, placement on the site, and use of appropriate architectural elements.

3. Establishing Community Space

The spaces used by citizens to gather, recreate, or do business take many forms. Public parks provide opportunities for ballgames, picnics, and simple socialization. Linear parks, public 'greens' or 'commons', and pocket parks can allow for informal and unplanned social activities while more formalized activities can occur in places surrounding public buildings and civic facilities. Civic spaces are critical to the success of any growth area and need to be as thoughtfully planned as our buildings and streets.

4. Size and Shape of Lots

The way in which land is subdivided into individual lots has a direct affect upon the design and functionality of the neighborhood. Poorly configured parcels can diminish the privacy of some lots while placing others out of the public realm. When accomplished in accord with traditional community design practices, lot configuration can support the development of compact, efficient, higher-density neighborhoods while maintaining clear distinctions between public and private spaces.

5. A Collection of Mixed Use Neighborhoods

In a design sense, we rarely think about a community as a whole. More likely, we recall specific neighborhoods, important personal landmarks, or special areas such as downtown business or entertainment districts. A key characteristic of many of our most vital communities is the rich mix of uses that allows homes, employment centers, retail stores, and civic uses to develop in close proximity to one another. Future development should follow these same models by designing communities that are not homogenous, single-use, places but instead allow for a collection of distinct mixed use neighborhoods to complement each other, and thrive in doing so.

6. An Interconnected Network of Streets

The interconnected street grid is a framework for movement and circulation well suited to higher density development. While maintaining a clear and intuitive layout for residents and visitors, this once-conventional street pattern can also serve to support a pedestrian-scaled block pattern of land development and provide multiple transportation routes to any given location. By using the interconnected street pattern, not only within individual developments, but to link these developments together, our growth areas can develop as cohesive communities served by a functional and time-tested circulation network.

7. Sustainable Practices

Designing communities that are environmentally sustainable will incorporate many of the same design concepts that produce efficient, vital, and accessible places. But, it will also require that all involved in the land planning and development process understand and adopt practices that are applicable at the building design, site design, and neighborhood design levels. Without a comprehensive outlook, the smaller steps – use of native landscapes, bio-retention stormwater management, or access to renewable energy - will be less effective.

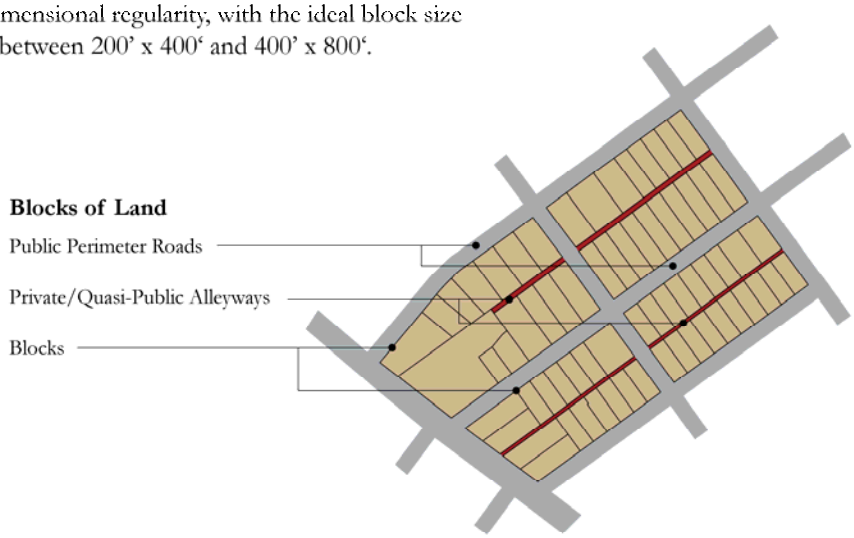
8. Prominent Natural or Man-Made Features

Prominent features in the landscape, whether they be natural or man-made, serve to define the limits and character of our Community Growth Areas. Conventional development patterns often ignore natural features such as stream corridors or hillsides, or man-made barriers such as highways or existing neighborhoods, because the technology of our development techniques – and lifestyles - allows it to do so. Future development will acknowledge these features without ignoring or degrading them while the regulatory environment will become more flexible to allow for more creative design responses when dealing with such features.

1. A Pattern of Blocks

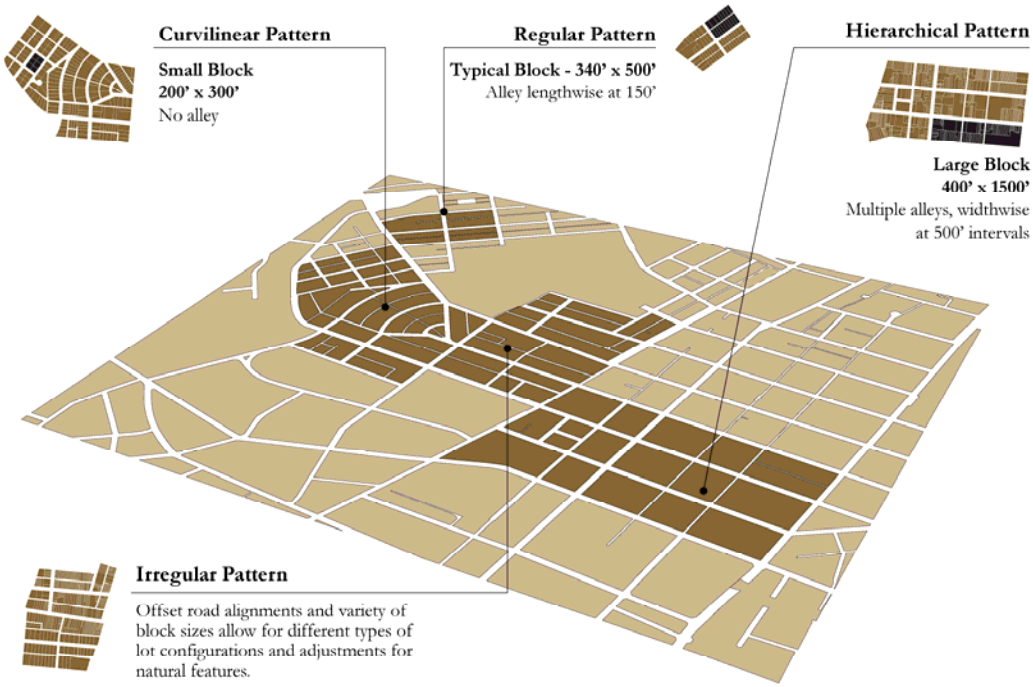
Principle: Blocks of land should be organized with public perimeter roads and internal private or quasi-public alleyways.

Principle: Block dimensions and shapes should vary depending on need and circumstance, but should fit into an overall pattern and should generally conform to a standard dimensional regularity, with the ideal block size measuring between 200' x 400' and 400' x 800'.



Block Pattern

Variety of block patterns and block shapes combine to form a regular and interconnected overall pattern of blocks.



2. Buildings and Structures

Principle: Buildings and structures should be configured to maximize density and efficiency without being excessively tall or massive.

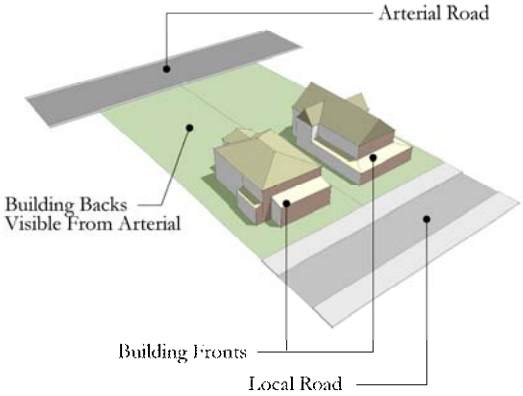
Principle: Buildings should meet reasonable dimensional requirements – including both minimum and maximum standards – and be scaled to correspond with the particular character of the neighborhood, mix of uses, and street width.

Principle: Primary structures within view of a public street should be designed to face the public street to create an interesting and defined public realm.

Principle: Buildings shall generally be situated on their lots in such a way as to create a 'street façade' that defines the three-dimensional space between facing buildings.

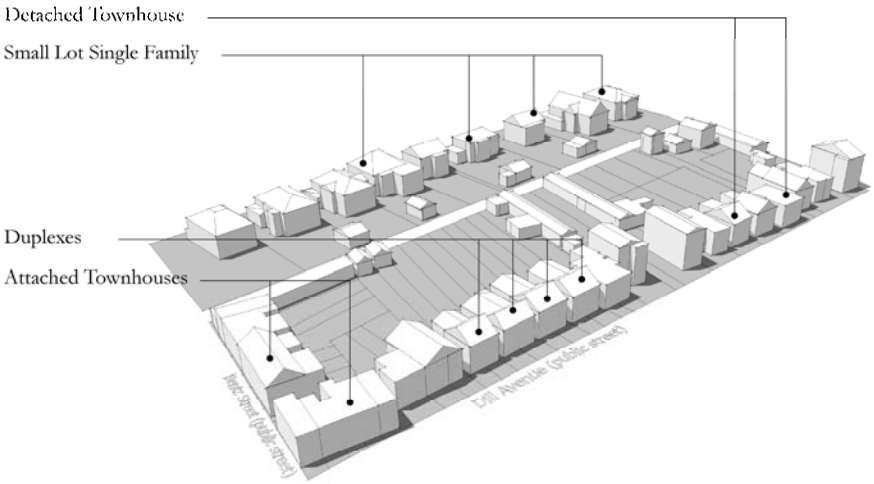
Buildings are typically designed to front on local public roads, with most of the visual design effort on this front.

However, buildings are often also seen from the back. Therefore the visual design focus should be on both the front and the back of buildings if the back is in view of a public road.



The overall effect of creating a "street facade" is that a public space is defined and given visual interest. This space is contained by the edges created by the fronts of buildings and the grouping and spacing of buildings such that they are in close enough proximity to define a continuous physical boundary.

Maximum density and minimum physical impact can be achieved by using a variety of housing types. Mixing different but similar housing types can create variety without creating incompatibility in the character of the neighborhood.



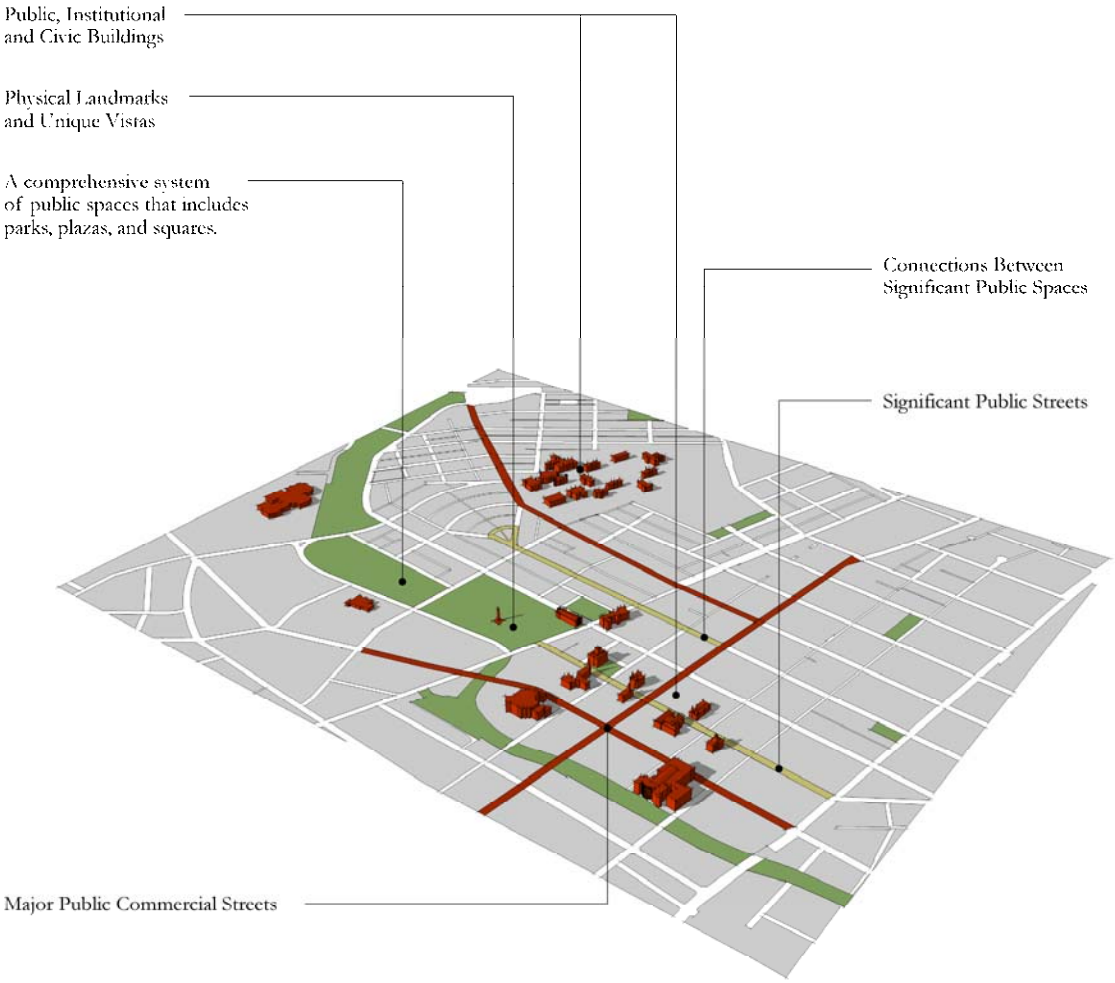
3. Establishing Community Space

Principle: Community spaces such as parks, squares, commons, trails, playing fields, and civic facilities should be configured as integral pieces of the built environment and not simply comprised of those areas that are inappropriate for structures and streets.

Principle: The public right-of-way, including streets, sidewalks, and other publicly accessible areas adjacent to private lands and structures should be designed to facilitate social interaction.

Principle: Landmark buildings, important vistas, and structures of cultural or historic significance to a community, should be incorporated into the design of community spaces.

Community Places Integrated with the Layout and Design of Development

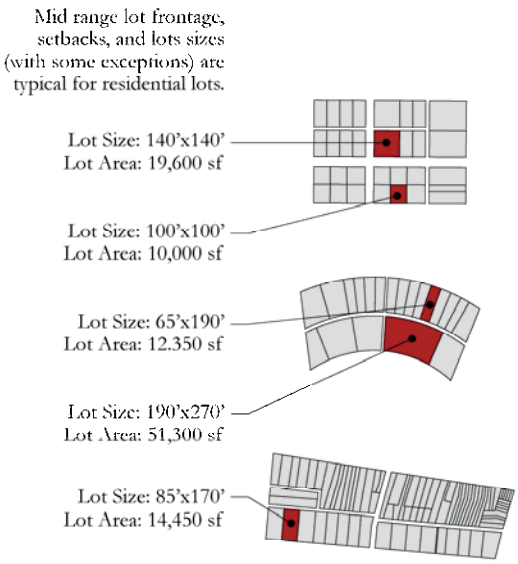


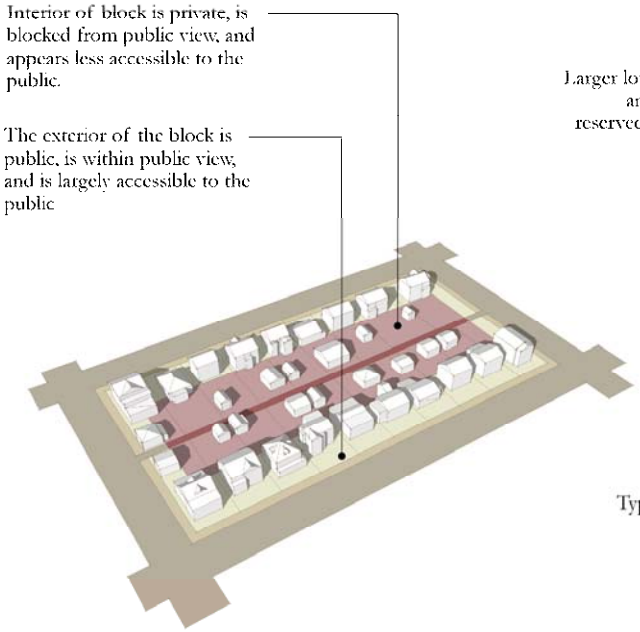
4. Size and Shape of Lots

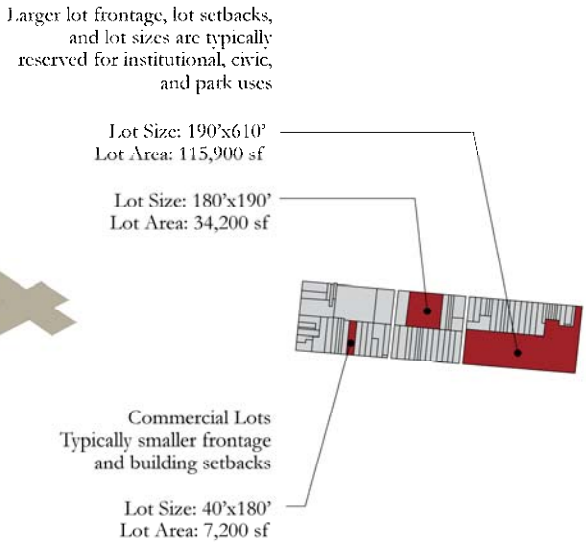
Principle: Individual land parcels should be organized into blocks that contain a variety of lot sizes.

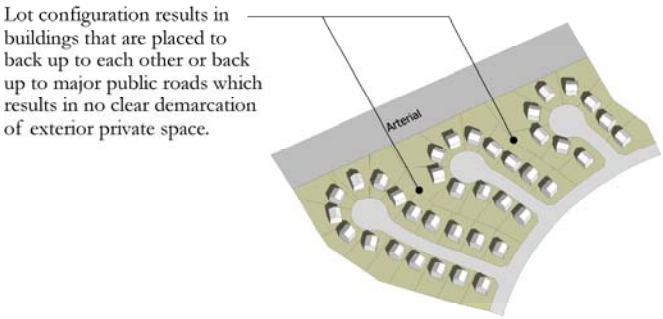
Principle: Narrower and deeper lots should be the configuration of choice when establishing pedestrian friendly neighborhoods. Lot frontage dimensions should not result in unnecessarily broad gaps in the street facade.

Principle: Lot configuration shall be arranged to clarify rather than to confuse the distinctions between public and private spaces and shall reinforce the differences between the public and private 'faces' of a building or use.









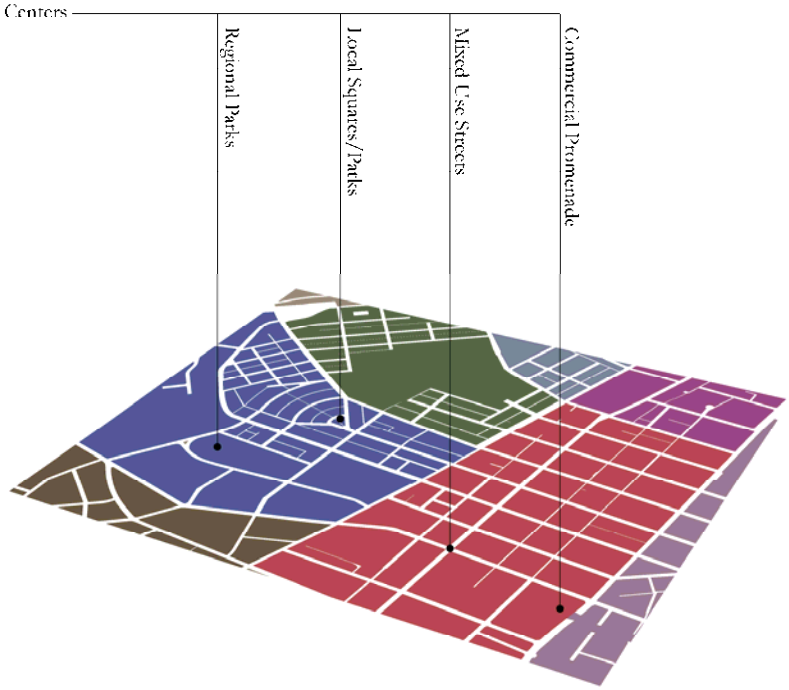
5. A Collection of Mixed Use Neighborhoods

Principle: Planning of growth areas should anticipate – and openly accommodate – the full integration of both vertical and horizontal mixed use development.

Principle: Communities should be composed of multiple neighborhoods, arranged and designed in relationship to each other such that transitions between differing uses are treated with the appropriate level integration or separation .

Principle: Elements of community, site, and building design should be carefully chosen and articulated in ways that are appropriate to the character, scale, and uses of the neighborhood in which they reside.

Edges of neighborhoods formed by streets, buildings, natural features, and other factors.

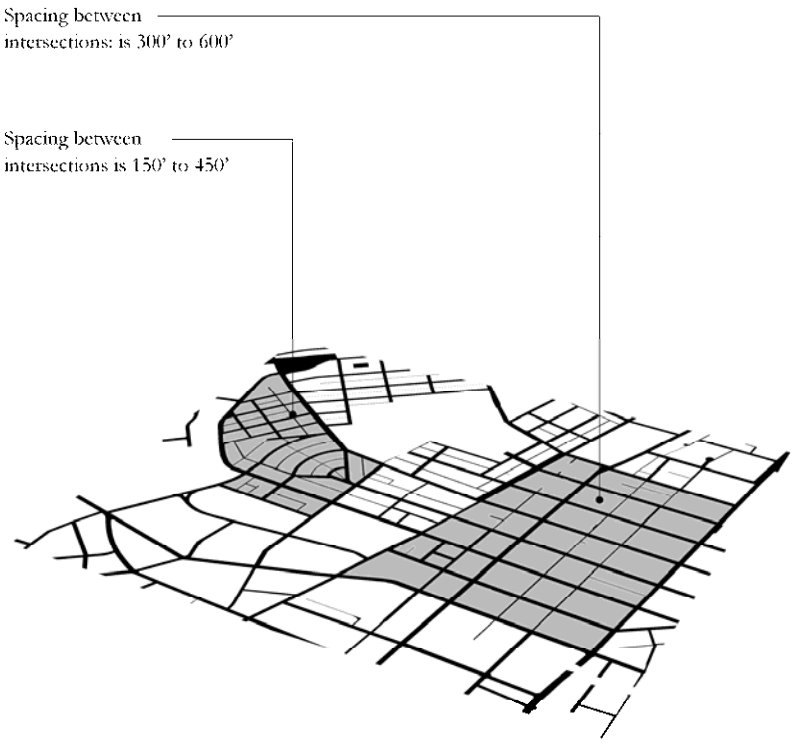


6. An Interconnected Network of Streets

Principle: Communities Growth Areas should be planned with a high level of street connectivity.

Principle: Street and pedestrian interconnections between autonomous developments will be the norm.

Principle: Within individual developments, an interconnected network of streets – building on the block pattern and utilizing a clear hierarchy of public streets and quasi-public alleyways - will provide for multiple routes of access to any given location and enhance opportunities for pedestrian movement.

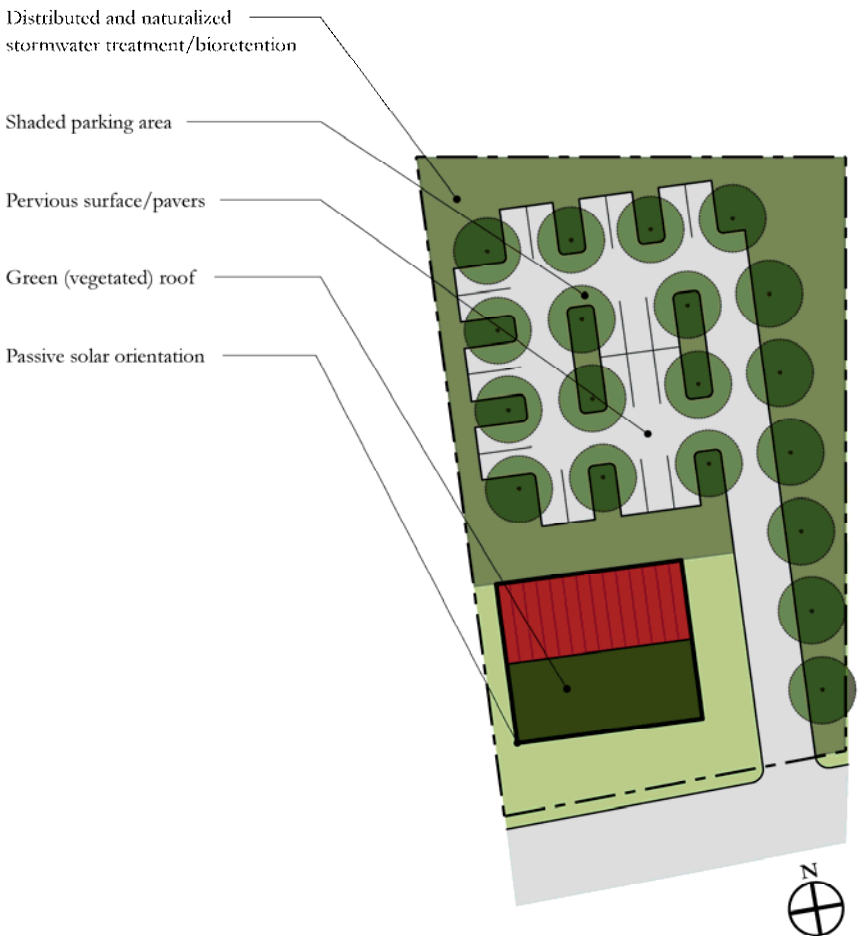


7. Sustainable Practices

Principle: Communities shall be designed to remove impediments to sustainable development techniques and resource-conserving practices.

Principle: Low impact development (LID) techniques will be the acknowledged standard for site development in the County.

Principle: Landscaping shall be designed to optimize the use of native, noninvasive, and drought-tolerant vegetation.



8. Prominent Natural or Man-Made Features

Principle: Significant natural features and major infrastructural elements should be considered as immovable aspects of the physical environment.

Principle: Policies and regulations governing individual development projects should give land developers the flexibility necessary to allow for creative design responses to these features.

Principle: Communitywide plans will be devised so that elements such as stream corridors, hills and mountains, major transportation corridors, park facilities, and existing neighborhoods are given prominence in the design process.

ACTION ITEMS

MG-A-01 Update and illustrate community design standards and integrate these standards into zoning, subdivision, and other land development ordinances.

MG-A-02 Develop procedures and regulations to ensure that all new development and redevelopment is reviewed in coordination with community design guidelines.

MG-A-03 Develop plans and design standards for designated County Growth Areas, special districts, and development corridors that reflect the Community Design policies identified in this Comprehensive Plan

MG-A-04 Identify solutions to design conflicts arising in areas in which increased development density, application of traditional neighborhood design principles, and the close physical proximity of structures results in the need to: negotiate shared access to rights-of-way, ensure adequate public safety access to buildings and structures, and provide safe and adequate infrastructure within our communities.

11 Community and Corridor Plans

This chapter provides an overview of the new planning process proposed by this Plan that focuses subsequent plan updates on the individual community growth areas and on corridors. This chapter includes brief profiles of the traditional planning regions and the Community Growth Areas.

The profiles of the planning regions and the community growth areas within the respective regions are meant to provide general background data and information. While the planning regions will no longer be the basis of subsequent plan updates, it was recognized that profiling the planning regions provide a link to prior region plans and this Countywide Plan. In addition, it provides an opportunity to associate historical demographic and development data as well as interject certain land use issues and opportunities that have been identified in a particular region plan.

	Amendment Status
Goals, Policies, Action Items	**04/08/2010**
Maps and Graphics	**04/08/2010**
Background Information	**04/08/2010**

GOALS

CP-G-01 Maintain consistency between municipal comprehensive plans and the County's Comprehensive Plan.

CP-G-02 Incorporate the Countywide goals and policies from the Comprehensive Plan as part of the individual community and corridor plans.

CP-G-03 Incorporate community based physical planning elements into the Corridor and Community planning efforts.

POLICIES

CP-P-01 Include the preparation of a Municipal – County Planning Agreement that would address concurrence on annexation areas, water/sewer service and other relevant issues as part of updates of a municipal comprehensive plan as coordinated with the County.

CP-P-02 Initiate a review and update of the County portion of a Municipal Growth Area concurrent with the respective municipal comprehensive plan update.

CP-P-03 Review on a regular basis, subsequent community and corridor plans, consistent with State mandates and schedules, to assess their implementation.

STATE VISIONS AND PLANS

Municipal Growth Element

This chapter lays the groundwork for recognizing the respective municipal comprehensive plans and how they correspond with the County's goals and polices. To address the municipal – county coordination required by the Municipal Growth Element this chapter describes the process for the County to review its Countywide Plan concurrent with the update of the respective municipal comprehensive plans. A policy and action item addresses the implementation of municipal – county planning agreements.

In addition, this chapter supports all of the state visions.

COMMUNITY PLANNING PROCESS

A departure from the organization of previous County comprehensive plans is the elimination of the reference to a Volume I (Countywide Comprehensive Plan) and a Volume II (Region Plans), which has been used by the County since its 1984 Plan update. For the detailed land use plan mapping, this Plan will include a countywide land use plan map that will consolidate what has been previously identified within the eight separate region plans that have previously comprised the Volume II of the County Comprehensive Plan. This Plan establishes a Community Planning process that will allow for plan updates to occur at three levels: Countywide Plan, Community Plans, and Corridor Plans. Lastly, this process will facilitate Comprehensive Rezoning to occur concurrent with a Corridor and Community Plan and subsequent to the Countywide Plan updates.

COUNTYWIDE PLAN

The Countywide Plan as a whole would be updated on a regular cycle consistent with the State requirement, which is currently every six (6) years. The State requires that each jurisdiction review its comprehensive plan and if necessary revise and update it. The County's process will accommodate amendments to the Countywide Plan between the comprehensive update that would occur every six years. The interim amendments would allow for revisions to: the goals, policies, and actions items; the background data, text; or the maps.

Within this chapter are planning region profiles that provide some background data and an overview of the General Plan components for that region. These profiles also include issues and planning concepts from prior region plans in an effort to incorporate them into subsequent community plans. For each region profile are brief descriptions of each Community Growth Area including Municipal Growth Areas and Unincorporated Growth Areas. These descriptions are not meant to serve as a detailed plan but to provide a general overview of the community and to identify any issues that would need to be addressed in a subsequent community plan.

COMMUNITY PLANS

Revisions to the land use plan will be addressed through updates of individual community growth areas including both Municipal Growth Areas and Unincorporated Growth Areas. The plan update process and schedule for Municipal Growth Areas would be determined by the

respective municipality and would be coordinated with the County. Once a municipal plan update has progressed to the municipality's elected officials the County would initiate its Countywide Plan amendment process. Any changes to the community growth boundary and/or land use designations adopted as part of the municipal plan update would be reviewed by the County Planning Commission and Board of County Commissioners and adopted as an amendment to the Countywide Plan.

The County will be responsible for the process and schedule for preparing community plans for the Unincorporated Growth Areas. A primary purpose for these community plans is to explore design concepts, redevelopment opportunities, and development staging in greater detail than described in the Countywide Plan. The process will be similar to the small area plan process the County has used in previous region plan updates. The result of this will produce a stand alone community plan document that would amend the Countywide Plan land use plan.

This process would also provide an opportunity to conduct a detailed planning effort for the Rural Communities, which while not considered as growth areas may have land use and design issues that could be addressed in a detailed plan for the community.

CORRIDOR PLANS

Like the Community Plans, the Countywide Plan will be updated through the preparation of Corridor Plans. The purpose of the Corridor Plans will be to focus on smaller areas to address in more detail issues related to design elements, street networks, etc. in addition to the overall land use plan designations and zoning. This process will be especially useful to address the application of redevelopment and transit oriented design concepts. The 'Corridors' are primarily situated along a highway corridor and may either be part of a single growth area or include portions of adjoining growth areas. The specific study area for a Corridor Plan would be determined at the time a plan is initiated. Any changes to the Corridor land use plan designations, zoning or other associated elements would be reviewed by the County Planning Commission and Board of County Commissioners and adopted as an amendment to the Countywide Plan.

LAND USE PLAN DESIGNATIONS

This Plan illustrates the preferred future growth and development vision for Frederick County through the creation of a Land Use Plan Map. This map depicts the broad pattern of land uses, community growth area boundaries, transportation networks, community facilities, and green infrastructure that have previously been identified as part of the region plans. Described here are the Land Use Plan designations that are illustrated on the Land Use Plan map with references to the intent of those designations, their relative land use intensity or density, their general placement guidelines, and the zoning districts that would be applied to each designation in order to implement the County's land use policies.

AGRICULTURAL AND RURAL DESIGNATIONS

Natural Resource

This designation renames what has previously been called Resource Conservation. The purpose of the Natural Resource designation is to identify significant natural resource features to provide guidance for the application of the Resource Conservation Zoning District and other resource protection strategies. The Natural Resource areas would also support the delineation of natural boundaries for community growth areas and to identify potential greenway linkages within and between community growth areas. The primary features designated Natural Resource include mountain areas and the extent of contiguous forest, major streams defined by the County's 20 sub watersheds, and the State's Green Infrastructure features.

The corresponding zoning districts include Agricultural (A) and Resource Conservation (RC). The RC zone does permit all agricultural activities in addition to limited residential subdivision based on a 10-acre minimum lot size. Since many other protection measures are applied to features such as stream corridors it is not necessary to apply the RC zoning district to all properties designated Natural Resource.

Public Parkland/Open Space

This designation is applied to lands primarily under public ownership for local, state, or federal parklands. It is also applied to publicly-owned open space lands devoted to watersheds that protect public water supplies. It may also be applied to large property holdings under private ownership, which have some degree of protection from development. The corresponding zoning districts may include Resource Conservation and Agricultural and various residential zoning districts.

Agricultural/Rural

This designation is applied to areas outside of the Community Growth Area's (CGA's) that may include active farmland, fallow lands, and residential lots and subdivisions that have been developed under the Agricultural zone. As a development staging mechanism the Agricultural/Rural designation is also applied to land within a CGA to indicate future development potential generally beyond the 20-year time frame of the Plan. These areas would be described as Future Growth Areas.

The corresponding zoning district is Agricultural (A). In addition to permitting agricultural activities the Agriculture zoning district does permit limited residential subdivision for original tracts that existed as of August 18, 1976. Original tracts may be subdivided into three (3) lots plus a remainder with a minimum lot size of 40,000 square feet. Additional cluster rights are available for original tracts greater than 25 acres permitting an additional right for every 50 acres.

Rural Community

This designation recognizes existing rural communities that have historically developed as cross road communities with an identifiable concentration of residences and in some cases still support commercial uses. Their designation as a Rural Community serves to maintain the rural and historical character and permits some limited infill development that would rely on individual well/septic systems. The corresponding zoning districts include R-1 Low Density Residential, Village Center (VC), and General Commercial (GC).

Rural Residential

The intent of a Rural Residential designation is to recognize areas of existing major residential subdivisions on well/septic, which are zoned Agricultural and R-1 (1 dwelling/acre) outside of Community Growth Areas. This designation is applied to what have previously been designated Rural Subdivision and Rural Neighborhood. Rural Residential areas are not intended to be served by public water/sewer and should only allow for continued build-out and infill of the existing lots/subdivisions and should not be expanded into surrounding agricultural properties. The corresponding zoning districts would be R-1 and Agricultural.

RESIDENTIAL DESIGNATIONS

Low Density Residential

This designation is only applied within Community Growth Areas (CGA) and where public water/sewer is available or planned. The density range will be 3 – 6 dwellings (du)/acre to better support smart growth policies. This designation may be applied to older developments within a CGA that may still be relying on individual well/septic systems.

The corresponding zoning districts that can be applied include R-3, R-5 and PUD. The R-3 district permits single-family detached dwellings at a density of 3 du/acre with public water/sewer. The R-5 district permits single-family detached, duplexes, and townhouses at a density of 5 du/acre. The Planned Unit Development (PUD) zoning district is a floating zone that can only be applied to properties designated for residential. While the gross density of the PUD developments are typically in the 3-4 du/acre range, because the PUD district permits townhouse and multi-family dwellings the net densities are generally much higher.

Medium Density Residential

This designation has a density range of 6 – 10 dwellings/acre with public water/sewer. This designation would serve to accommodate attached dwellings such as townhouses and also serves as an underlying plan designation for PUD zoning.

The corresponding zoning districts include R-8 and PUD. The R-8 zoning district permits all dwelling types, with smaller minimum lot sizes than the R-5 district. The PUD floating zone could also be applied to this designation allowing a gross density of 6 – 10 dwellings/acre and a mix of dwelling types.

High Density Residential

The intent of this designation is to provide for multi-family housing and to encourage opportunities for moderate priced housing. The density range is >10 dwellings/acre. Within the County this designation has only been applied to properties in the Ballenger Creek community growth area. Corresponding zoning districts include R-12, R-16, and PUD.

MIXED USE DESIGNATIONS

Mixed Use Development

This new land use category is intended to facilitate redevelopment and transit oriented design (TOD) opportunities in existing developed areas adjoining underutilized malls, industrial or

commercial areas or office parks, and vacant or underutilized commercial/employment corridors. In particular this designation would support mixed use developments, which include residential, commercial, office/employment, and institutional uses. For residential uses this Plan would support medium to high densities especially with TOD projects. The uses may be integrated both; vertically (different uses within the same building) and horizontally, on the same property and/or within the same project limits. The extent to which the amount of residential development is required versus permissible on a particular parcel will be identified at the time of corridor and community plan reviews. Application of the mixed-use designation is not intended for general application throughout the county and should be carefully considered.

The implementation of the mixed use land use designation may be through a mixed use euclidean zone, or through the application of a revised mixed use floating zone. The creation of a mixed-use euclidean zone and amendments to the current mixed-use (MXD) floating zone provisions are needed to allow for the zoning changes to be put into effect.

Village Center

The intent of the Village Center designation is to accommodate a mix of low intensity commercial uses and residential uses within existing communities. The Village Center designation has a broad application to both community growth areas where public water/sewer is available and to Rural Communities that rely on individual well/septic systems. Its application to the "Main Streets" of smaller Community Growth Areas, which have historically developed with a mix of residential and commercial uses, would continue to support appropriate mixed uses. Residential development could be developed at densities up to 5 dwellings/acre. Within Rural Communities residential densities would still be limited to 3 dwelling/acre based on well/septic restrictions. The corresponding zoning district is Village Center (VC).

COMMERCIAL AND EMPLOYMENT DESIGNATIONS

General Commercial

The General Commercial designation provides for general retail, small-scale office, business/personal service uses, and highway services. This Plan recommends focusing General Commercial uses within Community Growth Areas with the exception of existing, isolated commercial uses. The General Commercial designation is also applied to properties previously designated either Commercial Rural or Highway Service where there are existing commercial uses or if commercial use would be appropriate on undeveloped parcels. The corresponding zoning district is General Commercial (GC).

Though not designated as such, commercial land uses may also be located within Planned Unit Developments (PUD's), which are designated Low Density Residential; within Mixed Use Developments (MXD's) which may be designated Office/Research/Industrial or Limited Industrial and within Village Center (VC) zoned properties.

Office/Research

The intent of this designation is to support business, professional and corporate office uses as well as research and development uses. The Office/Research designation is primarily applied on properties that have visibility from interstate highways and are in close proximity to interstate highway interchanges.

The corresponding zoning district is Office/Research/Industrial (ORI). This designation would also be eligible for the Mixed Use Development (MXD) floating zone, which would allow for a mix of employment, commercial, and residential uses in an integrated development. The predominant use of an MXD development would still be employment with the current zoning ordinance regulations limiting residential uses to 25% of the gross acreage, commercial uses to 45% of the gross acreage (without a residential component) or with a combined residential and commercial components together could not exceed 40% of the gross acreage.

Limited Industrial

This designation provides opportunities for warehousing, wholesaling, limited manufacturing uses in addition to corporate office and research/development uses. The predominant application of this designation is within Community Growth Areas or Employment Areas, where public water/sewer is available. This designation is also applied to areas outside of a Community Growth Area with a reliance on well/septic systems. These areas should have close access to the arterial highway network though they don't necessarily need to have visibility from the interstate highways. The corresponding zoning district is Limited Industrial (LI). Current zoning ordinance regulations permit this designation to be eligible for the Mixed Use Development (MXD) floating zone with the same residential and commercial use limitations as described under the Office/Research designation.

General Industrial

This designation supports heavy industrial and manufacturing uses in addition to uses typical in Limited Industrial developments. Due to the potential intensity of uses they should generally be segregated and appropriately buffered from residential uses. The corresponding zoning district is General Industrial (GI). The GI district also permits mineral mining activities.

Mineral Mining

This designation is primarily applied to areas under active mining operations and more recently has been applied to areas where future mining and associated activities may occur. The corresponding zoning district is Mineral Mining (MM), which is a floating zone that can only be applied as a piecemeal rezoning process. This zoning district also permits associated processing uses related to the mining such as asphalt plants and concrete block manufacturing. Several existing mining operations are zoned GI.

OTHER DESIGNATIONS

Institutional

The purpose of the Institutional designation is to recognize public and governmental uses such as schools, libraries, public safety facilities, and water/sewer facilities. The designation is applied to properties owned either by the County or the Board of Education even if the properties are not developed. The Institutional designation is also applied to both private and governmental institutional uses such as Mt. St. Mary's University, the State's Victor Cullen Center, and the Daughters of Charity complex in Emmitsburg. The designation is also applied to private elementary and secondary schools. The corresponding zoning is the recently created Institutional euclidean zone (I) while some uses may be zoned residential and PUD.

ACTION ITEMS

CP-A-1 Establish a template for a County – Municipal Planning Agreement.

CP-A-2 Establish a review/update process for preparing community and corridor plans.

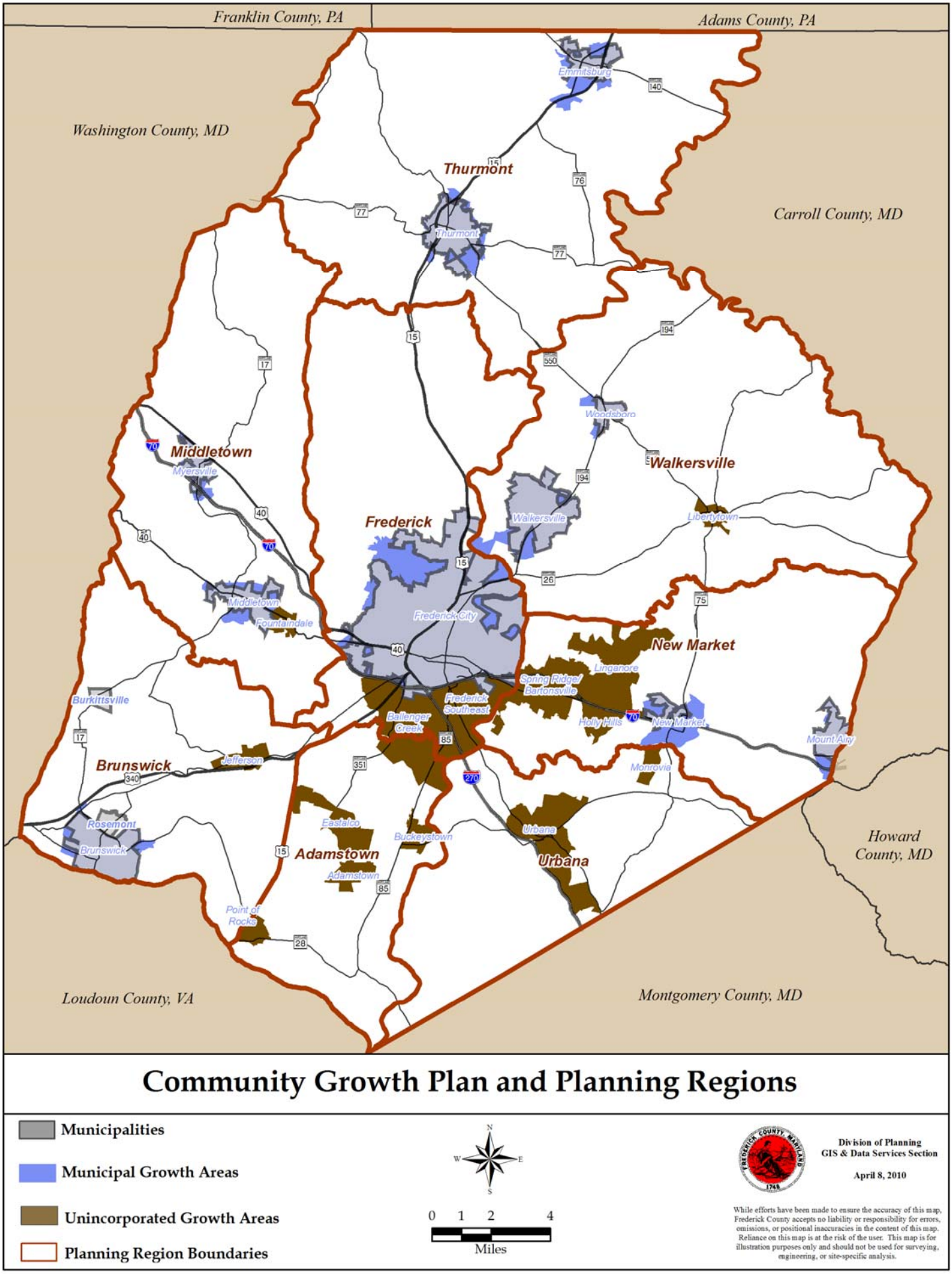
CP-A-3 Establish a Countywide Zoning update process subsequent to the Countywide Plan Updates

PLANNING REGION AND COMMUNITY PROFILES

The new planning process focuses land use plan updates as part of the Community and Corridor Plans, therefore, the region plans will no longer be the basis of subsequent plan updates. However, it is recognized that profiling the planning regions here, provides a link to prior region plans and an opportunity to maintain historical demographic and development data as well as interject issues and opportunities that have been identified in a past region plan.

The following region profiles provide basic demographic data and descriptions of the community facilities and General Plan components. Within each region profile are more detailed profiles for the individual community growth areas including both Municipal Growth Areas and Unincorporated Growth Areas. It is not the intent for these profiles to serve as community plans rather they are intended to provide background data and highlighted issues and characteristics of the regions and the communities.

Map 11-1: Community Growth Plan and Planning Regions



ADAMSTOWN PLANNING REGION PROFILE

Current Region Population:
10,828

Community Population:
Adamstown: 1,868
Buckeystown: 1,554
Point of Rocks: 1,363

Household Size:
2.9

Population Growth Rates:
58.6% (2000-2008)
38.7% (1990-2000)
59% (1980-1990)

Projected Population:
11,408 (2020)

Highways
Existing Primary and Arterials:
US 340, US 15, MD 28, MD 85, MD 80, MD 351, New Design Road and English Muffin Way

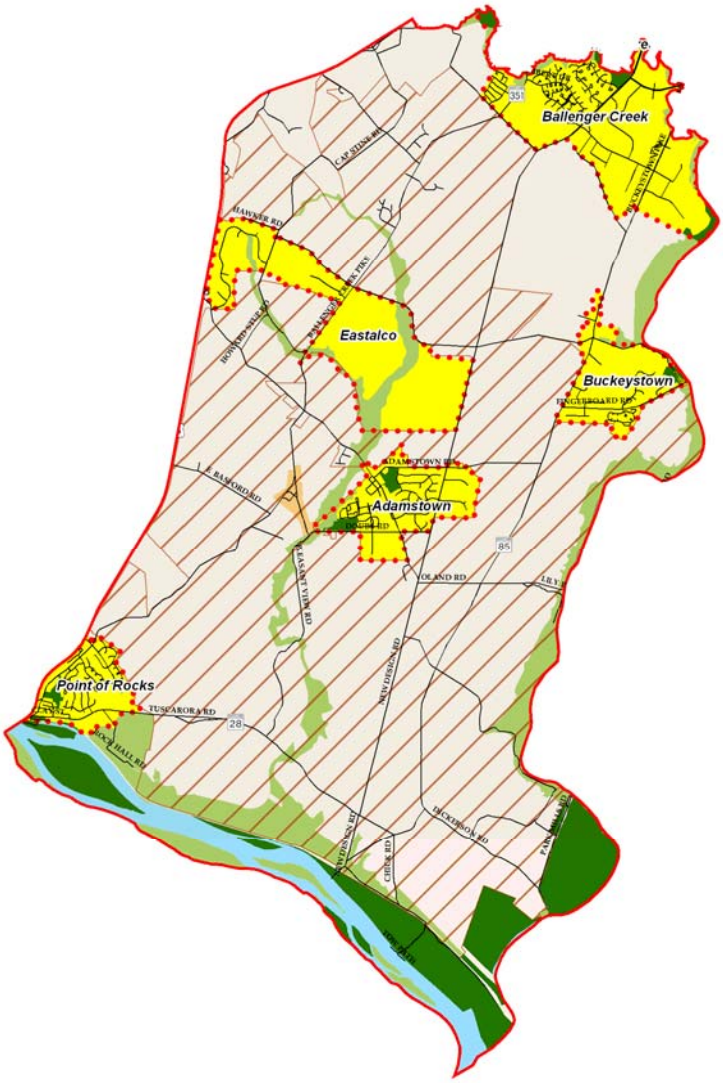
Planned Improvements:
Upgrade US 15 to a divided highway with new interchanges at MD 464 and Mountville Road

Relocated MD 28 through Point of Rocks to connect with planned interchange at MD 464 and US 15

Transit/Railroad
Maryland Area Regional Commuter (MARC) Station in Point of Rocks

County TransIT Meet the MARC bus service runs from the Point of Rocks MARC Station to the City of Frederick

TransIT's MD 85 Shuttle bus extends to English Muffin Way in the northern portion of the Adamstown Region



REGIONAL ISSUES AND UNIQUE FEATURES

- The three Community Growth Areas of Adamstown, Buckeystown, and Point of Rocks each have a historic core and limited future development potential.
- Carrollton Manor Rural Legacy Area and Priority Preservation Area encompass a majority of the Region.
- The Eastalco Employment Area includes the largest amount of General Industrial land in the County.

Bike & Pedestrian Facilities

Ballenger Creek Trail provides a link between the Ballenger Creek Park and the proposed Monocacy River Greenway

Monocacy River Greenway is a proposed trail to connect the City of Frederick to the C&O Canal at the Potomac River

C&O Canal – a section of the 185-mile towpath along the Potomac River is present in the Adamstown Region

Schools

Carroll Manor Elementary School
Tuscarora Elementary School

Parks

County Parks: *Buckeystown Park, Green Hill Manor Park, Point of Rocks/Ruritan Park*

State Parks: *a portion of the Monocacy Natural Resource Management Area*

Federal Parks: *C&O Canal National Historic Park*

Planned Parks: *Point of Rock Community Park*

Public Safety

Carroll Manor Volunteer Fire Company, Point of Rocks Fire Station

Libraries

Edward F. Fry Memorial Library at Point of Rocks

GENERAL PLAN COMPONENTS

Community Plan Elements

- Adamstown – Unincorporated Growth Area
- Buckeystown – Unincorporated Growth Area
- Point of Rocks - Unincorporated Growth Area
- Eastalco Employment Area – Majority of the county's general industrial land is located in this employment area.
- Ballenger Creek Community Growth Area – Far southern portion of the Ballenger Creek Community extends into this Region, however, it is described in the Frederick Planning Region Profile.

Green Infrastructure Plan Elements

- Natural resource features in the region include Catoctin Mountain, the Monocacy River, the Potomac River and three major tributaries: Ballenger Creek, Tuscarora Creek South, and Rocky Fountain Run & Horsehead Run.
- Parkland and other protected lands include the C&O Canal National Historic Park, a portion of the Monocacy Natural Resources Management Area, and several county parks.

Agricultural and Rural Community Plan Elements

- Carrollton Manor Priority Preservation Area covers almost the entire planning region outside of the Community Growth Areas. Twenty-three (23) properties are under permanent preservation easement, totaling 5,882 acres.
- Rural Community - Doubs

Water Service Areas

- Adamstown, Buckeystown, and Point of Rocks plus the Eastalco Employment Area have existing or planned service through the County's New Design Water Treatment Plant.

Sewer Service Areas

- Adamstown and Buckeystown are served by the Ballenger/McKinney Wastewater Treatment Plant (WWTP). The Point of Rock Community Growth Area is served by its own WWTP.

REGIONAL SUMMARY

The following tables summarize the residential development potential and the breakdown of zoning based on this Plan. The residential potential is only for the community growth areas and does not include the residential potential within the Agricultural/Rural or Natural Resource areas, which will have limited subdivision potential.

Table 10-1: Adamstown Region Residential Land Use Development Potential

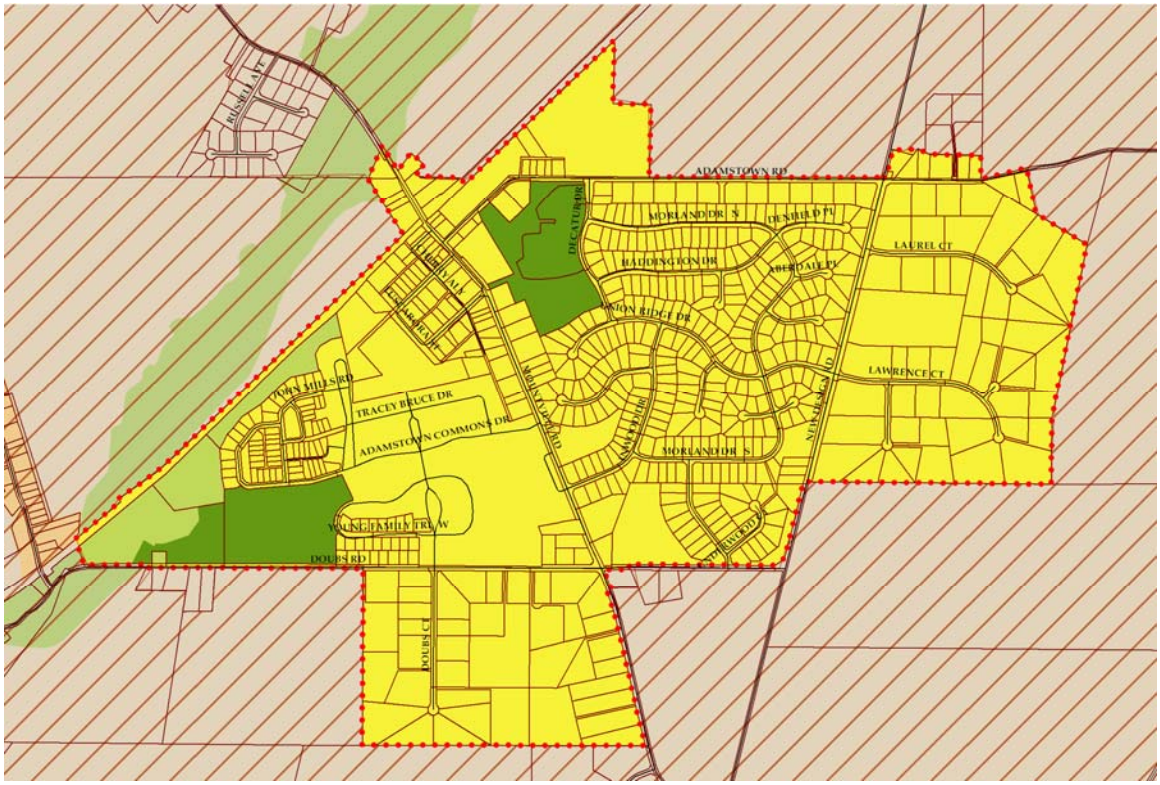
Growth Area	Acreage Designated Residential	Existing Dwellings	Total Potential Dwellings (1)	Total Dwellings	Total Projected Population
Adamstown	493	604	119	723	2,095
Buckeystown	428	527	181	708	2,054
Point of Rocks	240	459	97	556	1,612
Total	**1,162**	**1,590**	**397**	**1,987**	**5,762**

Source: Frederick County Division of Planning
(1) Includes approved pipeline development and undeveloped land potential.

Table 10-2: Adamstown Region Zoning Acreage

Zoning District		Zoned Acres
Residential		
R1	Low Density Residential	908
R3	Low Density Residential	395
R5	Medium Density Residential	97
PUD	Planned Unit Development	467
	Subtotal	*1,867*
Commercial and Employment		
GC	General Commercial	9
GI	General Industrial	928
LI	Limited Industrial	1,320
MM	Mineral Mining	702
ORI	Office Research Industrial	5
	Subtotal	*2,965*
Mixed Use		
VC	Village Center	96
MXD	Mixed Use Development	199
	Subtotal	*295*
Other		
A	Agricultural	18,303
Ie	Institutional Euclidean	130
RC	Resource Conservation	3,688
	Subtotal	*22,121*
	Adamstown Region Total Acres	***27,247***

ADAMSTOWN COMMUNITY GROWTH AREA



The Adamstown Community Growth Area, situated along Mountville and Adamstown Roads and the CSX rail line, is primarily a residential community with low density housing the dominant land use. Adamstown has a 19th century historic core along Mountville Rd. surrounded by a mix of 1980's conventional suburban residential development and a more recent development with "neo-traditional" design patterns. The community supports an elementary school, a fire station, and a public park.

Community Plan Highlights

Growth Boundary Revision

The community growth boundary now excludes the existing Manor Village well and septic subdivision, which is proposed to be designated as Rural Residential. Several agricultural-cluster lots on the south side of Doubs Road were also removed from the growth boundary. These lots retain their Agricultural/Rural land use designation.

Residential

The Village Center (VC) land use designation was added to the entire historic core area of Adamstown along Mountville road, Adams Street and Washington Street. The VC plan designation will afford future mixed uses in the historic village and adjacent to the future MARC station. Low Density Residential was replaced with the Public Parkland designation to delineate the full extent of the public park within the Green Hill Manor subdivision.

Commercial and Employment

The Limited Industrial (LI) designation is applied to the Trans-Tech facility, replacing the General Industrial designation from the 2001 Adamstown Region Plan. This will maintain consistency between plan designation and existing LI zoning.

Table 10-3: Adamstown Community Land Use Plan

Land Use Plan Designation	Acres Designated	Acres Undeveloped	Pipeline Dwellings (1)	Undev. Land Potential Dwellings (2)	Total Potential Dwellings
Residential					
Low Density Residential	493	108	87	32	119
Subtotal	*493*	*108*	*87*	*32*	*119*
Other					
Institutional	19	0	0	0	0
Public/Open Space	44	23	0	0	0
Natural Resources	22	22	0	0	0
Subtotal	*84*	*45*	*0*	*0*	*0*
Commercial/Employment					
Village Center	29	5	0	0	0
Limited Industrial	5	0	0	0	0
Subtotal	*34*	*5*	*0*	*0*	*0*
Adamstown Total	***612***	***158***	***87***	***32***	***119***

(1) Pipeline dwellings: unbuilt dwellings/units in approved developments.
(2) Potential dwellings: net (75%) of undeveloped acreage (minus undeveloped acreage in pipeline) at 3.5 du/acre (LDR); 7.5 du/acre (MDR); and 15 du/acre (HDR)

Agricultural and Rural Communities Plan Highlights

The Adamstown Growth Boundary is completely surrounded by the Carrollton Manor Rural Legacy Area and the Carrollton Manor Priority Preservation Area.

Green Infrastructure Plan Highlights

Natural resource features include Tuscarora Creek South, which runs along the western boundary of the community.

Development Staging Mechanisms

Land Use Plan Designations

The few undeveloped properties in the community are designated Low Density Residential and Village Center.

Zoning

All of the properties in Adamstown are zoned with only two parcels remaining undeveloped and with no development approvals.

Water and Sewer

The few undeveloped parcels have a water and sewer plan category consistent with the residential land use designation and indicate public water and sewer service within a 10-year time period. Any constraints are related to the need for additional water/sewer lines to be constructed within the community. The water supply and wastewater treatment capacities are adequate to accommodate any infill or redevelopment.

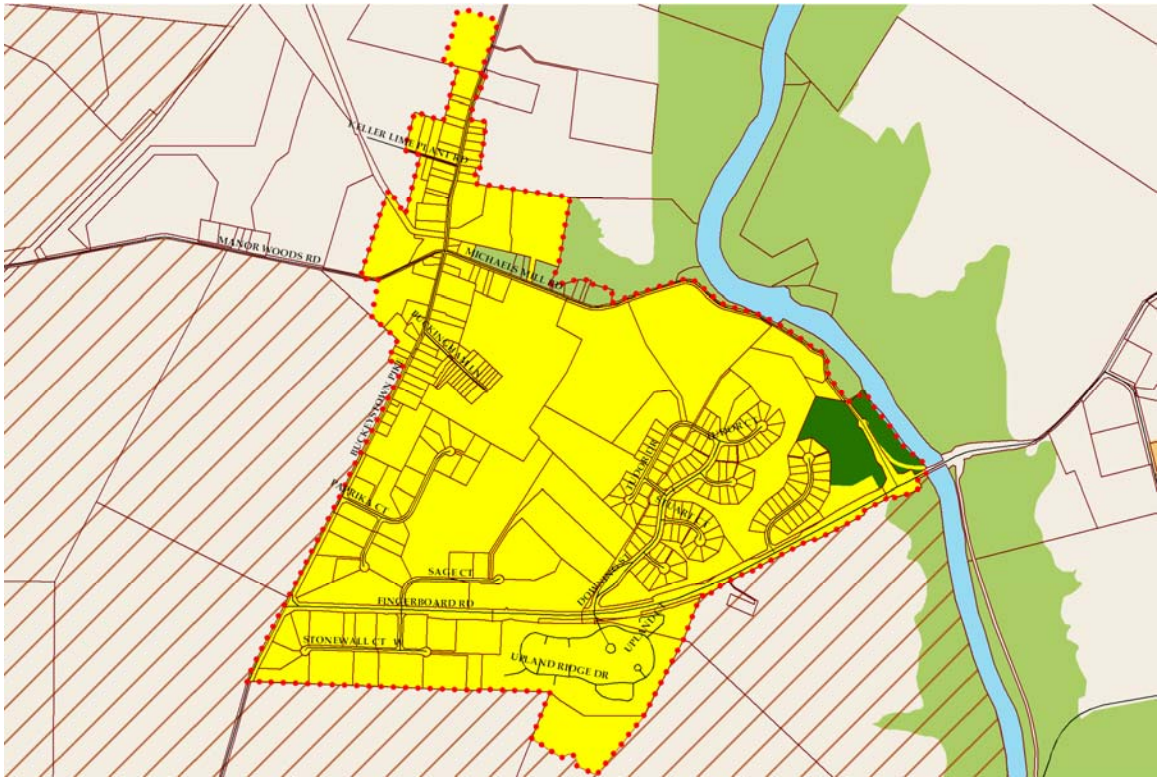
County Water and Sewerage Plan Revisions

The well and septic subdivision of Manor Village, designated Rural Residential, is removed from the water and sewer service area

Issues and Opportunities

- A subsequent community plan update for Adamstown could address redevelopment opportunities for the Village Center area along Mountville Rd. including any adaptive reuse of the Carroll Manor Fire Co. building.

BUCKEYSTOWN COMMUNITY GROWTH AREA



The Buckeystown Community Growth Area is located along MD 85 near the Monocacy River; Manor Woods Road and Michaels Mill Road are the crossroads of the community. The community is listed on the National Register of Historic Places and contains a post office, small shops and businesses, churches, conference center, and inns. An early industrial town, its kilns, mill and quarries are still visible. The residences along MD 85 are noted for their well-preserved turn-of-the-century architectural features.

Community Plan Highlights

Growth Boundary Revisions

Revisions to the Buckeystown Community Growth Area reflect the removal of 140 acres of Low Density Residential from the northwest area of the community and are now designated Agricultural/Rural. The growth boundary now includes the existing development on the west side of MD 85, from a point north of Keller Lime Plant Road to approximately 500 feet south of Buckingham Lane. The growth boundary follows Michaels Mill Road, but includes the residential properties on the north side of Michaels Mill Road located in the 100-yr. floodplain. An approximately 16-acre expansion of the growth area includes a portion of the Bishop Claggett Retreat Center, adjacent to the Buckingham Choice retirement facility.

Residential

The Village Center land use designation is expanded along the MD 85 frontage to include all the residential and commercial uses in the Buckeystown National Register District. Existing Low Density Residential-designated areas within the community contain a mixture of well and septic development, the Buckingham's Choice continuing care retirement facility, plus the 100-lot

Buckingham Hills Subdivision. Several large undeveloped parcels with an LDR land use plan designation are located within the community growth area.

Commercial/Industrial

There are several existing industrial uses in Buckeystown. The Limited Industrial land use designation replaces the General Industrial designation within the Buckeystown community growth area. The Limited Industrial designation on undeveloped floodplain along Michaels Mill Road is now designated Natural Resource.

Table 10-4: Buckeystown Community Land Use Plan

Land Use Plan Designation	Acres Designated	Acres Undeveloped	Pipeline Dwellings (1)	Undev. Land Potential Dwellings (2)	Total Potential Dwellings
Residential					
Low Density Residential	428	135	0	181	181
Subtotal	*428*	*135*	*0*	*181*	*181*
Other					
Public/Open Space	16	0	0	0	0
Natural Resources	7	3	0	0	0
Subtotal	*23*	*3*	*0*	*0*	*0*
Commercial/Employment					
Limited Industrial	17	0	0	0	0
Village Center	58	12	0	0	0
Subtotal	*74*	*12*	*0*	*0*	*0*
Buckeystown Total	***525***	***151***	***0***	***181***	***181***

(1) Pipeline dwellings: unbuilt dwellings/units in approved developments.
(2) Potential dwellings: net (75%) of undeveloped acreage (minus undeveloped acreage in pipeline) at 3.5 du/acre (LDR); 7.5 du/acre (MDR); and 15 du/acre (HDR)

Agricultural and Rural Communities Plan Highlights

The south edge and southwest portion of the Buckeystown Community Growth Boundary are adjacent to the Carrollton Manor Priority Preservation Area. There is a Maryland Environmental Trust (MET) easement on property adjoining the northeast part of the community and agricultural preservation easements on properties to the east and southwest.

Green Infrastructure Plan Highlights

The Monocacy River is adjacent to the northeast Community Growth Boundary. Rocky Fountain Run, a Monocacy River tributary, bisects the growth area; its floodplain is designated Resource Conservation only where historical development in the stream corridor has not occurred.

Development Staging Mechanisms

Land Use Plan Designation

All land within the Buckeystown Community Growth Area has a land use plan designation other than Agriculture/Rural, generally indicating that development would be appropriate on those properties within a 20-year time frame subject to completion of other staging mechanisms.

Zoning

Properties within a community growth boundary and designated with a development land use plan designation may still remain zoned Agriculture. The majority of undeveloped land within the Buckeystown Community Growth Area is zoned Agricultural.

Water and Sewer Service

The entire Buckeystown Community Growth Area is identified for public water and sewer service. However, only the Buckingham Choice Continuing Care Facility and the Buckingham Hills residential subdivision currently have public water and/or sewer service; the remaining properties rely on individual wells and private septic systems and, in some cases, effluent holding tanks.

The timing and provision of public water and sewer service to all portions of the Buckeystown community is the primary factor that will influence the pace and ultimately the density of development in the community. In-fill development or redevelopment of the historic core of Buckeystown is also dependent upon the extension of public water and sewer.

The county's main water transmission line from the Potomac River passes through the Buckeystown Community Growth Area and, as such, is available to provide future water to properties within the growth boundary. The county's Water and Sewerage Plan identifies specific criteria that must be met before properties are eligible for connection to public water service. Future development within the community growth area will also require construction of several sewer pumping stations to convey effluent to the county's 30-inch sewer main adjacent to the Monocacy River, for treatment at the Ballenger-McKinney Waste Water Treatment Plant.

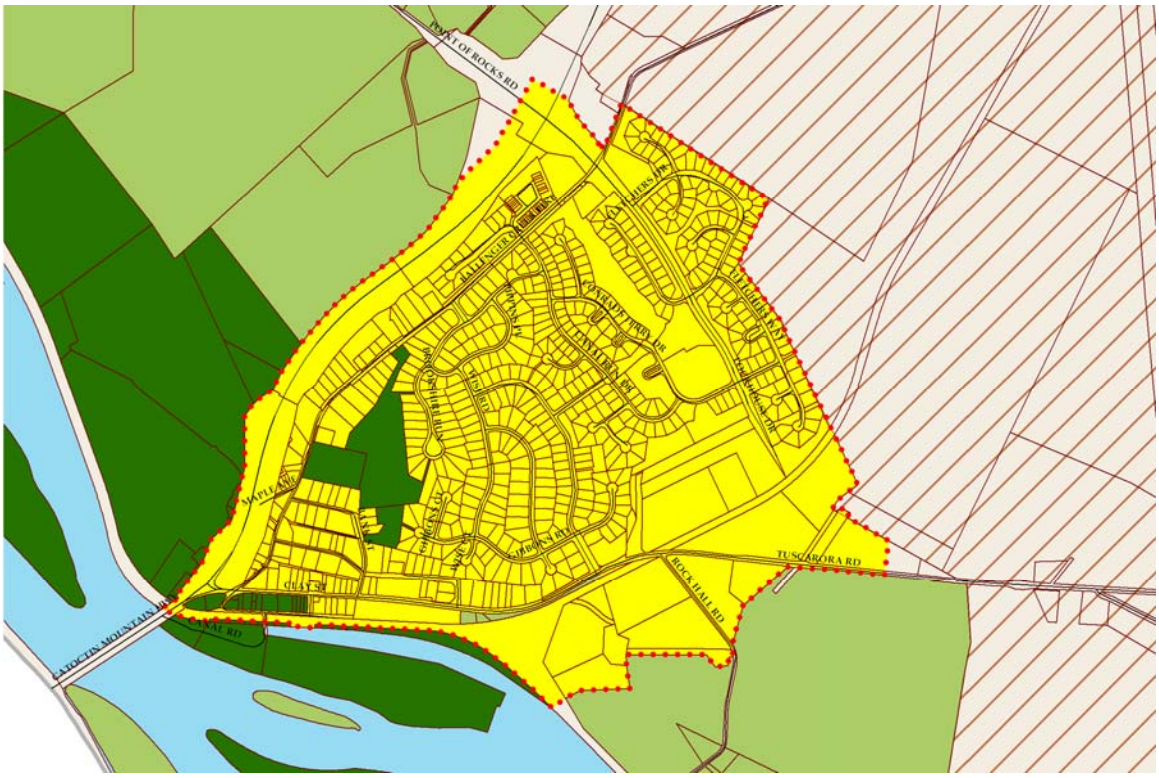
County Water and Sewerage Plan Revisions

- Changes to the water and sewer service area reflect the growth boundary revisions within the Buckeystown Community
- Community growth area contracted by the removal of 140 acres of Low Density Residential on the west side of MD 85, resulting in a No Planned Service classification for public water and sewer service

Issues and Opportunities

- The location of Buckeystown presents issues particularly with heavy truck traffic and excessive speeds through the historic core. Opportunities exist to both provide a transition between Buckeystown and the areas outside of it as well as reducing vehicular speeds through the use of traffic calming at strategic points along MD 85. Future Corridor and Community Plans should explore the use of traffic circles along MD 85 on the northern and southern boundaries of the community. These features can function both as a traffic calming and gateway feature as traffic transitions into and through Buckeystown.

POINT OF ROCKS COMMUNITY GROWTH AREA



Point of Rocks is an Unincorporated Growth Area and is the largest community in the Adamstown Region, located along the Potomac River at the junction of MD 28 and US 15. The community is a small commercial and industrial center, containing small-scale retail uses as well as larger manufacturing facilities. Several major residential subdivisions, Point of Rocks Estates, Potomac Village, and Canal Run, are present in the community and comprise the majority of the land uses in the community.

Community Plan Highlights

Growth Boundary Revisions

The southeast Point of Rock Community Growth Boundary has been adjusted to exclude most of the forested land and several residential lots along Rock Hall Road near the Potomac River. The new southern growth boundary corresponds to the existing industrial land uses on Rock Hall Road.

Residential

General Commercial and Institutional land use designations were replaced with Low Density Residential on the northern section of the Canal Run Planned Unit Development (PUD) to accurately reflect the development's preliminary plan approval. The build out of the Canal Run development represents the only remaining residential development potential.

Commercial/Industrial

The Limited Industrial designation was added on the north side of MD 28, adjacent to the railroad. The north side of Clay Street now has the Village Center land use designation to reflect various commercial uses and facilitate future mixed-use opportunities. The MARC Train Station

and parking area are designated Institutional. The existing General Commercial property on the north side of MD 28 is now within the community growth area.

Table 10-5: Point of Rocks Community Land Use Plan

Land Use Plan Designation	Acres Designated	Acres Undeveloped	Pipeline Dwellings (1)	Undev. Land Potential Dwellings (2)	Total Potential Dwellings
Residential					
Low Density Residential	240	104	97	0	97
Subtotal	*240*	*104*	*97*	*0*	*97*
Other					
Institutional	18	12	0	0	0
Public/Open Space	21	3	0	0	0
Natural Resources	1	0	0	0	0
Subtotal	*40*	*15*	*0*	*0*	*0*
Commercial/Employment					
Limited Industrial	18	11	0	0	0
General Industrial	42	0	0	0	0
General Commercial	9	3	0	0	0
Village Center	7	2	0	0	0
Subtotal	*76*	*16*	*0*	*0*	*0*
Point of Rocks Total	***357***	***135***	***97***	***0***	***97***

(1) Pipeline dwellings: unbuilt dwellings/units in approved developments.
(2) Potential dwellings: net (75%) of undeveloped acreage (minus undeveloped acreage in pipeline) at 3.5 du/acre (LDR); 7.5 du/acre (MDR); and 15 du/acre (HDR)

Agricultural and Rural Communities Plan Highlights

The eastern boundary of the Point of Rock Community Growth Area is adjacent to the Carrollton Manor Priority Preservation Area.

Green Infrastructure Plan Highlights

The Potomac River, its floodplain and protected lands border the Point of Rocks Community Growth Area to the south. Bordering the growth area on the west is the Catoctin Mountain range.

Development Staging Mechanisms

Land Use Plan Designation

All land within the Point of Rocks Community Growth Area has a land use plan designation other than Agriculture/Rural, generally indicating that development would be appropriate on those properties within a 20-year time frame subject to completion of other staging mechanisms. Additional residential development is limited to the completion of the Canal Run subdivision, designated Low Density Residential. Future commercial and industrial development, plus opportunities for redevelopment along the Clay Street corridor are facilitated by the General

Commercial, Limited Industrial, and Village Center land use designations within the Point of Rocks Community.

Zoning

Properties within a community growth area with a development land use designation may still remain zoned Agricultural. The application of zoning is one tool the county can utilize to control the pace and timing of development. Undeveloped land within the Point of Rocks Community Growth Area has a variety of zoning classifications: General Commercial, Village Center and a small area zoned Agriculture, just south of the railroad tracks.

Water and Sewer Service

The entire Point of Rocks Growth Area is identified for public water and sewer service. In 2004, a 20-inch water transmission main was constructed from the county's Potomac River source at New Design Road to Point of Rocks to provide water to the community, replacing a groundwater system. The existing community wells are a back-up water supply for the Point of Rocks Community.

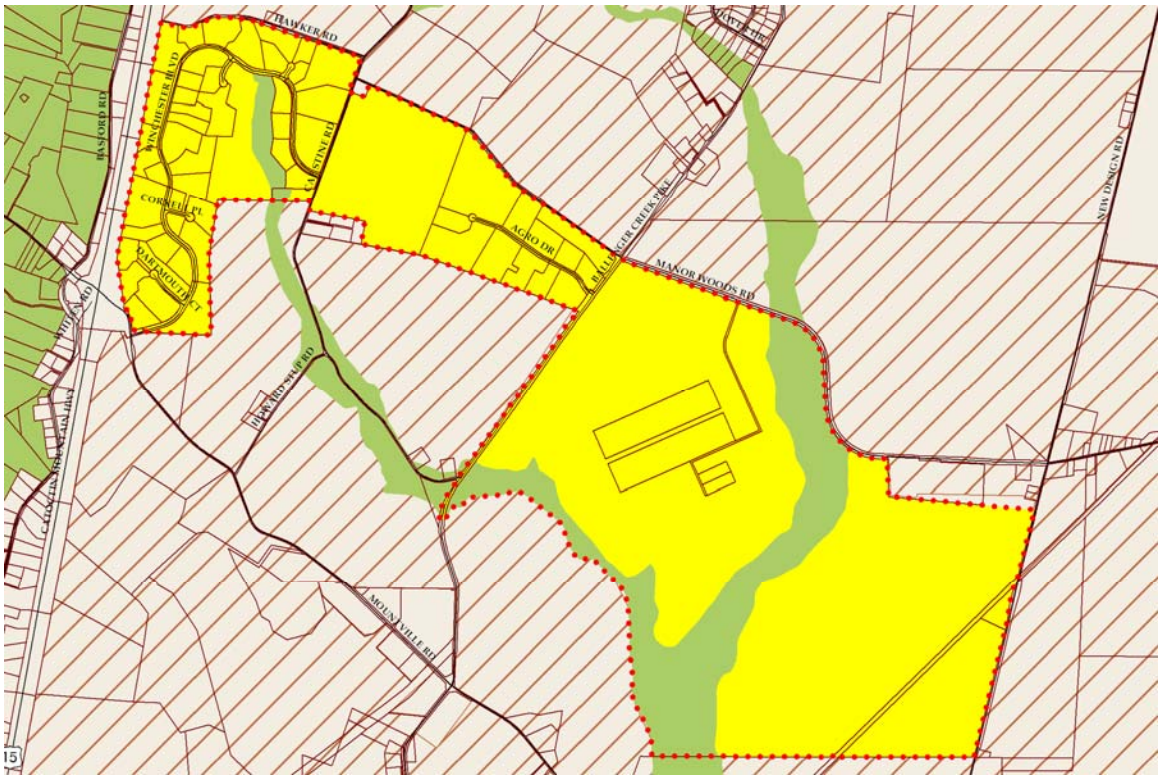
County Water and Sewerage Plan Revisions

- Water and sewer service area revised to reflect the removal of lands designated Natural Resource in the Rock Hall Road corridor

Issues and Opportunities

- The construction of Lockhouse Drive through the Canal Run PUD has been planned as a relocation of MD 28 to meet MD 464 at US 15. The completion of the Canal Run project (580 dwelling units) is contingent upon the construction of the MD 28/MD 464 connection. The project has been conditioned to only build 325 dwellings prior to the completion of the MD 28 relocation. Due to issues with the ability to construct the bridge the over the CSX railroad tracks the developer has decided to only build up to 325 dwellings at this time.

EASTALCO EMPLOYMENT AREA



The largest concentration of industrial land in the County is located in the Adamstown Region. This area includes the Alcoa/Eastalco Aluminum Facility, the Mullinix Agro Industrial Park and the Stanford Industrial Park. These industrial parks are only partially built-out.

Community Plan Highlights

Growth Boundary Revisions

The northern growth boundary has been adjusted to Manor Woods Road. Tuscarora Creek South now defines the eastern boundary of this Employment Area. The adjustment to the growth boundary has resulted in a reduction of 720 acres from Limited Industrial and General Industrial to Agricultural/Rural on the land use plan within this Employment Area.

Commercial/Industrial

The Limited Industrial designation replaces General Industrial on a portion of undeveloped land between New Design Road and the eastern tributary of Tuscarora Creek South.

Agricultural and Rural Communities Plan Highlights

The Eastalco Employment Area is completely surrounded by the Carrollton Manor Rural Legacy Area and the Carrollton Manor Priority Preservation Area. All lands north of Manor Woods Road and east of Tuscarora Creek South, designated General Industrial and Limited Industrial on the 2001 Adamstown Region Plan are recommended for an Agriculture/Rural designation. The parcels removed from the employment area have been added to the Priority Preservation Area.

Green Infrastructure Plan Highlights

Tuscarora Creek South, a tributary to the Potomac River, bisects the Eastalco Employment Area and is designated Natural Resource Area.

Table 10-6: Eastalco Community Land Use Plan

Land Use Plan Designation	Acres Designated	Acres Undeveloped	Pipeline Dwellings (1)	Undev. Land Potential Dwellings (2)	Total Potential Dwellings
Other					
Natural Resources	196	143	0	0	0
Subtotal	*196*	*143*	*0*	*0*	*0*
Commercial/Employment					
Limited Industrial	598	444	0	0	0
General Industrial	593	223	0	0	0
Subtotal	*1,191*	*667*	*0*	*0*	*0*
Eastalco Total	***1,387***	***810***	***0***	***0***	***0***

(1) Pipeline dwellings: unbuilt dwellings/units in approved developments.
(2) Potential dwellings: net (75%) of undeveloped acreage (minus undeveloped acreage in pipeline) at 3.5 du/acre (LDR); 7.5 du/acre (MDR); and 15 du/acre (HDR)

Development Staging Mechanisms

Land Use Plan Designation
All land within the Eastalco Employment Area is designated either General Industrial or Limited Industrial, generally indicating development would be appropriate within a 20-year time frame.

Zoning
All of the property within the Eastalco Employment Area community growth area is zoned Limited Industrial or General Industrial.

Water and Sewer Service
The Eastalco Employment Area is identified for planned public water and sewer service. A 24-inch water line serves the Eastalco facility from the Potomac River but the facility also utilizes groundwater wells for some operations. Currently, the Eastalco facility uses a multi-use sewer system; the wastewater treatment plant on site conveys treated effluent through an 18-inch sewer line to the Potomac River

County Water and Sewerage Plan Revisions

- Significant revisions to the employment growth boundary in the community correspond to a reduced water and sewer service area. This Plan removes the Mullinex and Stanford Industrial parks from the community water/sewer service area as these developments are almost completely built-out using individual well/septic systems.

Issues and Opportunities

- Assess the ability to serve existing and future development with community water and sewer service through the Ballenger/McKinney wastewater system and the New Design water system.

BRUNSWICK PLANNING REGION PROFILE

Current Region Population:
16,144

Community Population:
City of Brunswick: 6,052
Town of Burkittsville: 204
Village of Rosemont: 313
Jefferson: 2,111

Household Size:
2.76

Population Growth Rates:
11.6% (2000-2008)
17.2% (1990-2000)
18.8% (1980-1990)

Projected Population:
20,305 (2020)

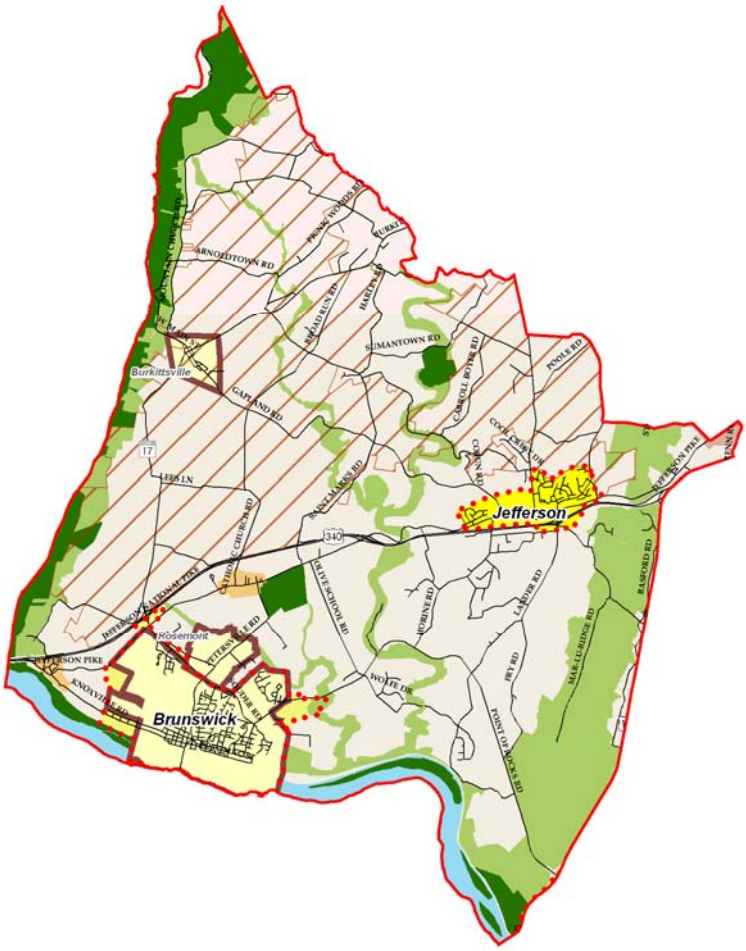
Highways:
US 340
US 15 Catoctin Mountain Highway
MD 180 Jefferson Pike
MD 464 Point of Rocks Road
MD 17 Burkittsville Road

There is a planned east-west collector road connection between Broad Run Rd. and Old Middletown Rd. in Jefferson.

Two connections are planned between MD 180 and downtown Brunswick as part of Brunswick Crossing development.

Transit/Railroad:
MARC Brunswick Station
CSX Railroad
County TransIT service between Brunswick and Frederick.

Bike & Pedestrian Facilities:
C&O Canal
Appalachian Trail
Planned Catoctin Creek Trail



REGIONAL ISSUES AND UNIQUE FEATURES

- The Town of Burkittsville, Village of Rosemont, and the unincorporated places of Knoxville, and Petersville are not focus areas for future growth. These communities will remain designated as Rural Communities.
- The unique character and form of the unincorporated community of Jefferson is subject to Jefferson Village Center Community Design Guidelines developed in the 1998 Brunswick Region Plan.
- Preservation of farmland and agricultural are high priorities due to high quality soils and productive farming operations in the lower Middletown Valley.

Public Schools:
Valley Elementary School
Brunswick Elementary School
Brunswick Middle School
Brunswick High School

Planned schools include two elementary school sites in Brunswick

Public Parks:
City:
Brunswick City Park
Brunswick Campground
Brunswick Sports Complex
Brunswick Heights Park
Brunswick Kim Weddle Park

County:
Catoctin Creek Park (in development)
Regional Park in Brunswick (purchased, not developed)

State:
South Mountain State Park

Federal:
C&O Canal National Historic Park

Planned:
Community Parks in Jefferson and Brunswick

Public Safety:
Brunswick Ambulance Company
Brunswick Fire Company
Jefferson Volunteer Fire Company

Public Libraries:
Brunswick Community Library

GENERAL PLAN COMPONENTS

Community Plan Elements

- City of Brunswick - Municipal Growth Area – Will remain as the primary community growth area in the region. Sewage treatment along the river will determine eastward expansion.
- Jefferson – Unincorporated Growth Area – Located along MD 180 with historical "main street" character and several newer residential developments.

Green Infrastructure Plan Elements

- There are almost 2,500 acres of parkland in the Brunswick Region, including 1,800 acres in South Mountain State Park, and 380 acres in the C&O Canal National Historic Park.
- The southern boundary of the Brunswick Region is bordered by the Potomac River, with South Mountain to the west and Catoctin Mountain to the east.

Agricultural and Rural Community Plan Elements

- There are +/- 10,000 acres of land in agricultural preservation. Large portions of the Mid-Maryland and the Middletown Valley Priority Preservation Area are located in the Brunswick Region.
- Rural Communities – Knoxville, Petersville, Town of Burkittsville, Village of Rosemont

Water Service Areas

- Municipal system operated by the City of Brunswick serving portions of Knoxville, New Addition, Washington County (Brownsville area) and portions of the Village of Rosemont.
- Village of Rosemont: Two-thirds of the households in Rosemont receive drinking water service from the City of Brunswick. The remaining homes utilize individual wells.
- Sources are the Potomac River and the Yourtee Springs in Washington County, MD.
- Groundwater based system including two County operated systems serving the Copperfield and Cambridge Farms developments, and one private well water system serving the Briercrest Apartments. All of the systems are planned to become a community system in the future. The majority of the remaining service area population is served by individual wells including the Valley Elementary School.

Sewer Service Areas

- Municipal system operated by Brunswick City including one wastewater treatment plant and one pumping station with outfall to the Potomac River. Services the City of Brunswick, the community of Knoxville and the New Addition Subdivision just west of the City.
- Jefferson wastewater service is maintained by the County and is comprised of one wastewater treatment plant and three pumping stations with outfall to Catoctin Creek.

REGIONAL SUMMARY

The following tables summarize the residential development potential and the breakdown of zoning based on this Plan. The residential potential includes the municipalities and is only for the community growth areas. It does not include the residential potential within the Agricultural/Rural or Natural Resource areas, which will have limited subdivision potential.

Table 10-7: Brunswick Region Residential Land Use Development Potential

Growth Area	Acreage Designated Residential	Existing Dwellings	Total Potential Dwellings (1)	Total Dwellings	Total Projected Population
Brunswick	1,377	2,469	2,739	5,208	15,047
Jefferson	389	760	227	987	2,764
Total	**1,766**	**3,229**	**2,966**	**6,195**	**17,811**

Source: Frederick County Division of Planning
(1) Includes approved pipeline development and undeveloped land potential.

Table 10-8: Brunswick Region Zoning Acreage

Zoning District		Zoned Acres
Residential		
R1	Low Density Residential	1,424
R3	Low Density Residential	235
R5	Medium Density Residential	164
R8	Medium Density Residential	39
	Subtotal	*1,863*
Commercial and Employment		
GC	General Commercial	58
	Subtotal	*58*
Mixed Use		
VC	Village Center	108
	Subtotal	*108*
Other		
A	Agricultural	26,826
Ie	Institutional Euclidean	197
RC	Resource Conservation	8,803
	Subtotal	*35,826*
	Brunswick Region Total Acres	***37,854***

BRUNSWICK COMMUNITY GROWTH AREA

The Brunswick Community Growth Area is the largest growth area in the Brunswick Region. As a hub for the Baltimore and Ohio Railroad in the late 1800's and early 1900's, the town flourished until railroad operations were reduced in the 1950's. Modern day Brunswick serves as a commuter hub for Washington, D.C. The downtown area is designated a Main Street community with a growing mix of businesses and residential uses. With a combination of steeply sloping topography, direct adjacency to the Potomac River, active rail operations, and historic building stock, the City possesses a physical character and atmosphere that is decidedly unique in the County.

City of Brunswick Master Plan

The City adopted their Master Plan in 2007. The City's Plan revised the growth boundary/annexation area from the west along MD 180 to the north and east. This shift is primarily due to the inability to expand the capacity of the existing wastewater treatment plant (WWTP). The Plan proposes a second WWTP to the east of the City to accommodate future development.

Community Plan Highlights

Growth Boundary Revisions

This Plan proposes a contraction of the community growth boundary to the existing municipal boundary. While this would not preclude Brunswick from considering future annexation, the County believes the City has sufficient development capacity within its current municipal boundary.

Table 10-9: Brunswick Community Land Use Plan: County Portion

Land Use Plan Designation	Acres Designated	Acres Undeveloped	Pipeline Dwellings (1)	Undev. Land Potential Dwellings (2)	Total Potential Dwellings
Residential					
Low Density Residential	171	155	0	407	407
Medium Density Residential	25	2	0	10	10
Subtotal	*196*	*157*	*0*	*418*	*418*
Other					
Natural Resources	31	31	0	0	0
Agricultural	14	14	0	0	0
Subtotal	*45*	*45*	*0*	*0*	*0*
Commercial/Employment					
General Industrial	1	0	0	0	0
General Commercial	28	15	0	0	0
Subtotal	*29*	*15*	*0*	*0*	*0*
Brunswick Total	***271***	***217***	***0***	***418***	***418***

Table 10-10: Brunswick Community Land Use Plan: City Portion

Land Use Plan Designation	Acres Designated	Acres Undeveloped	Pipeline Dwellings (1)	Undev. Land Potential Dwellings (2)	Total Potential Dwellings
Residential					
Low Density Residential	816	692	1,505	643	2,148
Medium Density Residential	365	38	0	173	173
Subtotal	*1,181*	*731*	*1,505*	*816*	*2,321*
Other					
Institutional	98	13	0	0	0
Natural Resources	184	117	0	0	0
Public/Open Space	235	0	0	0	0
Subtotal	*518*	*129*	*0*	*0*	*0*
Commercial/Employment					
General Commercial	18	2	0	0	0
Village Center	11	0	0	0	0
General Commercial	34	14	0	0	0
Subtotal	*64*	*16*	*0*	*0*	*0*
Brunswick Total	***1,762***	***876***	***1,505***	***816***	***2,321***

(1) Pipeline dwellings: unbuilt dwellings/units in approved developments.
(2) Potential dwellings: net (75%) of undeveloped acreage (minus undeveloped acreage in pipeline) at 3.5 du/acre (LDR); 7.5 du/acre (MDR); and 15 du/acre (HDR)

Residential

Residential land supply within the current municipal boundary of Brunswick includes an additional 1,505 residential units proposed in the Brunswick Crossing development, which is under construction. The City has approximately 200 lots of record throughout the City.

Commercial and Employment

Commercial land in the County jurisdiction and within the Brunswick Growth Boundary is reduced to eliminate the General Commercial land use designation at the southwest corner of US 340 and MD 17. Within the City, commercial and employment uses are provided with highway oriented uses at MD 180 and MD 17; local retail along Souder Road at the Brunswick Heights Shopping Center; and a nine block area of mixed retail and office uses in the Brunswick City downtown. Additionally, there are industrial uses along the railroad in the Brunswick downtown. There are no new employment/industrial areas planned for Brunswick.

Agricultural and Rural Communities Plan Highlights

The Brunswick Growth Boundary is not adjacent to any Priority Preservation Areas. The closest is the Mid-Maryland Priority Preservation Area which extends to US 340 across from Brunswick.

Green Infrastructure Plan Highlights

As the most significant natural feature in the Brunswick Community Growth Area, the Potomac River serves as a source of local and regional drinking water. The Potomac River corridor also includes the C&O Canal National Historic Park, which connects Brunswick with Point of Rocks and Harpers Ferry.

The Brunswick Crossing development on the west side of the City will provide several new parks. Included are trail systems with connections to the City of Brunswick downtown along preserved and wooded stream valley corridors, and several community pocket parks dispersed throughout the development.

Development Staging Mechanisms

Annexation

As a Municipal Growth Area, the annexation process will be the primary staging mechanism used by the City. Annexation agreements negotiated between the City and the petitioner can address development phasing, development limits, and responsibilities for transportation and public facility improvements.

Land Use Plan Designation

The majority of land within the Brunswick Community growth area has a land use plan designation other than Agricultural/Rural, generally indicating that development would be appropriate on those properties within a 20-year timeframe subject to completion of other staging mechanisms. Land outside the County growth area is designated Ag/Rural to support development of this property through annexation into the municipalities.

Zoning

Residentially designated County land within the Community Growth Boundary will be zoned Agricultural. Property within the growth area would then be required to be annexed into the municipality in order to obtain appropriate zoning.

Adequate Public Facilities Ordinance

The City of Brunswick adopted an APFO in 1999. Their ordinance addresses roads, schools, and water/sewer.

Water and Sewer Service

Brunswick City estimates that drinking water demand will reach 2.04 mgd by 2030. To accommodate the projected population, additional appropriations will be required as well as expansions to the water treatment facility.

Brunswick estimates that waste water treatment demand will reach 2 mgd by 2030. The City identifies a second wastewater treatment plant on Catoctin Creek that will be necessary to serve the eastern portion of the growth area.

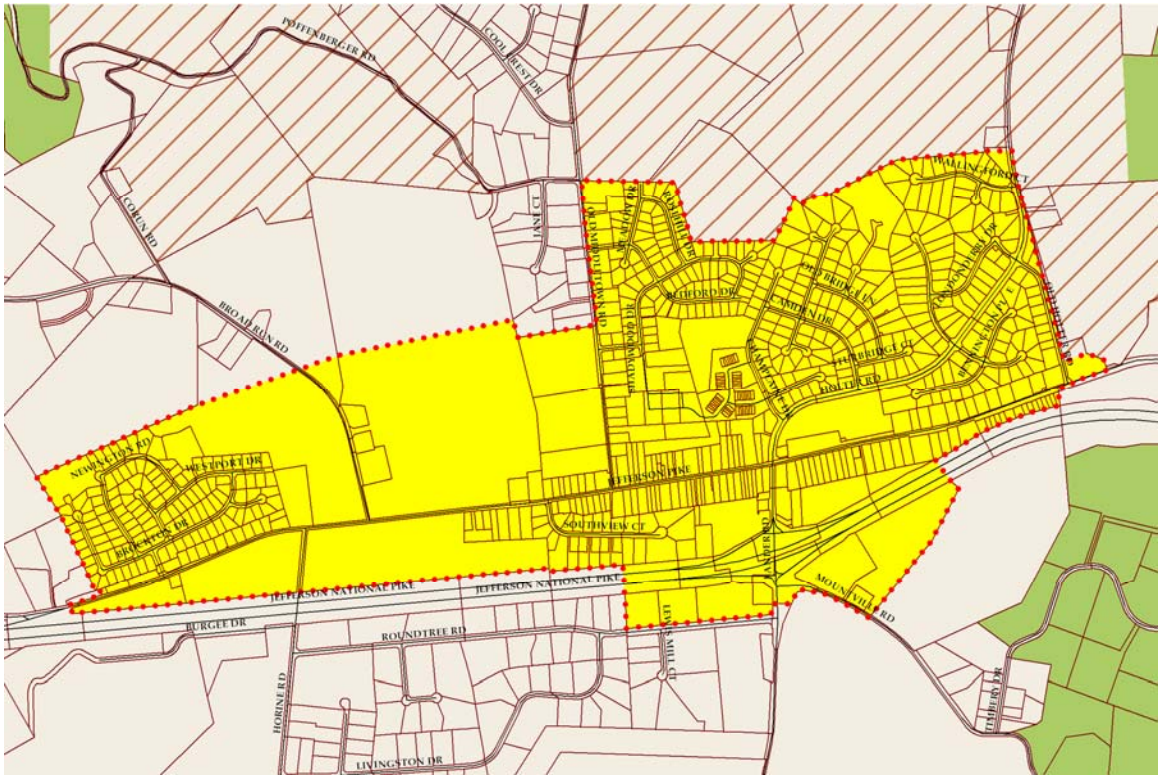
County Water and Sewerage Plan Revisions

The water/sewer service area would be adjusted to reflect the revised community growth boundary. County properties within the growth area with a plan designation other than Agricultural/Rural or Natural Resource, but still zoned Agricultural would be classified on the Water and Sewerage Plan as Planned Service (PS).

Issues and Opportunities

- A strip of lots along MD 79 (Petersville Road) and north of Souder Road lies between Rosemont and the City of Brunswick, outside of the Brunswick Community Growth Area and within the jurisdiction of Frederick County. The northern portions of these lots are developed with single family residences. The southern portion includes a cluster of residential lots at the southernmost end along Souder Road, with a cluster of undeveloped lots in between. The location and configuration of this land between Rosemont and Brunswick creates an ambiguous situation in terms of determining the appropriateness of future annexation of the properties into either Rosemont or Brunswick.
- The Village of Rosemont does not have public sewer service, and water lines that were laid in the 1940s as part of Brunswick's water system are reaching the end of their life cycle. Issues include the provision of sewer lines and possible new water lines.

JEFFERSON COMMUNITY GROWTH AREA



The unincorporated community of Jefferson is an example of a linear turnpike town that developed in Frederick County beginning in the second half of the 18th century and continuing into the early 20th century. The 1774 plan of rectangular lots on both sides of Jefferson Pike is still strongly evident. Until recently, Jefferson retained much of its surrounding open agricultural land. This setting is steadily being changed with new suburban development. In addition to its community development story, the town has architectural significance for the variety of building materials and styles from the late 18th century through the 1940's.

Community Plan Highlights

Growth Boundary Revisions

Revisions to the Jefferson Community Growth Area reflect a general limitation on the amount of growth that can be absorbed in the community due to constrained water and sewer capacities. Several parcels with Agricultural/Rural land use designation have been removed from the growth boundary in the northwestern corner of the growth area. Additionally, on the southeastern corner of the growth area east of US 340, a large parcel designated Low Density Residential has been removed from the growth area and given a designation of Agricultural/Rural.

Residential

Residential development in the community includes a mix of single-family, townhouses and multi-family residences that have been developed since the 1970's. Along its "Main Street" (MD 180) are 19th century residences. Agricultural/Rural designation is applied on most of the undeveloped properties to serve as a holding area for future residential uses.

Commercial/Industrial

The Village Center designation is maintained along MD 180 and is also applied to several properties on Roundtree Rd. Village Center is also maintained on a vacant property between Holter Rd. and MD 180. General Commercial land use designation is maintained on properties east of US 340 at the intersection of Lander Rd. and Mountville Rd. There are no existing or planned industrial uses within Jefferson.

Table 10-11: Jefferson Community Land Use Plan

Land Use Plan Designation	Acres Designated	Acres Undeveloped	Pipeline Dwellings (1)	Undev. Land Potential Dwellings (2)	Total Potential Dwellings
Residential					
Low Density Residential	345	83	199	23	222
Medium Density Residential	44	1	0	6	6
Subtotal	*389*	*84*	*199*	*28*	*227*
Other					
Agricultural	61	56	0	0	0
Institutional	34	0	0	0	0
Subtotal	*94*	*56*	*0*	*0*	*0*
Commercial/Employment					
Village Center	94	26	0	0	0
General Commercial	21	14	0	0	0
Subtotal	*115*	*39*	*0*	*0*	*0*
Jefferson Total	***598***	***179***	***199***	***28***	***227***

(1) Pipeline dwellings: unbuilt dwellings/units in approved developments.
(2) Potential dwellings: net (75%) of undeveloped acreage (minus undeveloped acreage in pipeline) at 3.5 du/acre (LDR); 7.5 du/acre (MDR); and 15 du/acre (HDR)

Agricultural and Rural Communities Plan Highlights

The Middletown Valley Priority Preservation Area directly borders the northern boundary of the Jefferson Community Growth Area. With this limitation on the potential future expansion of the Community Growth Area, it is prudent to undertake a modest land banking strategy by providing a growth area with some land designated Agricultural/Rural to provide for future (beyond 20 years) growth.

Green Infrastructure Plan Highlights

There are no significant green infrastructure elements within the boundary of the Jefferson Community Growth Area. However, the eastern edge of the Growth Area borders Catoctin Mountain.

Development Staging Mechanisms

Future Growth Area

The parcels within the Community Growth Area directly to the west of the Woodbourne Manor development, and the parcels on the western edge of the Growth Boundary between MD 180 and US 340 have Agricultural/Rural land use designations. This is intended to provide land for long term development, with a timeframe generally beyond 20 years. This will provide the community of Jefferson with the space to grow without setting up a condition where the growth pressure will occur before the community can accommodate the growth with water, sewer, and other infrastructure/services.

Zoning

Properties with the Agricultural/Rural designation within the Growth Area should remain zoned Agricultural until an appropriate land use plan designation is identified and adequate water and sewer capacity can be provided.

Water and Sewer Service

Water and sewer capacity will be constraints for new development. A community wide water system with additional wells and storage would be needed to accommodate the full build out of Jefferson. The wastewater treatment plant capacity would need to be expanded to accommodate full build out of the community.

County Water and Sewerage Plan Revisions

The water/sewer service area would be adjusted to reflect the revised community growth boundary. Properties within the growth area with a plan designation other than Agricultural/Rural or Natural Resource, but still zoned Agricultural would be classified on the Water and Sewerage Plan as Planned Service (PS). Properties designated Agricultural/Rural would be classified as No Planned Service (NPS).

Issues and Opportunities

- Establishing a communitywide water system.
- Extension of VC on undeveloped land on west end of MD 180.
- Appropriate use for undeveloped land between MD 180 and US 340 at west end of the community.
- While the existing character of the building stock and layout of the unincorporated community of Jefferson is subject to Jefferson Village Center Community Design Guidelines, newer development around the periphery of the older center does not possess the same desirable qualities. A physical master plan for the community may help extend that visual character.
- This Plan proposes the study of additional access with US 340 on the west side of Jefferson. Currently there is a ramp from MD 180 to west bound US 340. A plan to add a ramp movement from westbound US 340 to MD 180 could be studied as part of a subsequent community plan process.

FREDERICK PLANNING REGION PROFILE

Current Region Population:
90,841

Community Population
City of Frederick: 61,960
Ballenger Creek: 16,185
Frederick Southeast: 832

Household Size:
2.57

Projected Region Population:
104,776 (2020)

Population Growth Rates:
30% (2000-2008)
15.8% (1990-2000)
47.5% (1980-1990)

Major Roads/Highways:
Existing: I 270, I 70, US 15, US 340, MD 85, MD 355, MD 351, MD 180, US 40, US 40A, New Design Road, MD 26, Monocacy Boulevard, Christopher's Crossing, Gas House Pike, Yellow Springs Road, Old Frederick Road

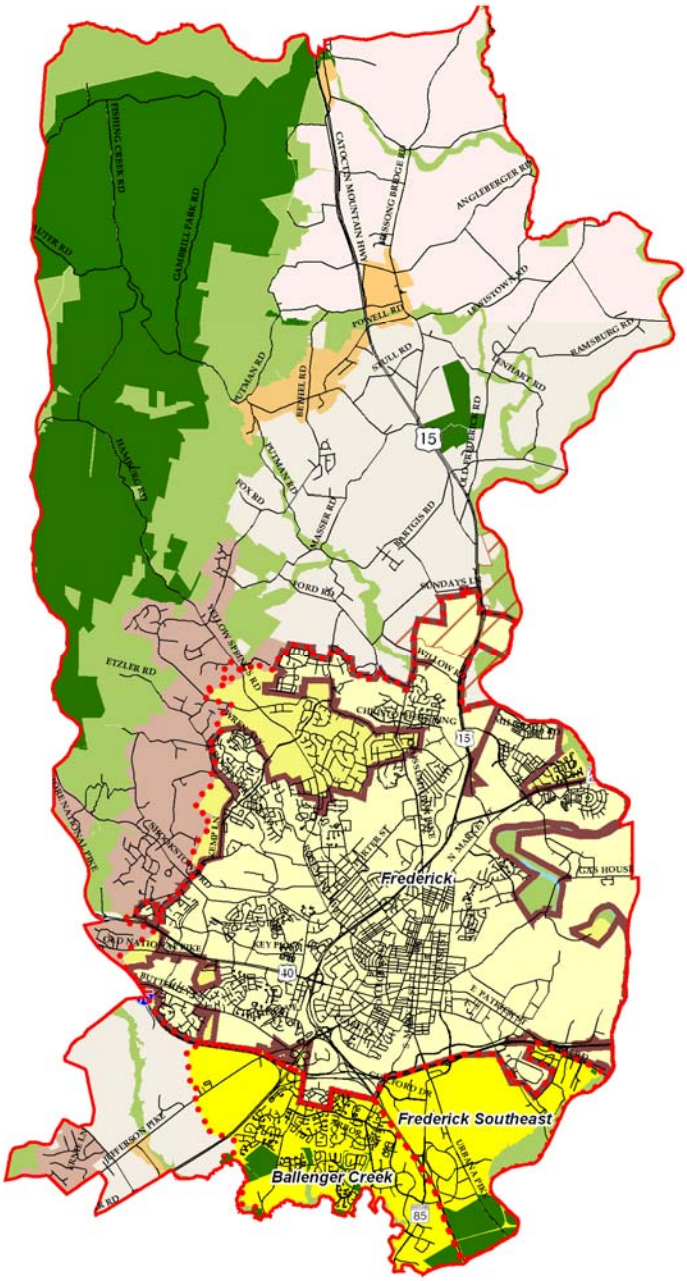
Planned: Proposed east-west connection between Christopher's Crossing and Monocacy Boulevard via interchange at US 15.
Proposed completion of Christopher's Crossing

Transit and Railroad:
MARC Monocacy Station

TransIT Service throughout Frederick City and outlying area.

Bicycle and Ped, Facilities:
Existing Multi-use path at Tuscarora Creek

Schools:
Ballenger Creek Elementary
Ballenger Creek Middle
Crestwood Middle
Frederick High



REGIONAL ISSUES AND UNIQUE FEATURES

- With the highest concentration of jobs, residences, transportation infrastructure, services, and community facilities in the County, Frederick City is designated the "County Center" in the 2002 Frederick Region Plan.

Schools (cont.):
Governor Thomas Johnson High
Governor Thomas Johnson Middle
Heather Ridge
Hillcrest Elementary
Lewistown Elementary
Monocacy Elementary
Monocacy Middle
North Frederick Elementary
Orchard Grove Elementary
Parkway Elementary
Rock Creek School
Lincoln Elementary
Tuscarora High
Waverley Elementary
West Frederick Middle
Whittier Elementary
Yellow Springs Elementary

Planned schools include four elementary schools, one middle school, and one high school

Parks
City Parks: 7,667acres (including the 7,000 acre Frederick Watershed)
County Parks: 929 acres (including public schools)
State Parks: 2,404 acres

County:
Monocacy River Park
Rose Hill Manor Park
Carroll Creek Park
Kingsbrook Park
Devilbiss Bridge River Access
Ballenger Creek Park
Utica Park

State:
Gambrill State Park
Cunningham Falls State Park

Public Safety:
Independent Hose Company
Junior Fire Company
United Steam Fire Engine Company
Citizens Truck Company
Lewistown Dist. Vol. Fire Dept.
Westview/United Fire Company

2 Additional Planned Sites

Libraries:
C. Burr Artz Library

- Frederick City is located in the Frederick Valley at the confluence of several major regional thoroughfares. This concentration of transportation infrastructure gives Frederick City a high level of accessibility to communities and economic centers in the surrounding region including Baltimore, Washington D.C., and points north south and west.

GENERAL PLAN COMPONENTS

Community Plan Elements

- **City of Frederick – Municipal Growth Area** Includes the City of Frederick growth/annexation area.
- **Ballenger Creek – Unincorporated Growth Area** Bounded by the Frederick Growth Area to the north and includes the portion of the Ballenger Creek community in the Adamstown Region**.**
- **Frederick Southeast – Unincorporated Growth Area** Bounded by I-270 and MD 144. Includes the MD 85/355 corridor.

Green Infrastructure Plan Components

- There are over 11,000 acres of public park land resources in the Frederick Region, including the over 7,000 acre Frederick Municipal Forest (watershed property), the 1,200 acre Gambrill State Park, and the County's recently completed Utica Regional Park.
- Major natural resource features include the Monocacy River, Catoctin Mountain, Carroll Creek, and Ballenger Creek.

Agricultural and Rural Community Plan Components

- The Frederick Region has +/- 1,400 acres and a total of ten farms protected under preservation programs.
- A portion of the Walkersville PPA covers land west of the Monocacy River around the north side of the City.
- Rural communities include Lewistown and Mountaindale.

Water Service Areas

- The New Design System operated by the County serves the Ballenger Creek and Frederick Southeast communities and provides water to the City of Frederick.
- Municipal system operated by the City of Frederick and covering the entire city and future annexation land within the Frederick Community Growth Boundary. The City provides treated water from five sources: The Monocacy River, Linganore Creek, Fishing Creek reservoir, three wells, and the Potomac River through an agreement with the County.
- Fort Detrick operates an independent water supply system, with water source from the Monocacy River. In addition to the surface water, Fort Detrick also has a ground water appropriation.

Sewer Service Areas

- The County's Central Frederick Sewer Service Area is served by the Ballenger/McKinney wastewater treatment plant. This system serves a portion of the City of Frederick, Ballenger Creek, and the Frederick Southeast growth areas.
- Fort Detrick is served by its own wastewater treatment plant located on the Monocacy River.

REGIONAL SUMMARY

The following tables summarize the residential development potential and the breakdown of zoning based on the Plan. The zoning only includes the county portion of the region and the residential potential includes the municipal potential and is only for the community growth areas. It does not include the residential potential within the Agricultural/Rural or Natural Resource areas, which will have limited subdivision potential.

Table 10-12: Frederick Region Land Use Development Potential

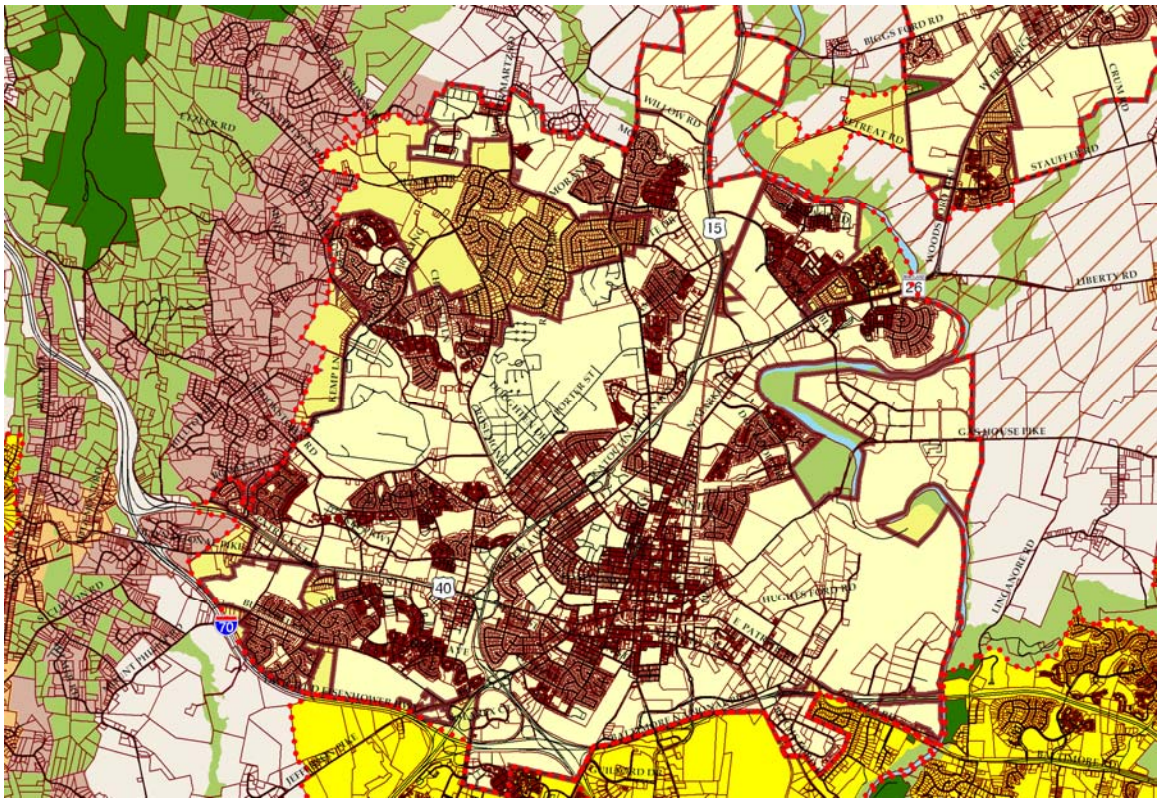
Growth Area	Acreage Designated Residential	Existing Dwellings	Total Potential Dwellings (1)	Total Dwellings	Total Projected Population
Ballenger Creek	1,386	6,272	3,630	9,902	25,745
Frederick	941	28,210	9,405	37,615	104,852
Frederick SE	196	317	1,095	1,412	3,671
Total	**2,523**	**34,799**	**14,129**	**48,928**	**134,268**

Source: Frederick County Division of Planning
(1) Includes approved pipeline development and undeveloped land potential.

Table 10-13: Frederick Region Zoning Acreage

Zoning District		Zoned Acres
Residential		
R1	Low Density Residential	3,981
R3	Low Density Residential	865
R5	Medium Density Residential	64
R8	Medium Density Residential	213
R12	High Density Residential	83
R16	High Density Residential	28
PUD	Planned Unit Development	796
	Subtotal	*6,030*
Commercial and Employment		
GC	General Commercial	590
GI	General Industrial	603
LI	Limited Industrial	305
MM	Mineral Mining	102
ORI	Office Research Industrial	187
	Subtotal	*1,788*
Mixed Use		
VC	Village Center	52
MXD	Mixed Use Development	517
	Subtotal	*570*
Other		
A	Agricultural	17,458
Ie	Institutional Euclidean	97
RC	Resource Conservation	17,194
	Subtotal	*34,750*
	Frederick Region Total Acres	***43,137***

FREDERICK COMMUNITY GROWTH AREA



This Municipal Growth Area includes the City of Frederick and its proposed growth/annexation area. There are several County developments including Cloverhill and Waterside that are included within the community growth area boundary but are unlikely to be annexed into the City. The estimated population for the City of Frederick is 61,960 as of January 2009.

City of Frederick Comprehensive Plan

The 2009 City of Frederick Comprehensive Plan focuses on the benchmarks established by the 2004 City Plan for population and employment growth. While the Plan continues a focus on redevelopment within the existing municipal boundary it maintains Tier II and Tier III annexation areas that define an Initial Growth Area and Future Growth Area respectively. The Tier II area is consistent with the lands included in the Potomac River Water Supply Agreement (PRWSA) between the City and the County. The City's Plan also maintains an alignment for the North/South Parallel road as a bypass for US 15 through the City.

Community Plan Highlights

Growth Boundary Revisions

The City of Frederick established a growth boundary in their 2009 Plan that is primarily based on a utility service area, but also employs a tiered approach to indicate areas of possible future expansion of the City. The County's Plan delineates a growth boundary generally consistent with the City utility service area. Exceptions to this include property on the east and west side of US 15 directly to the north of the City.

The major change between the County growth boundary delineated in the 2002 Frederick Region Plan and the current City determined boundary is that Ballenger Creek is no longer the dividing line between the Frederick City Growth Area and the Ballenger Creek Growth Area. Rather, the southern boundary of the Frederick City Growth Area now roughly corresponds to the Frederick City municipal boundary, with the exception of several enclave parcels designated low density residential, general commercial, limited industrial, and institutional.

Residential

The City has by far the greatest concentration of medium and high density residential development of any growth area in the County. Residential land supply within the current municipal boundary of the City includes an estimated 5,900 additional dwellings. Residential potential in the County within the limits of the growth boundary is almost entirely designated Agricultural/Rural.

Table 10-14: Frederick Community Land Use Plan (Only County properties within Growth Area)

Land Use Plan Designation	Acres Designated	Acres Undeveloped	Pipeline Dwellings (1)	Undev. Land Potential Dwellings (2)	Total Potential Dwellings
Residential					
Low Density Residential	794	88	0	226	226
Rural Residential	15	11	0	0	0
Medium Density Residential	132	14	0	80	80
Subtotal	*941*	*112*	*0*	*307*	*307*
Other					
Agricultural	891	738	0	0	0
Institutional	6	0	0	0	0
Natural Resources	307	249	0	0	0
Subtotal	*1,204*	*987*	*0*	*0*	*0*
Commercial/Employment					
General Commercial	23	6	0	0	0
Office Research Industrial	7	0	0	0	0
Subtotal	*30*	*6*	*0*	*0*	*0*
Frederick Total	***2,174***	***1,105***	***0***	***307***	***307***

(1) Pipeline dwellings: unbuilt dwellings/units in approved developments.
(2) Potential dwellings: net (75%) of undeveloped acreage (minus undeveloped acreage in pipeline) at 3.5 du/acre (LDR); 7.5 du/acre (MDR); and 15 du/acre (HDR)

Commercial and Employment

As with residential development the City will continue to serve as the primary employment area for the County. Recent annexations into the City in the past two years have totaled approximately 547 acres of land, which were designated for industrial/employment use on previous County plans.

Commercial land currently constitutes 8% of the City's developed land. The majority of the City's commercial development is located on major corridors, including the US 40/West Patrick

Street/Golden Mile corridor, Rosemont Avenue, Jefferson Street, East Patrick Street, and MD 26 / Monocacy Boulevard.

Agricultural and Rural Communities Plan Highlights

The Walkersville Priority Preservation Area (PPA) includes the west side of the Monocacy River incorporating parcels recently annexed into the City of Frederick. The Walkersville PPA also adjoins the existing municipal boundary on the north side of Gas House Pike.

Green Infrastructure Plan Highlights

The Monocacy River is the primary green infrastructure feature as both a natural resource and as a potential greenway/trail network. Tuscarora Creek and Carroll Creek corridors are also parts of a greenway network connecting neighborhoods within the City to the Monocacy River.

Development Staging Mechanisms

Annexation

As a Municipal Growth Area, the annexation process will be the primary staging mechanism used by the City. Annexation agreements negotiated between the City and the petitioner can address phasing, limits, and responsibilities for transportation and facility improvements.

Land Use Plan Designation

Land within the Frederick Community growth area is designated as Agricultural/Rural, generally indicating that development would be appropriate in a longer timeframe.

Zoning

To facilitate annexation into the City undeveloped parcels with existing residential zoning on County land but within the Frederick City growth boundary will be zoned Agricultural. Residentially designated County land within the Community Growth Boundary is zoned R-1and R-3, with small areas of R-5 and R-8. Much of this land is already developed.

Adequate Public Facilities Ordinance

Frederick City adopted an APFO in March, 2007, addressing roads, schools, and water/sewer.

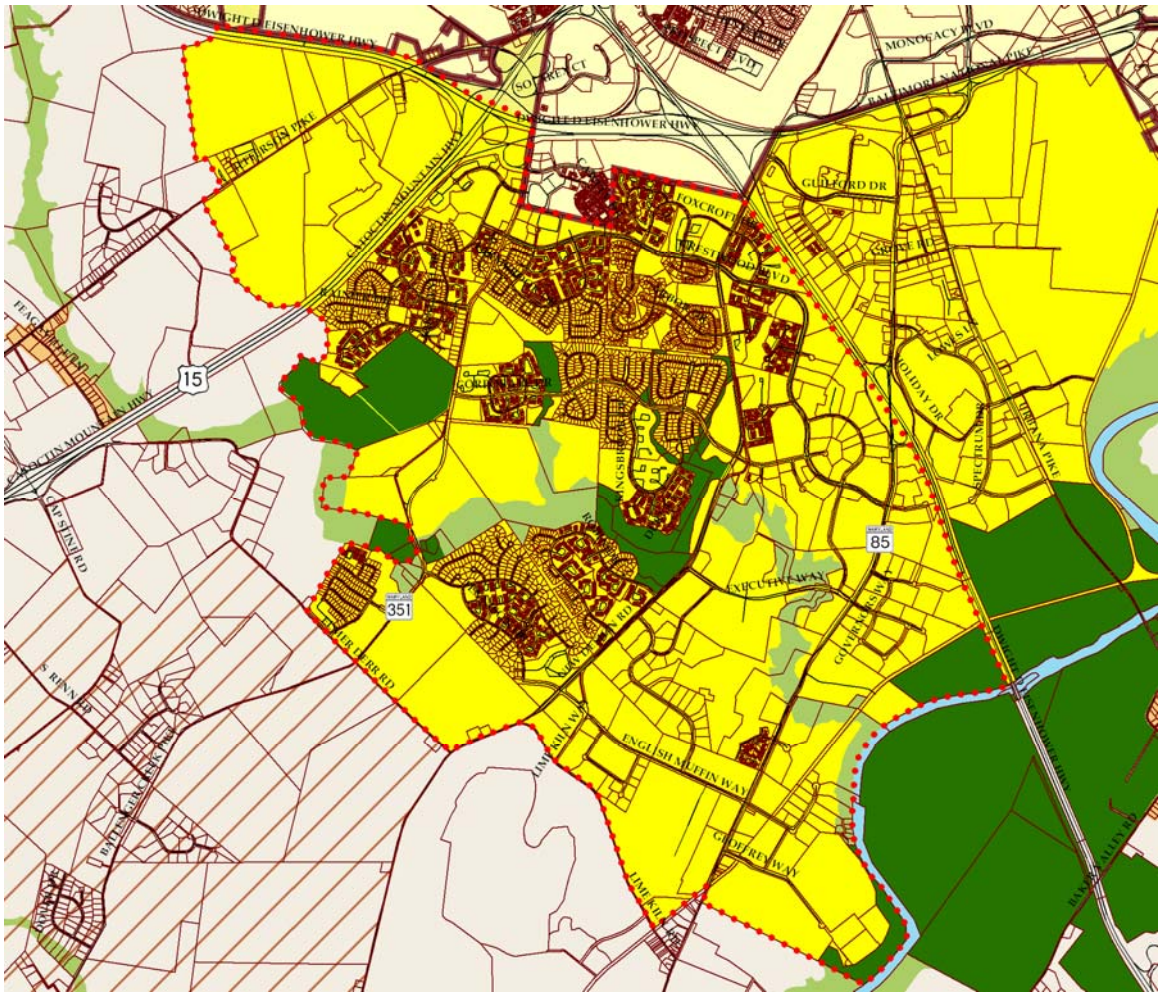
Water and Sewer Service

With the Potomac River Water Supply Agreement with the County the City will provide water to serve its annexation areas. Wastewater treatment capacity with the upgrades to the Ballenger/McKinney WWTP will be able to accommodate projected development.

Issues and Opportunities

- In the City of Frederick Plan, a proposed North-South Road along the eastern side of the City to connect I-270 north of Urbana to US 15 at Biggs Ford Rd. This proposed road is not recognized in this Plan.
- The Land Use Plan identifies the recent annexation of the Crum and Thatcher properties as part of the municipality but describes them as a Comment Area to recognize the County's disagreement with the annexations and the municipal zoning.
- A long term annexation area (Tier III) with proposed Mixed Use designation is identified along the North-South Road at Gas House Pike conflicts with the County's proposed Walkersville Priority Preservation Area.
- There will be a need to update the City/County Annexation Study that was prepared in 1988.

BALLENGER CREEK COMMUNITY GROWTH AREA



The Ballenger Creek Community Growth Area is an Unincorporated Growth Area located to the south of Frederick City between I-70 and I-270. The delineation of this growth area consolidates what has previously been divided between the Frederick planning region on the north side of Ballenger Creek and the Adamstown planning region on the south side of Ballenger Creek.

Community Plan Highlights

Growth Boundary Revisions

The extent of the Ballenger Creek Community Growth Area adjoins the Frederick Growth Area to the north, generally along I-70. The only growth boundary revisions are proposed in the southwest corner along Ballenger Creek where the growth boundary now follows property lines and has been contracted to exclude a portion of a parcel west of the Linton PUD.

Residential

Residential land in the Ballenger Creek Community is almost built out, with three PUD developments in the pipeline. Residential land use designation have been applied to several portions of the growth area, primarily to implement other policies or to adhere to preferred

mapping conventions such as following property lines rather than to increase residential land supply. Several areas where the Planned Unit Development (PUD) floating zone does not have a residential land use designation have been given a Medium Density Residential (MDR) designation. Also, MDR has been applied to several parcels that were designated Agricultural/Rural or Resource Conservation on land within the growth boundary.

Commercial/Industrial

Commercial land in the Ballenger Creek Community Growth Area is almost entirely built out except for the Jefferson Technology Park development in the northwest corner of the growth area. This is the largest undeveloped commercial/industrial area in the community. However, the Plan removes all of the ORI designation between I-70 and MD 180, maintaining the land within the growth boundary, but applying the Ag/Rural designation.

Agricultural and Rural Communities Plan Highlights

The Carrollton Manor Priority Preservation Area lies to the south along the southern border of the Ballenger Creek Community Growth Area along Elmer Derr Road.

Table 10-15: Ballenger Creek Community Land Use Plan

Land Use Plan Designation	Acres Designated	Acres Undeveloped	Pipeline Dwellings (1)	Undev. Land Potential Dwellings (2)	Total Potential Dwellings
Residential					
Medium Density Residential	1,169	342	1,910	413	2,323
High Density Residential	217	12	0	107	107
Subtotal	*1,386*	*354*	*1,910*	*520*	*2,430*
Other					
Agricultural	163	163	0	0	0
Natural Resources	211	162	0	0	0
Public/Open Space	306	54	0	0	0
Institutional	248	21	0	0	0
Subtotal	*927*	*401*	*0*	*0*	*0*
Commercial/Employment					
Limited Industrial	761	191	0	0	0
General Industrial	113	0	0	0	0
General Commercial	58	9	0	0	0
Office Research Industrial	712	456	1,200	0	1,200
Subtotal	*1,644*	*655*	*1,200*	*0*	*1,200*
Ballenger Creek Total	***3,957***	***1,409***	***3,110***	***520***	***3,630***

(1) Pipeline dwellings: unbuilt dwellings/units in approved developments.
(2) Potential dwellings: net (75%) of undeveloped acreage (minus undeveloped acreage in pipeline) at 3.5 du/acre (LDR); 7.5 du/acre (MDR); and 15 du/acre (HDR)

Green Infrastructure Plan Highlights

The major natural features in the Ballenger Creek Community Growth Area are Ballenger Creek running through the center of the growth area and the Monocacy River along the eastern edge. Both of these features serve as natural resource areas and are also components of a greenway/trail network.

Development Staging Mechanisms

Land Use Plan Designations

Most of the vacant land within the Community Growth Area is given some type of land use plan designation. Only the area between MD 180 and I-70, across from the Jefferson Technology Park is designated Agricultural/Rural, which will stage this area for longer term development.

Zoning

A few undeveloped parcels adjoin Tuscarora High School are still zoned Agricultural (A). These parcels may be subject to a floating zone application or be considered for Euclidean zoning as part of the comprehensive zoning process.

Adequate Public Facilities Ordinance

As a significant majority of the undeveloped land within the Ballenger Creek Community is zoned, the APFO will serve as the primary development staging mechanism for new development or redevelopment. The constraining facilities are likely to be road capacity and schools.

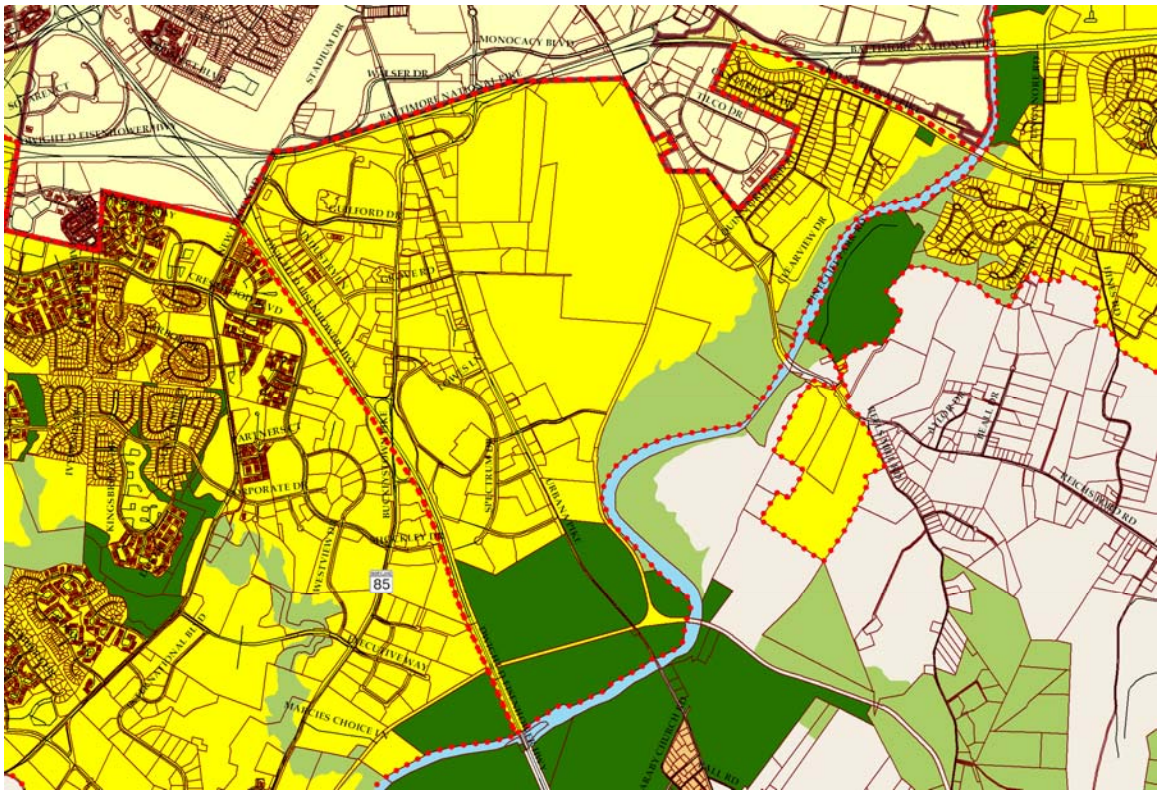
Water and Sewer Service

Water and sewer capacity are adequate and would not represent a significant development timing constraint.

Issues and Opportunities

- The land on the west side of MD 180 remaining within the community growth area but designated Agricultural/Rural should be considered for long-term employment uses. This Plan would not support additional residential uses and only limited commercial uses as part of any future MXD floating zone application.
- Possible employment redevelopment corridor opportunity along MD 85, south of I-270.

FREDERICK SOUTHEAST COMMUNITY GROWTH AREA



The Frederick Southeast Community Growth Area is located to the south of Frederick City and bounded by I-270, I-70, and MD 144. This is a predominantly commercial and industrial area that includes the County's largest regional mall, corporate offices, industrial uses that includes a limestone quarry, and a MARC commuter rail station.

Community Plan Highlights

Growth Boundary Revisions

The extent of the Frederick Southeast Community Growth Area will match the Frederick Growth Area to the north. Property between MD 144 and I-70 was annexed into the City in 2009.

Residential

There is very little existing or proposed residential within this community. The existing residential development is comprised of single-family dwellings and an assisted living/nursing care facility concentrated in the area between MD144 and Reichs Ford Road. There are only a few small parcels that are designated residential and remain undeveloped.

Commercial/Industrial

Two areas with General Industrial land use designations have been given General Commercial designations, in one case to match the underlying zoning and in the other to match the surrounding land uses. A State Highway right-of-way area at the intersection of I-70/MD355 has been given a General Commercial land use designation from Agricultural/Rural.

The new Mixed Use (MU) land use designation has been applied to an area that at its furthest extent currently is approximately one mile from the Monocacy MARC station. It is bounded by the Growth Area to the south, Grove Road to the north and MD 85 to the west. The future Corridor Plan for this area will take into account any adjustments of the MU along this corridor.

Agricultural and Rural Communities Plan Highlights

Relationship with PPA's

There are no PPAs adjacent or in the vicinity of the Frederick Southeast CGA.

Green Infrastructure Plan Highlights

Natural Resource Area land use designation is extended to match the existing 100-year floodplain along the Monocacy River. Public/Quasi-Public and Open Space designation has been applied to the northern portion of the Monocacy National Battlefield.

The major natural features in the Frederick Southeast Community Growth Area are the Monocacy River along the southeastern edge of the growth area, the Monocacy National Battlefield, and the Monocacy River Park owned by the County.

Table 10-16: Frederick Southeast Community Land Use Plan

Land Use Plan Designation	Acres Designated	Acres Undeveloped	Pipeline Dwellings (1)	Undev. Land Potential Dwellings (2)	Total Potential Dwellings
Residential					
Low Density Residential	196	36	0	95	95
Subtotal	*196*	*36*	*0*	*95*	*95*
Other					
Public/Open Space	266	263	0	0	0
Institutional	14	0	0	0	0
Natural Resources	197	173	0	0	0
Subtotal	*476*	*436*	*0*	*0*	*0*
Commercial/Employment					
Mixed Use Development	343	28	0	1,000	1,000
Office Research Industrial	65	3	0	0	0
Limited Industrial	69	2	0	0	0
General Industrial	148	92	0	0	0
General Commercial	149	14	0	0	0
Mineral Mining	538	253	0	0	0
Subtotal	*1,312*	*392*	*0*	*1,000*	*1,000*
Frederick SouthEast Total	***1,983***	***864***	***0***	***1,095***	***1,095***

(1) Pipeline dwellings: unbuilt dwellings/units in approved developments.
(2) Potential dwellings: net (75%) of undeveloped acreage (minus undeveloped acreage in pipeline) at 3.5 du/acre (LDR); 7.5 du/acre (MDR); and 15 du/acre (HDR)

Development Staging Mechanisms

Adequate Public Facilities Ordinance

The Adequate Public Facilities Ordinance (APFO) will be the primary staging mechanism because all the land within the Frederick Southeast Community Growth Area has a development zoning designation.

Water and Sewer Service

Water and sewer capacity would be adequate to serve redevelopment opportunities in this growth area.

Issues and Opportunities

- The MD 85/MD 355 corridor represents the County's most significant opportunity for redevelopment. Future Corridor and Community Plan efforts should focus on the unique opportunities this corridor has to integrate mixed-use development particularly residential, maximize public transit options around the Monocacy MARC and compliment the southern gateway into the City of Frederick.
- Facilitating better road access into this community to relieve the burden of having only a few primary roads (MD 85, MD 355, and New Design Rd.) handle all of the traffic into and out of this area. The feasibility of a number of roadway extensions and realignments in this corridor should be studied as part of the corridor plan for this area. Chief among those connections and which continues to be shown on the Countywide Plan is the extension of Spectrum Drive over I-270 to Shockley Drive. In addition connections between Crestwood Blvd. over I-270 to Grove Road/Industry Lane should also be explored as part of redevelopment efforts.
- There are also opportunities to expand the internal road network to create more local road connections.

MIDDLETOWN PLANNING REGION PROFILE

Current Region Population:
20,987

Community Population:
Town of Middletown: 4,198
Town of Myersville: 1,539
Fountaindale: 1,794

Projected Population:
26,832 (2020)

Population Growth Rates:
11% (1990-2000)
17% (2000-2008)

Household Size:
2.83

Highways
Existing Primary and Arterials
I-70, US 40-A (Old National Pike), US Rt. 40 (Baltimore National Pike), MD 17 (south of I-70), Holter Road

Planned Improvements

Continuation of the Middletown Parkway from Holter Road to US . 40-Aat west end of Town.

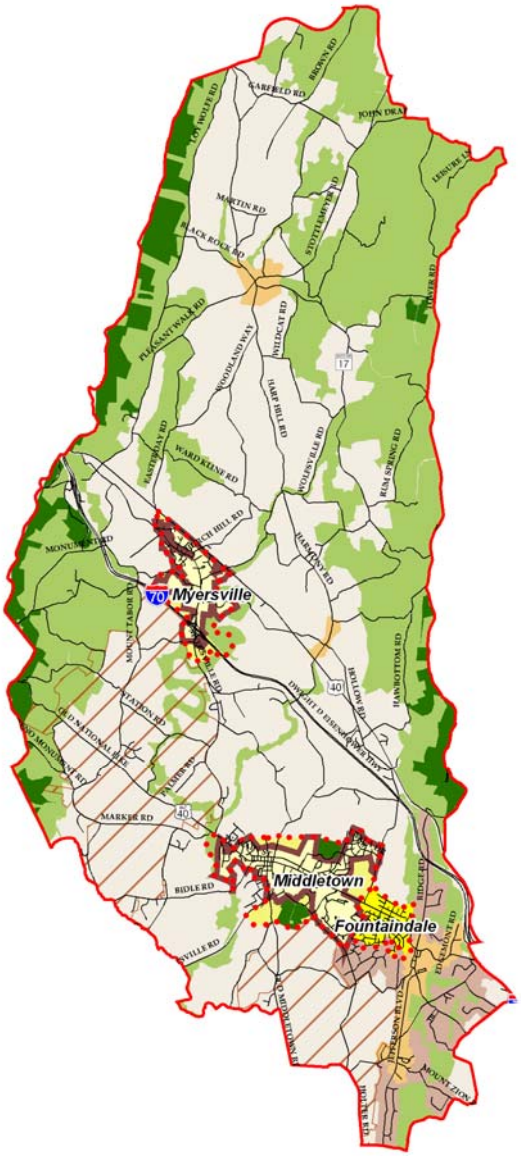
Collector road to connect MD 17 to Coblentz Road at Smithfield Drive

Bike & Pedestrian Facilities
On-Street Bikeways are indicated on US 40, US Rt. 40-A, MD 17, Holter Road, Old Hagerstown Road, Cherry Lane/South Clifton Road/Old Swimming Pool Road /Mt. Philip Road, Reno Monument/Bolivar/Marker Road

Catoctin Creek Trail – Potomac River to Myersville and eventually to the Catoctin Trail in Gambrill State Park with various other extensions.

Middletown-Myersville Trolley Trail – Frederick to Myersville

Middletown Greenway encircling the Town



REGIONAL ISSUES AND UNIQUE FEATURES

- Two Municipal Growth Areas – Middletown and Myersville – are focus areas for future development in the Region.
- The Region contains highly productive agricultural lands; the Mid-Maryland Rural Legacy Area; and the Middletown Valley Priority Preservation Area.
- Catoctin Mountain, South Mountain and Catoctin Creek are significant natural resources in the Region.

Schools
Middletown Primary
Middletown Elementary
Myersville Elementary
Wolfsville Elementary
Middletown Middle School
Middletown High School

Public Parks
Existing (county):
Middletown District Park
Fountaindale Neighborhood Park

The Region also contains portions of the following parks:
South Mountain Park
Gambrill State Park
Gathland Park
City of Frederick Municipal Forest

The Towns of Middletown and Myersville both have many neighborhood, community, or natural resource parks.

Public Safety
Braddock Heights Fire Company
Middletown Fire Company
Myersville Fire Company
Wolfsville Fire Company

Libraries
Middletown Library

GENERAL PLAN COMPONENTS

Community Plan Elements

- Town of Middletown - Municipal Growth Area
- Town of Myersville - Municipal Growth Area
- Fountaindale - Unincorporated Growth Area – Previous region plans included Fountaindale as part of the Middletown community growth area. This Plan identifies Fountaindale as a separate growth area to recognize its jurisdiction in the County and is not expected to be annexed into Middletown.

Green Infrastructure Plan Elements

- Portions of Gambrill State Park, South Mountain State Park, and the City of Frederick Municipal Forest are located in the Middletown Region. State-identified Green Infrastructure Hubs encompass these parks in addition to forestlands on the western slope of Catoctin Mountain, and on the east slope of Catoctin Mountain in the Braddock Heights area.
- Major stream systems include Catoctin Creek and Middle Creek

Agricultural and Rural Community Plan Elements

- The region includes portions of two Priority Preservation Areas, Mid-Maryland and Middletown/Jefferson. The Mid-Maryland Rural Legacy Area encompasses the western edge of the Region south of US 40. There are 4,892 acres of land permanently preserved in the region through various county and state land preservation programs.
- Rural Communities – Braddock Heights, Harmony and Wolfsville

Water Service Areas

- The Town of Middletown operates a public water system utilizing 15 wells and four springs to serve municipal residents.
- The Myersville water system consists of a spring system, 11 municipal wells, and two reservoirs to serve Town residents.
- The Fountaindale/Braddock Heights Water System is a combined, County-owned and managed system, supplied by seven wells and centrally treated for distribution to both communities.

Sewer Service Areas

- Middletown operates 2 WWTP's, discharging into Catoctin Creek and Hollow Creek

- Myersville's waste water collection and treatment facilities are owned and operated by the municipality. Effluent is discharged into Grindstone Run, a tributary of Catoctin Creek.
- The Fountaindale system is operated by the County and includes a 250,000 gpd WWTP that was replaced by the County in 2008. The County acquired Fountaindale Services, a private water and wastewater utility, in 1983. The plant currently operates at capacity.

REGIONAL SUMMARY

The following tables summarize the residential development potential and the breakdown of county zoning based on this Plan. The residential potential is only for the community growth areas and includes the municipalities.

Table 10-17: Middletown Region Residential Land Use Development Potential

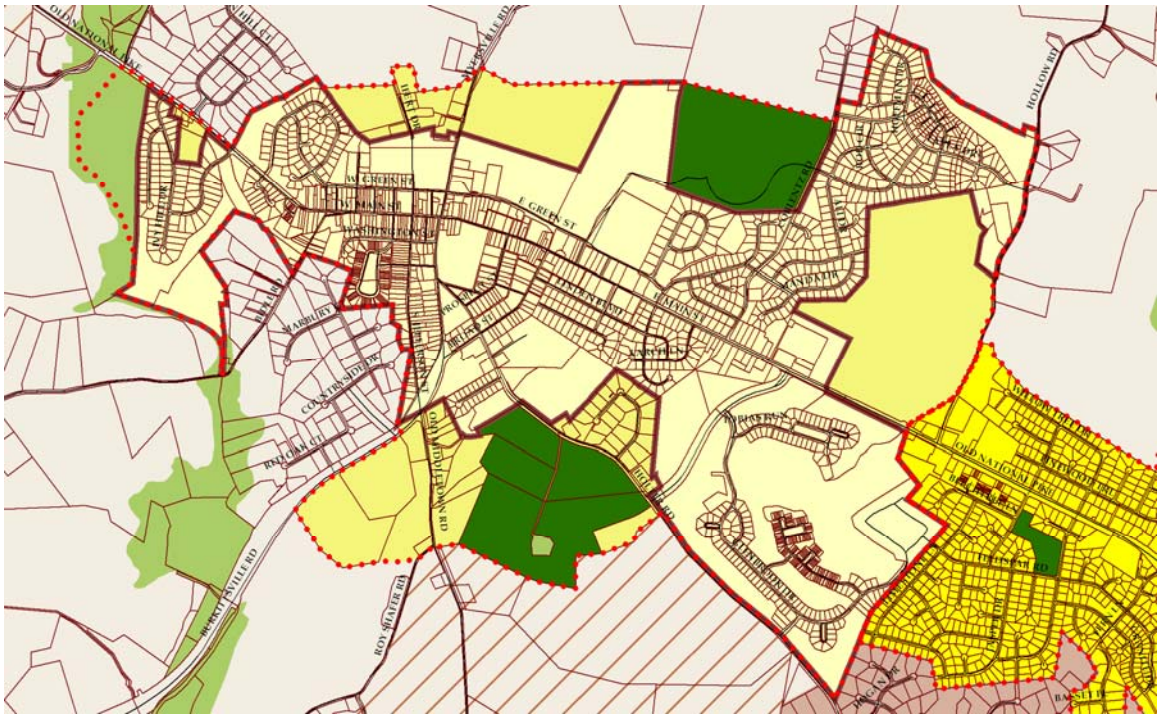
Growth Area	Acreage Designated Residential	Existing Dwellings	Total Potential Dwellings (1)	Total Dwellings	Total Projected Population
Fountaindale	303	634	20	654	1,830
Middletown	649	1,746	194	1,940	5,605
Myersville	375	557	173	730	2,043
Total	**1,327**	**2,937**	**386**	**3,323**	**9,478**

Source: Frederick County Division of Planning
(1) Includes approved pipeline development and undeveloped land potential.

Table 10-18: Middletown Region Zoning Acreages

Zoning District		Zoned Acres
Residential		
R1	Low Density Residential	2,525
R3	Low Density Residential	967
R5	Medium Density Residential	3
R8	Medium Density Residential	7
	Subtotal	*3,502*
Commercial and Employment		
GC	General Commercial	51
LI	Limited Industrial	64
	Subtotal	*115*
Mixed Use		
VC	Village Center	26
	Subtotal	*26*
Other		
A	Agricultural	26,721
Ie	Institutional Euclidean	40
RC	Resource Conservation	20,988
	Subtotal	*47,748*
	Middletown Region Total Acres	***51,392***

MIDDLETOWN COMMUNITY GROWTH AREA



The Middletown Community Growth Area is centered on the Town of Middletown located in the southern portion of the Region, bisected by the historic National Road, US 40A. The largest municipality and growth area in the Region, Middletown also has a National Historic District for its relevance to the history of west-central MD along an important transportation route.

Town of Middletown Comprehensive Plan

The Town's current Comprehensive Plan was adopted in March 2010. The Town is primarily a residential community with higher density historic residential development generally west of Broad Street. Commercial areas are centered along Main Street, primarily west of Church Street and at the Middletown Parkway/ MD 40A intersection. The Town has delineated a conservation area beyond its municipal growth boundary to identify lands for possible acquisition of groundwater rights to accommodate future development. Virtually all future municipal growth is located north of the existing town, which includes several parcels not reflected on the County's Plan. The Town's Plan also removes two existing County subdivisions from the growth boundary since they are not expected to be annexed and connected to community water/sewer.

Community Plan Highlights

Growth Boundary Revision

A separation between the Fountaindale Community and the adjacent Middletown Community Growth Area is shown on the land use plan by utilizing Hollow Road and Middletown's eastern municipal boundary. Several large parcels, north of the Middletown Community Park, north of Ifert Drive, and north of Middletown High School have been removed from the Community Growth Area.

Table 10-19: Middletown Community Land Use Plan: County Portion

Land Use Plan Designation	Acres Designated	Acres Undeveloped	Pipeline Dwellings (1)	Undev. Land Potential Dwellings (2)	Total Potential Dwellings
Residential					
Low Density Residential	44	2	0	4	4
High Density Residential	2	0	0	0	0
Subtotal	*46*	*2*	*0*	*4*	*4*
Other					
Agricultural	283	221	0	0	0
Institutional	7	0	0	0	0
Public/Open Space	177	98	0	0	0
Natural Resources	38	38	0	0	0
Subtotal	*504*	*357*	*0*	*0*	*0*
Commercial/Employment					
General Commercial	25	25	0	0	0
Subtotal	*25*	*25*	*0*	*0*	*0*
Middletown Total	***575***	***384***	***0***	***4***	***4***

Table 10-20: Middletown Community Land Use Plan: Town Portion

Land Use Plan Designation	Acres Designated	Acres Undeveloped	Pipeline Dwellings (1)	Undev. Land Potential Dwellings (2)	Total Potential Dwellings
Residential					
High Density Residential	75	3	0	12	12
Medium Density Residential	239	36	0	52	52
Low Density Residential	288	15	166	-41	125
Subtotal	*603*	*53*	*166*	*24*	*190*
Other					
Agricultural	1	0	0	0	0
Natural Resources	241	4	0	0	0
Institutional	145	16	0	0	0
Public/Open Space	15	5	0	0	0
Subtotal	*402*	*26*	*0*	*0*	*0*
Commercial/Employment					
General Commercial	44	9	0	0	0
Subtotal	*44*	*9*	*0*	*0*	*0*
Middletown Total	***1,048***	***88***	***166***	***24***	***190***

(1) Pipeline dwellings: unbuilt dwellings/units in approved developments.
(2) Potential dwellings: net (75%) of undeveloped acreage (minus undeveloped acreage in pipeline) at 3.5 du/acre (LDR); 7.5 du/acre (MDR); and 15 du/acre (HDR)

Residential
The Residential land use designations within the Community Growth Area have been removed and replaced with an Agricultural/Rural land use designation. The Low Density Residential land use plan designation is removed from the 87-acre Remsberg Park on Holter Road and replaced with Public Parkland/Open Space to reflect its ownership by the Town for a park.

Commercial and Employment
The Middletown Growth Area does not contain existing or planned industrial/employment uses.

Agricultural and Rural Community Plan Highlights

The Middletown/Jefferson Priority Preservation Area adjoins the southern boundary of Middletown's growth area.

Green Infrastructure Plan Highlights

The western boundary of the Middletown Community Growth Area is adjacent to Catoctin Creek, a major stream system in the county.

Development Staging Mechanisms

Annexation
As a Municipal Growth Area, the annexation process will be the primary staging mechanism used by the Town of Middletown. Annexation agreements negotiated between the Town and the petitioner can address development phasing, development limits, and responsibilities for public facility and transportation improvements.

Land Use Plan Designation
Most County land within the Middletown Community Growth Area has a land use plan designation of Agricultural/Rural; a land use designation indicating desired future uses by the Town would be applied upon annexation of these properties into the municipality.

Zoning
The majority of residentially designated land within the county portion of the Community Growth Boundary is zoned Agricultural; annexation of these properties into the municipality would be required in order to obtain appropriate zoning for development.

Water and Sewer Service
The water supply is the primary constraint to accommodate projected development. The Town estimates that drinking water demand will reach 742,000 gpd by 2030. To accommodate the projected population, additional appropriations or new water sources will be required. The wastewater treatment capacity will require expansion to accommodate projected development.

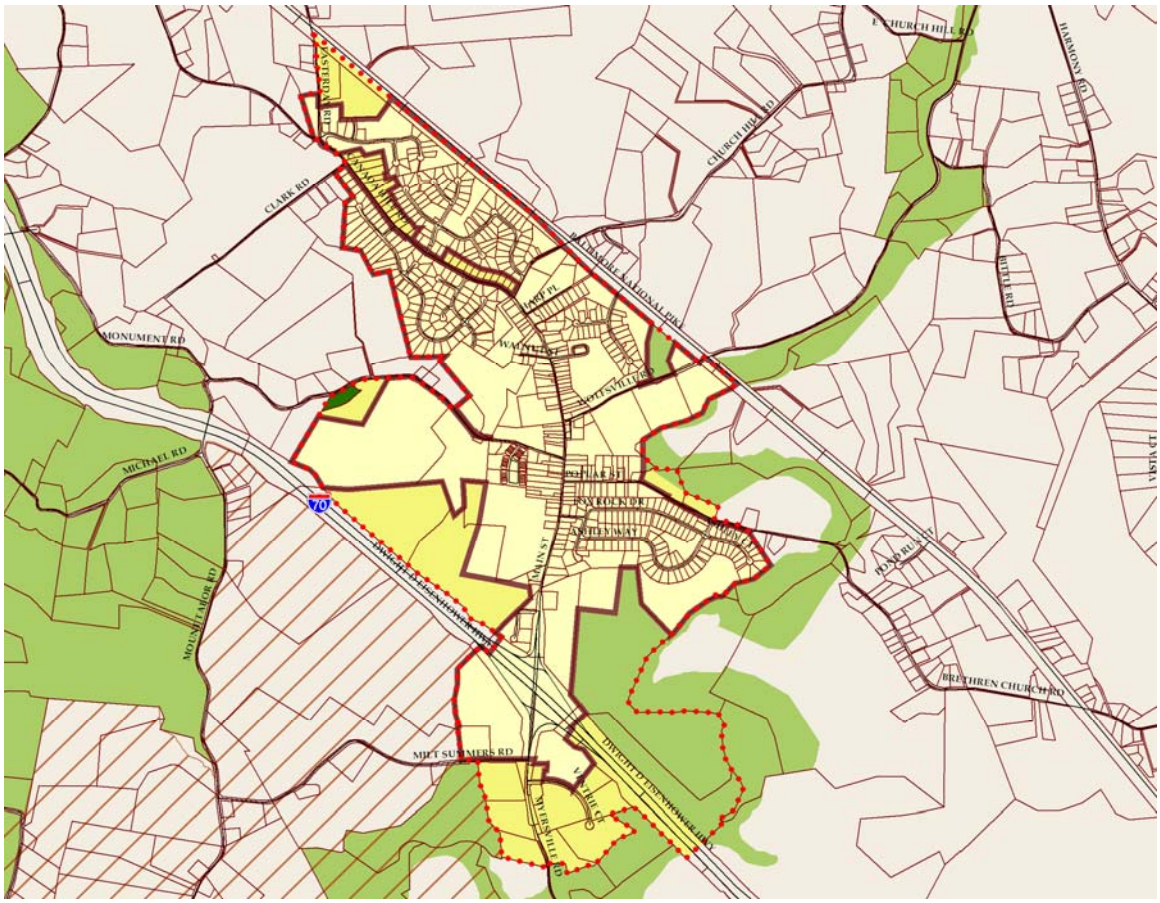
County Water and Sewerage Plan Revisions

The water/sewer service area would be adjusted to reflect revisions to the community growth boundary.

Issues and Opportunities

- The Town is looking at the ability to secure water recharge easements on properties outside of the municipal limits, which are under agricultural preservation easements. The Town's recently adopted Comprehensive Plan identifies a Conservation area around its Growth area to identify agricultural properties for possible groundwater rights.

MYERSVILLE COMMUNITY GROWTH AREA



Situated at the far western edge of the Middletown Region, the Myersville Community Growth Area is located between two major transportation corridors, I-70 and US 40. Catoctin Creek's meandering course forms the eastern boundary of the growth area. The Town has a current population of 1,539.

Town of Myersville Comprehensive Plan

The Town's current plan was adopted in March 2010. The municipal growth boundary was expanded to include approximately 37 acres in the northwest quadrant of Easterday Road and Canada Hill Road. These lands are designated for future residential development. Two Rural Legacy easement properties totaling 111 acres on the south side of Brethren Church Road are now removed from the Town's municipal growth boundary. The Plan also removes a future industrial area south of Catoctin Creek on the east side of MD 17.

Community Plan Highlights

Growth Boundary Revision

This Plan maintains most of the Community Growth Boundary as shown on the 1997 Middletown Region Plan except for the removal of industrial land south of Catoctin Creek between I-70 and MD 17 and the removal of a small area at the north side of Town between Easterday Rd. and US 40.

Residential
Within the Community Growth Area outside of the Municipal boundary, the majority of undeveloped land has an Agricultural/Rural land use designation. The Low Density Residential designation is shown on 13 acres within the Community Growth Area.

Commercial and Employment
Areas designated Limited Industrial on the land use plan are located on the south side of I-70 along MD 17 and extend to Catoctin Creek.

Agriculture and Rural Community Plan Highlights

The Mid-Maryland Priority Preservation Area (PPA) adjoins the southern boundary of the growth area. There are two agricultural preservation easements within the PPA that directly adjoin the growth area. There is also a property, located on the north side of Brethren Church Rd., with an agricultural preservation easement within the growth area.

Green Infrastructure Plan Highlights

Catoctin Creek forms the eastern edge of the Myersville Community Growth Area and bisects the southern portion of Growth Area.

Development Staging Mechanisms

Annexation
As a municipal growth area, the annexation process will be the primary staging mechanism used by the Town of Myersville. Annexation agreements negotiated between the Town and the petitioner can address development phasing, development limits, and responsibilities for public facility and transportation improvements.

Land Use Plan Designation
The majority of land within the Growth Area, except for the employment area south of I-70, has an Agricultural/Rural land use plan designation indicating development, from a county perspective, beyond a 20-year timeframe. Development in these areas is dependent upon annexation into the Town of Myersville.

Zoning
Residentially-designated and Agricultural/Rural-designated lands within the Community Growth Area are zoned Agricultural. These properties would be required to annex into the Town to obtain appropriate zoning. Employment areas north of Catoctin Creek within the Growth Area are zoned Limited Industrial.

Water and Sewer Service
The Town's projected 2030 population is 2,500, which will require additional sources of water to accommodate the projected need. The Town's waste water treatment plant has an excess capacity and therefore can meet the 20-year demand needs of the Town.

County Water and Sewerage Plan Revisions

The water/sewer service area would be adjusted to reflect revisions to the community growth area boundary.

Table 10-21: Myersville Community Land Use Plan: County Portion

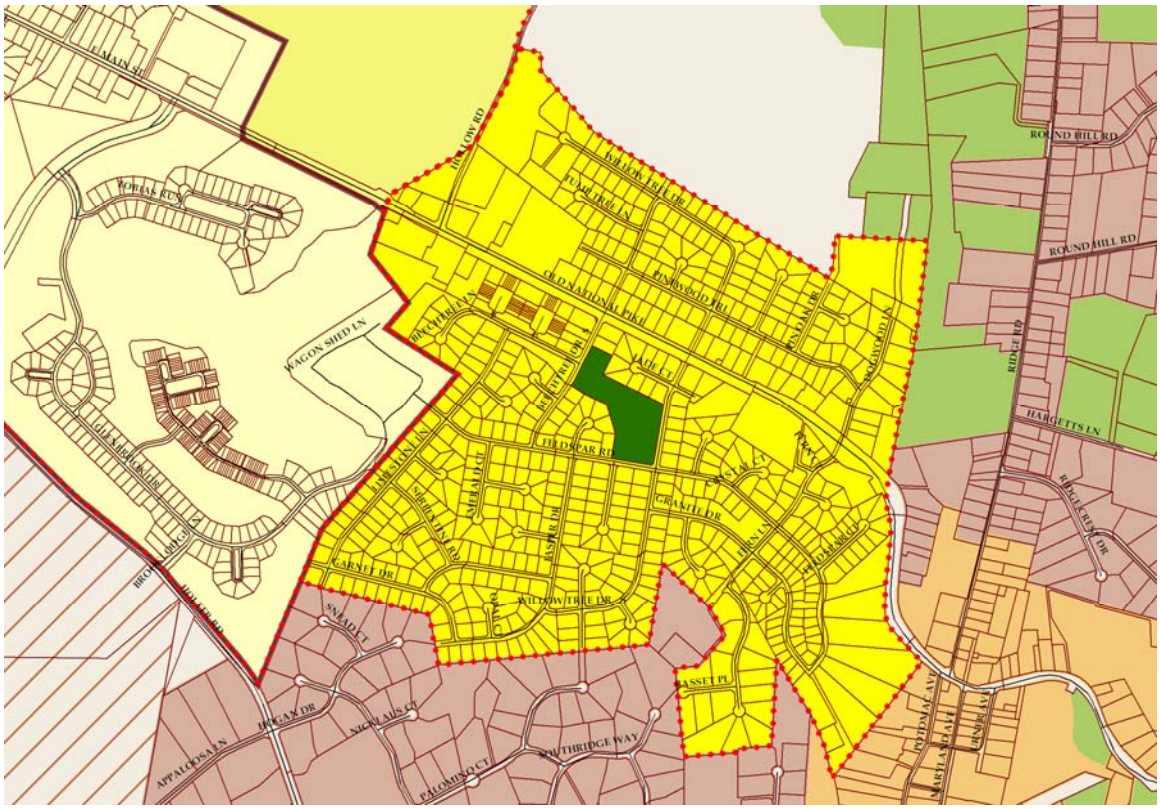
Land Use Plan Designation	Acres Designated	Acres Undeveloped	Pipeline Dwellings (1)	Undev. Land Potential Dwellings (2)	Total Potential Dwellings
Residential					
Low Density Residential	33	5	0	12	12
Subtotal	*33*	*5*	*0*	*12*	*12*
Other					
Public/Open Space	2	2	0	0	0
Natural Resources	100	98	0	0	0
Agricultural	64	64	0	0	0
Subtotal	*166*	*164*	*0*	*0*	*0*
Commercial/Employment					
General Commercial	3	0	0	0	0
Limited Industrial	50	12	0	0	0
Village Center	4	4	0	0	0
Subtotal	*57*	*16*	*0*	*0*	*0*
Myersville Total	***256***	***185***	***0***	***12***	***12***

Table 10-22: Myersville Community Land Use Plan: Town Portion

Land Use Plan Designation	Acres Designated	Acres Undeveloped	Pipeline Dwellings (1)	Undev. Land Potential Dwellings (2)	Total Potential Dwellings
Residential					
Medium Density Residential	13	5	0	0	0
Low Density Residential	329	103	159	1	160
Subtotal	*342*	*108*	*159*	*1*	*160*
Other					
Natural Resources	37	20	0	0	0
Institutional	22	0	0	0	0
Public/Open Space	17	0	0	0	0
Agricultural	27	26	0	0	0
Subtotal	*103*	*46*	*0*	*0*	*0*
Commercial/Employment					
Village Center	44	26	0	0	0
Limited Industrial	4	4	0	0	0
General Commercial	52	28	0	0	0
Subtotal	*100*	*57*	*0*	*0*	*0*
Myersville Total	***545***	***211***	***159***	***1***	***160***

(1) Pipeline dwellings: unbuilt dwellings/units in approved developments.
(2) Potential dwellings: net (75%) of undeveloped acreage (minus undeveloped acreage in pipeline) at 3.5 du/acre (LDR); 7.5 du/acre (MDR); and 15 du/acre (HDR)

FOUNTAINDALE COMMUNITY GROWTH AREA



Fountaindale is proposed as a separate community growth area apart from the Middletown community. The Fountaindale Community Growth Area is centered on a 1970's residential subdivision situated between Braddock Heights and the Town of Middletown, just past the western slope of Catoctin Mountain. Fountaindale includes a small commercial area around the intersection of US 40A and Hollow Rd.

Community Plan Highlights

Growth Boundary Revision

A separation between the Fountaindale Community and the adjacent Middletown Community Growth Area is defined by Hollow Road and Middletown's eastern municipal boundary in the Glenbrook subdivision. The Community Growth Boundary closely follows the extent of the water and sewer service area and excludes the existing well and septic subdivisions to the south. Several well/septic subdivisions to the south along Holter Rd. have been removed from the growth area and are proposed to be designated Rural Residential.

Residential

The primary components of the Fountaindale Community Growth Area are the existing developed subdivisions of Fountaindale, Fountaindale South, Springbrook, and Crest Manor Estates. All are designated Low Density Residential on the land use plan. The eight-acre Fountaindale Community Park, located in the center of the community is owned by the County.

Commercial and Employment

The General Commercial area is focused at the intersection of US 40A and Hollow Rd. The General Commercial land use designation was added to seven acres, currently zoned General Commercial, which was previously designated Low Density Residential.

Table 10-23: Fountaindale Community Land Use Plan

Land Use Plan Designation	Acres Designated	Acres Undeveloped	Pipeline Dwellings (1)	Undev. Land Potential Dwellings (2)	Total Potential Dwellings
Residential					
Low Density Residential	303	9	0	20	20
Subtotal	*303*	*9*	*0*	*20*	*20*
Other					
Agricultural	9	9	0	0	0
Public/Open Space	8	0	0	0	0
Institutional	7	0	0	0	0
Subtotal	*23*	*9*	*0*	*0*	*0*
Commercial/Employment					
General Commercial	27	8	0	0	0
Subtotal	*27*	*8*	*0*	*0*	*0*
Fountaindale Total	***353***	***25***	***0***	***20***	***20***

(1) Pipeline dwellings: unbuilt dwellings/units in approved developments.
(2) Potential dwellings: net (75%) of undeveloped acreage (minus undeveloped acreage in pipeline) at 3.5 du/acre (LDR); 7.5 du/acre (MDR); and 15 du/acre (HDR)

Agricultural and Rural Communities Plan Highlights

The Middletown/Jefferson Priority Preservation Area extends to Holter Rd. just south of the Fountaindale community.

Green Infrastructure Plan Highlights

The northeast corner of the Fountaindale Community Growth Boundary is adjacent to Catoctin Mountain.

Development Staging Mechanisms

Land Use Plan Designation

The vast majority of land within the Fountaindale Community Growth Area has a land use plan designation of Low Density Residential or General Commercial. Less than 10 acres of undeveloped land exists within the Community and has an Agricultural/Rural designation and seven acres of undeveloped, Commercially-designated is present in the Fountaindale Community.

Zoning

The residential subdivisions and small vacant lots within the Fountaindale Community are zoned R-3 Low Density Residential. There is also some R-5 zoning on a small section of townhouses.

General Commercial zoning exists on the seven acres now designated General Commercial on the land use plan.

Water and Sewer Service

Both water and sewer capacity will be a constraint to the small area of undeveloped land in the community. The Fountaindale/Braddock Heights Water System is not expected to require additional capacity or future groundwater appropriation due to the revised growth boundary and land use plan designation changes in Fountaindale and Braddock Heights.

Water and Sewerage Plan Revisions

- The community growth area and water and sewer area boundaries reflect all properties currently receiving public water and sewer service.
- The existing well and septic subdivisions of Deer Spring Farms, the Legends, and Springdale are now outside of the Fountaindale Community Growth Area and the water and sewer service area. These areas are reclassified as No Planned Service (NPS).

Issues and Opportunities

- Safety issues have been identified related to access from the intersecting subdivision streets along US 40A.
- Explore pedestrian access between the community and Middletown, especially to the shopping center.

BRADDOCK HEIGHTS RURAL COMMUNITY

This Plan designates Braddock Heights as a Rural Community and no longer as a community growth area. The change to a Rural Community reflects the lack of existing or planned community sewer service and also addresses the desire to protect the forest resource that has been fractured over the years by residential subdivision.

The Rural Community land use plan designation is applied to the historic core of Braddock Heights, north and south of US 40A and corresponds with the existing community water service area. The existing well and septic residential development along Ridge Road, Jefferson Boulevard, and on the eastern slope of Catoctin Mountain south of US 40A are designated Rural Residential. The properties designated Rural Residential retain their R-1 and R-3 zoning.

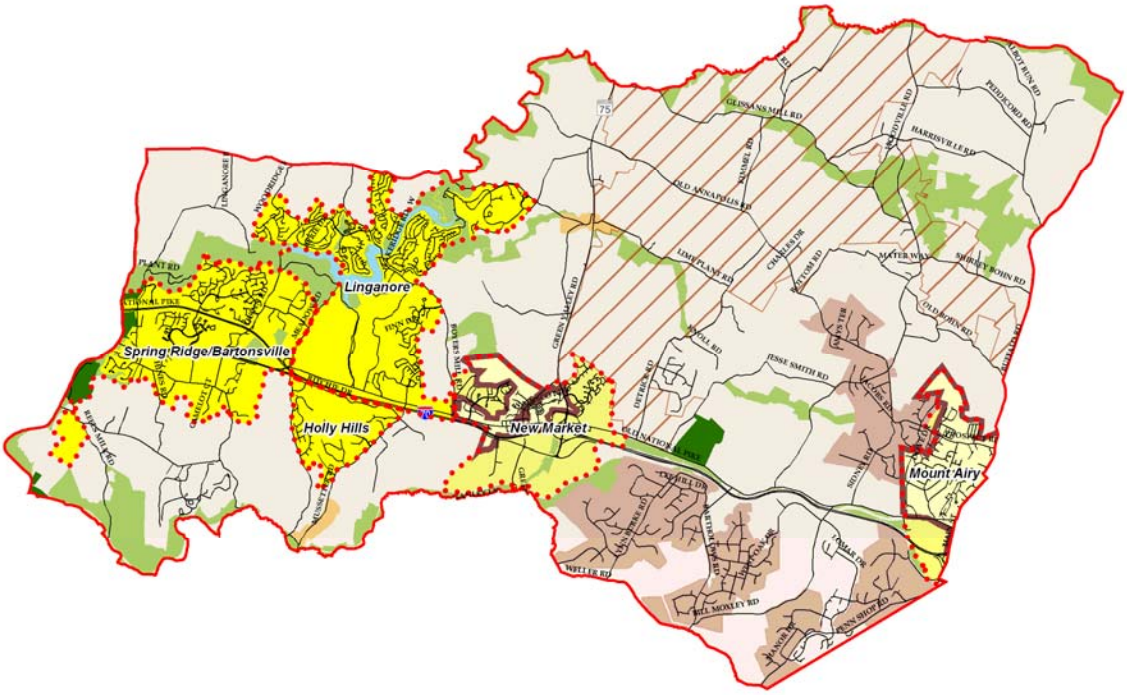
The zoning within the Rural Community includes primarily R-1 and R-3 Low Density Residential districts. This Plan expands the Village Center zoning in the southeast quadrant of Old Swimming Pool Rd. and Schley Ave.

Larger parcels, which are mostly if not entirely forested are now, designated Natural Resource on the land use plan in an effort to maintain a contiguous green infrastructure link along Catoctin Mountain. The properties now designated Natural Resource are zoned Resource Conservation.

County Water and Sewerage Plan Revisions

- The water service area is now aligned with the Rural Community designation of Braddock Heights.

NEW MARKET PLANNING REGION PROFILE



REGIONAL ISSUES AND UNIQUE FEATURES

Current Region Population:
34,160

Community Population:
Holly Hills: 1,159
Linganore: 8,664
Town of Mount Airy: 3,814
Town of New Market: 609
Spring Ridge: 8,106

Community Population:
Town of Mount Airy: 3,814
Town of New Market: 609
Linganore: 7,514
Spring Ridge/Bartonsville:
Holly Hills: 1,012

Projected Region Population:
47,784 (2030)

Population Growth Rates:
46% (1990-2000)
19% (2000-2008)

Household Size:
3.1

- The majority of the New Market Region is located in the Linganore Watershed, an area of study by the County and the State regarding water quality and watershed conditions. These watershed initiatives, such as storm water management retrofits, riparian buffer plantings and environmental restoration projects, are designed to address the water quality impairment of Lake Linganore.
- The County's landfill and public safety training facility are located in the New Market Region.
- The Linganore community growth includes the 1960's planned community of Eaglehead at Lake Linganore. This community was originally designed to accommodate vacation homes and later a variety of housing with dispersed commercial centers.
- MD 144 and Old National Pike that bisect the region is designated an All-American Road under the US Department of Transportation's Scenic Byways Program.

Highways
Existing Primary and Arterials
I-70, MD 75, MD 144/Old National Pike, Ijamsville Road, Boyers Mill Road

Planned Improvements:
Relocated MD 75 from the Park and Ride lot south of I-70 to a point near Archer Circle

Town Center Connector, an arterial roadway from the Meadow Road/Old National Pike intersection to Boyers Mill Road

Upgrade of Boyers Mill Road

Transit
East County TransIT Shuttle operating 2 days/week between Frederick and Spring Ridge and provides service to Lake Linganore, New Market and eastern Frederick County upon request.

Bike & Pedestrian Facilities
On-Street Bikeways are indicated on MD 75 north of I-70; Old Annapolis Road; Boyers Mill Road; MD 144/Old National Pike; Bill Moxley Road, and Mussetter Road north of Bush Creek.

Linganore Creek is identified for a future natural surface trail

Schools
Existing Schools:
Spring Ridge Elementary, Oakdale Elementary, New Market Elementary, Twin Ridge Elementary, Oakdale Middle, New Market Middle, Oakdale High

Linganore High School, currently closed for reconstruction will open in 2010

Planned elementary school sites: Greenview PUD, Harvest Ridge, and Linganore Town Center

Planned middle school sites: Old National Pike and the northern portion of Mt. Airy.

GENERAL PLAN COMPONENTS

Community Plan

- Town of Mt. Airy – Municipal Growth Area
- Town of New Market – Municipal Growth Area
- Linganore – Unincorporated Growth Area
- Spring Ridge/Bartonsville – Unincorporated Growth Area
- Holly Hills – Unincorporated Growth Area

Green Infrastructure Plan

- Natural Resource features include the Monocacy River and its two tributaries, Bush Creek and Linganore Creek.
- Three Green Infrastructure "Hubs," areas of large, intact forestland exist in the Region:
  - South Fork of Linganore Creek
  - Bush Creek surrounding the County landfill
  - An area just south of Gas House Pike near Lake Linganore

Agricultural and Rural Community Plan

- The Eastern Priority Preservation Area covers a large portion of the region east of MD 75. There are 3,119 acres of land permanently preserved in the region through various county and state land preservation programs
- Rural Communities-Ijamsville and New London

Water Service Areas

- The Linganore water service area includes the Linganore PUD, Spring Ridge PUD and areas between them, as well as Bartonsville and Holly Hills communities. Lake Linganore was the principal source of water for the Linganore system, but now is a back-up system due to the completion of the East County Water Distribution System. The Potomac River is the source for this East County System.
- The Town of Mt. Airy relies on multiple groundwater wells located in both Frederick and Carroll Counties.

Parks

Existing: Pinecliff District Park, Old National Pike District Park, Overlook Park on Monocacy River, Town of New Market 100-acre forest park, Prospect Park in Mt. Airy.

Planned: Four Community Parks: Bartonsville, Green Valley—Bill Moxley Road, Hazlenut Run/Ben's Branch Stream Valley Park

Two Regional Parks: Old Annapolis Road/MD 75 vicinity, Boyers Mill Road corridor

Public Safety

Spring Ridge Fire Station, New Market Fire Co., Mt. Airy Volunteer Fire Company.

One planned fire station site between New Market and Mt. Airy.

Libraries

No existing library.

A planned library site is shown in the Linganore Town Center area.

- The Town of New Market relies on both well/septic systems for the older parts of Town and on public water through the County's East County Distribution System. The County and Town have a Water Service Area Agreement, which details the provision of County water service to the Town of New Market.

Sewer Service Areas

- The Mt. Airy municipal waste water treatment plant, located on the Patapsco River in Carroll County, serves the Town of Mt. Airy.
- The Town of New Market is served by a County operated waste water treatment plant, located just east of Town on MD 144.
- The Linganore Sewer Interceptor serves most of the Linganore Service Area by transporting wastewater to the Monocacy Interceptor for delivery to the Ballenger Creek Waste Water Treatment Plant. Remaining lands in the Linganore Service area are connected directly to the Monocacy Interceptor.
- One sub-regional waste water system, the Mill Bottom Waste Water Treatment Plant, is a stand alone system with a finite capacity serving several subdivisions in the Penn Shop Rd. corridor. County policy no longer permits the establishment of such sub-regional facilities.

REGIONAL SUMMARY

The following tables summarize the residential development potential and the breakdown of county zoning based on this Plan. The residential potential includes the municipal potential and is only for the community growth areas.

Table 10-24: New Market Region Residential Land Use Development Potential

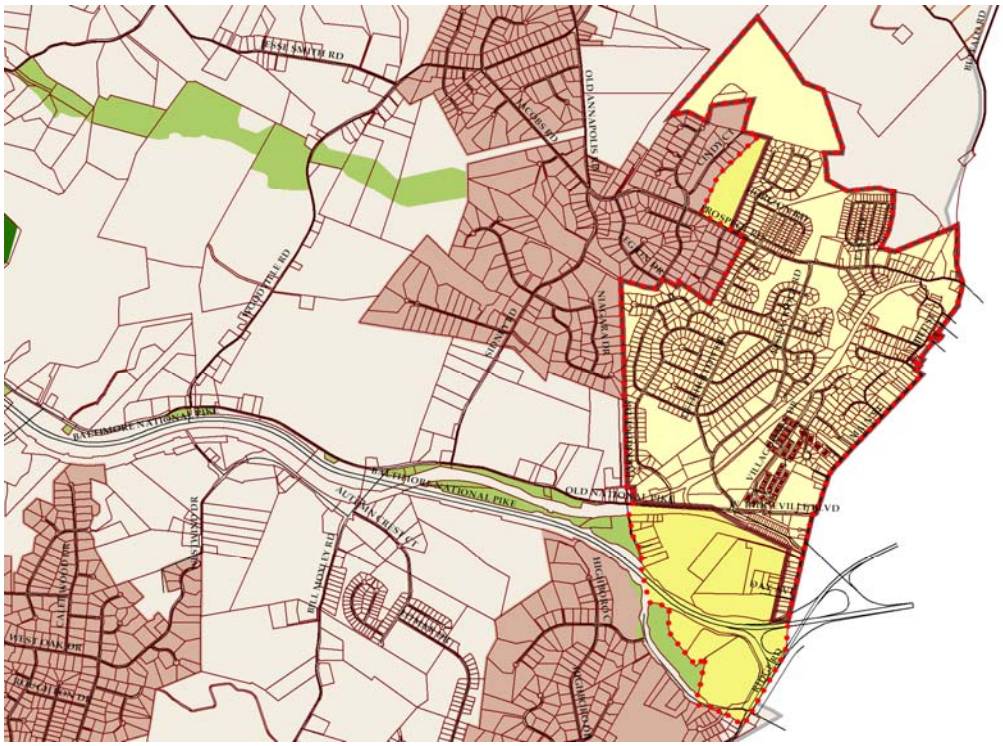
Growth Area	Acreage Designated Residential	Existing Dwellings	Total Potential Dwellings (1)	Total Dwellings	Total Projected Population
Holly Hills	634	374	64	438	1,358
Linganore	2,206	2,795	3,569	6,364	19,729
Mount Airy	517	1,229	135	1,364	3,849
New Market	672	1,034	546	1,580	4,732
Spring Ridge	1,839	2,615	1,294	3,909	12,117
Total	**5,868**	**8,047**	**5,608**	**13,655**	**41,785**

Source: Frederick County Division of Planning
(1) Includes approved pipeline development and undeveloped land potential.

Table 10-25: New Market Region Zoning Acreages

Zoning District		Zoned Acres
Residential		
R1	Low Density Residential	5,879
R3	Low Density Residential	550
PUD	Planned Unit Development	2,500
	Subtotal	*8,929*
Commercial and Employment		
GC	General Commercial	235
GI	General Industrial	168
LI	Limited Industrial	233
ORI	Office Research Industrial	70
	Subtotal	*707*
Mixed Use		
VC	Village Center	8
	Subtotal	*8*
Other		
A	Agricultural	30,763
Ie	Institutional Euclidean	92
RC	Resource Conservation	2,596
	Subtotal	*33,452*
	New Market Region Total Acres	***43,095***

MT. AIRY COMMUNITY GROWTH AREA



The Mt. Airy Municipal Growth Area is located on the far eastern edge of the Region and centered on the municipality of Mt. Airy, which is split between Frederick County and Carroll County. Mt. Airy has an historic district straddling Main Street and is listed on the National Register of Historic Places. The 2008 population estimate for the entire Town is 9,200. More than 60% of the Town's total population is located on the Carroll County side of the Town.

Town of Mt. Airy Master Plan

The Town's Master Plan was adopted in 2003. The Town is now underway with an update of its plan, which may be adopted in 2010. The plan designates the Frederick County portion of the town for Low and Medium Density Residential, Employment, and Commercial land use. The 2003 plan does include the Zeltman property on the north side of Town within the growth/annexation area. This property is not reflected on the County's 2008 New Market Region Plan as a result of comments from the Town elected officials. The majority of the town within Frederick County is developed; less than 20 acres of land, designated Low Density Residential, within the Frederick County portion of the town, remain undeveloped. Windy Ridge Park, an 88-acre passive recreational park within the Frederick County portion of town, is designated Open Space/Public Use on the Town's Master Plan.

Community Plan Highlights

Growth Boundary Revision

A change was made to the growth boundary south of the Town, as shown on the 2008 New Market Region Plan. An 18-acre forested parcel on the south side of I-70 adjacent to the 84-Lumber site and designated Natural Resource Area is removed from the growth area.

Residential
A 25-acre parcel on Prospect Street, designated Low Density Residential, is located within the municipal growth area and identified for future municipal annexation.

The existing residential subdivisions west of the Town are designated Rural Residential on the land use plan. These subdivisions, on private wells and individual septic systems, are not planned for annexation by the town and not in a future water/sewer service area.

Commercial and Employment
Several parcels totaling 125-acres, bordered by MD144 and I70 are designated Office/Research/Industrial on the land use plan and marked for future annexation by the Town.

Green Infrastructure Plan Highlights

The southern boundary of the Mt. Airy Municipal Growth Area is adjacent to Bush Creek, a Monocacy River tributary.

Development Staging Mechanisms

Annexation
As a Municipal Growth Area, the annexation process will be the primary staging mechanism used by the Town. Annexation agreements negotiated between the Town and the petitioner can address development phasing, development limits, and responsibilities for public facility and transportation improvements.

Land Use Plan Designation
All land within the Mt. Airy Community Growth Area has a land use plan designation other than Agricultural/Rural, generally indicating that development would be appropriate on these properties within a 20-year timeframe subject to completion of other staging mechanisms.

Zoning
All of the properties currently in the County, but planned for annexation into Mt Airy are currently zoned Agricultural to facilitate annexation into Mt. Airy. The appropriate municipal zoning would be applied as part of an annexation petition.

Water Service
The Town of Mt. Airy owns and operates the community water system, which includes eight wells located in Frederick County. To meet short term needs, the Town anticipates adding additional wells in Frederick County as development or annexation take place. The proposed Gillis Falls Reservoir located east of Mt. Airy in Carroll County, will be needed to meet the Town's ultimate water demand and is proposed to have a maximum safe yield of approximately 3.8 million gallons of water per day.

Sewer Service
The Town's waste water treatment plant is located in Carroll County and discharges into the South Branch of the Patapsco River. The system includes nine pumping stations, three of which are in Frederick County. Current capacity is projected to be adequate through at least 2017.

County Water and Sewerage Plan Revisions

- The water and sewer service area would be adjusted to maintain consistency with the revised Community Growth Boundary.
- The 18-acre Natural Resource designated parcel is excluded from the growth area south of I-70, is no longer within the water/sewer service area, and is classified No Planned Service.

Table 10-26: Mt. Airy Community Land Use Plan: County Portion

Land Use Plan Designation	Acres Designated	Acres Undeveloped	Pipeline Dwellings (1)	Undev. Land Potential Dwellings (2)	Total Potential Dwellings
Residential					
Low Density Residential	25	25	0	65	65
Subtotal	*25*	*25*	*0*	*65*	*65*
Commercial/Employment					
General Commercial	2	0	0	0	0
Limited Industrial	47	8	0	0	0
Office Research Industrial	112	98	0	0	0
Subtotal	*161*	*106*	*0*	*0*	*0*
Mt. Airy Total	***186***	***131***	***0***	***65***	***65***

Table 10-27: Mt. Airy Community Land Use Plan: Town Portion

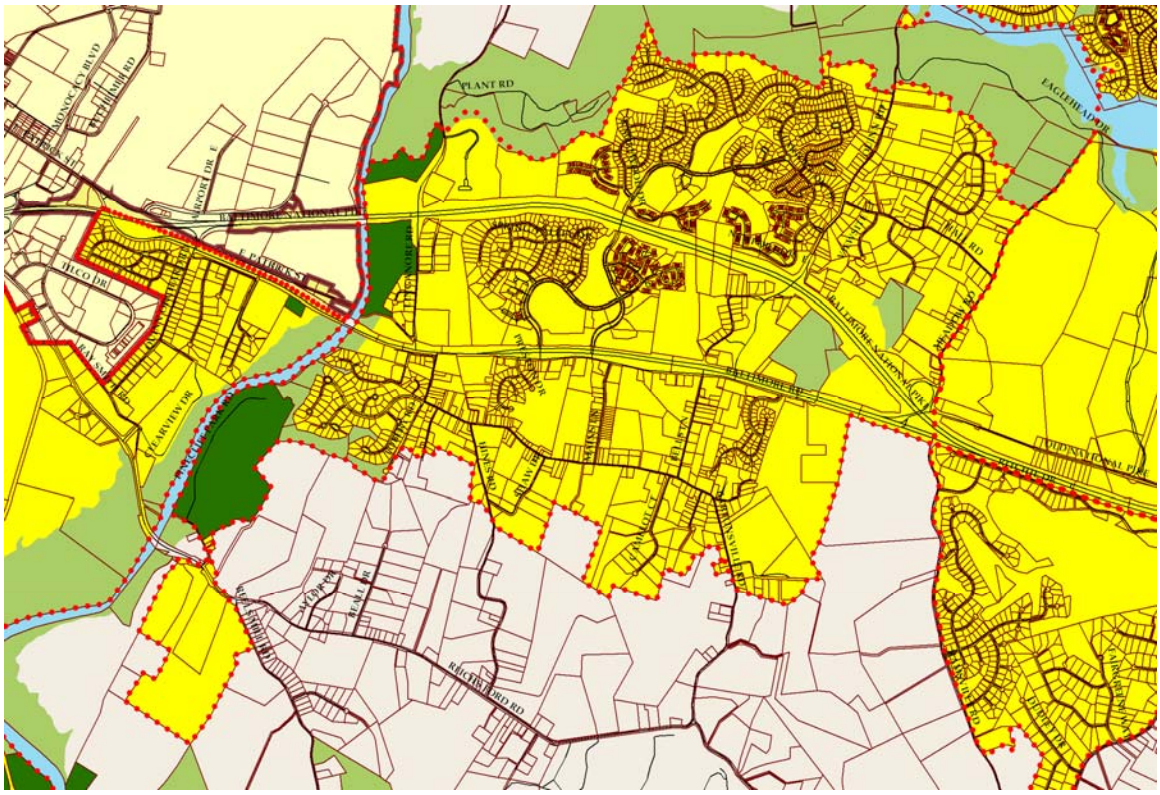
Land Use Plan Designation	Acres Designated	Acres Undeveloped	Pipeline Dwellings (1)	Undev. Land Potential Dwellings (2)	Total Potential Dwellings
Residential					
Medium Density Residential	7	0	0	0	0
Low Density Residential	450	26	0	69	69
High Density Residential	36	0	0	2	2
Subtotal	*493*	*26*	*0*	*71*	*71*
Other					
Natural Resources	157	0	0	0	0
Institutional	28	0	0	0	0
Subtotal	*185*	*0*	*0*	*0*	*0*
Commercial/Employment					
General Commercial	25	1	0	0	0
Limited Industrial	70	15	0	0	0
Subtotal	*95*	*16*	*0*	*0*	*0*
Mount Airy Total	***772***	***42***	***0***	***71***	***71***

(1) Pipeline dwellings: unbuilt dwellings/units in approved developments.
(2) Potential dwellings: net (75%) of undeveloped acreage (minus undeveloped acreage in pipeline) at 3.5 du/acre (LDR); 7.5 du/acre (MDR); and 15 du/acre (HDR)

Issues and Opportunities

- Prepare a Municipal – County Planning Agreement to address concurrence of the community growth area boundary and annexation areas.

SPRING RIDGE/BARTONSVILLE COMMUNITY GROWTH AREA



Situated at the far western edge of the Region and bisected by I-70 and MD 144, the Spring Ridge PUD, a fully developed 1,500 unit residential community, is the predominant feature along with the community of Bartonsville. Numerous other smaller subdivisions and an area designated for commercial uses are present in this Community Growth Area. Pinecliff Park, Overlook Park, and the County's Public Safety Training Facility are also included in the Spring Ridge/Bartonsville Community Growth area.

Community Plan Highlights

Growth Boundary Revision

A separation between the Spring Ridge/Bartonsville Community and the adjacent Linganore Community Growth Area is shown on the land use plan by removing mostly undeveloped, forested lands along the south side of Lake Linganore from the growth area. A Natural Resource Area designation is applied to these forest lands, which also include steep slopes. The northern growth boundary line corresponds to the northern limit of existing development within the Spring Ridge PUD. Undeveloped areas that are currently zoned Agricultural in the southern portion of Bartonsville are removed from the Community Growth Area and replaced with an Agricultural/Rural land use plan designation.

Residential

The vast majority of all lands within the Spring Ridge/Bartonsville Community are designated Low Density Residential on the land use plan. New residential development will be accommodated primarily as infill projects since the remaining undeveloped parcels are relatively small. This community also has existing residential development that is currently served by

individual well/septic systems including the area between Meadow Rd. and Quinn Rd. and portions of the Bartonsville neighborhoods south of MD 144.

Commercial and Employment

There is an existing General Commercial designated area on the south side of MD 144 at Mains Lane and a small Office/Research/Industrial designated parcel bordered by I-70 and MD 144 remain unchanged from the 2008 New Market Region Plan. Within the Spring Ridge PUD is a small shopping center with a grocery store anchor.

Table 10-28: Spring Ridge Community Land Use Plan

Land Use Plan Designation	Acres Designated	Acres Undeveloped	Pipeline Dwellings (1)	Undev. Land Potential Dwellings (2)	Total Potential Dwellings
Residential					
Low Density Residential	1,839	546	192	1,102	1,294
Subtotal	*1,839*	*546*	*192*	*1,102*	*1,294*
Other					
Agricultural	0	0	0	0	0
Natural Resources	90	28	0	0	0
Institutional	149	0	0	0	0
Public/Open Space	142	47	0	0	0
Subtotal	*381*	*75*	*0*	*0*	*0*
Commercial/Employment					
Office Research Industrial	23	23	0	0	0
General Commercial	39	16	0	0	0
Subtotal	*62*	*39*	*0*	*0*	*0*
Spring Ridge Total	***2,281***	***660***	***192***	***1,102***	***1,294***

(1) Pipeline dwellings: unbuilt dwellings/units in approved developments.
(2) Potential dwellings: net (75%) of undeveloped acreage (minus undeveloped acreage in pipeline) at 3.5 du/acre (LDR); 7.5 du/acre (MDR); and 15 du/acre (HDR)

Green Infrastructure Plan Highlights

The Monocacy River forms the western boundary of this community. Linganore Creek, a major Monocacy River tributary, and its riparian corridor are used as the northern limits of the Community Growth Area.

Development Staging Mechanisms

Land Use Plan Designation

All land within the Spring Ridge/Bartonsville Community Growth Area has a land use plan designation other than Agricultural/Rural, generally indicating that development would be appropriate on these properties within a 20-year timeframe subject to completion of other staging mechanisms.

Zoning

Properties within the community and designated with a development land use plan designation may still remain zoned Agriculture. Undeveloped lands in the Spring Ridge/Bartonsville Community Growth Area are zoned Agricultural, R-1 Residential, and R-3 Residential.

Adequate Public Facilities Ordinance

Those properties with existing residential, commercial or employment zoning would be permitted to proceed with development subject to the APFO review at the time of site plan or subdivision review.

Water and Sewer Service

The entire Spring Ridge/Bartonsville Community Growth Area is identified for public water and sewer service. Pockets of existing development within the community rely on individual wells and private septic systems and some residential subdivisions are connected to public water and sewer service.

Drinking water capacity through the New Design System and wastewater treatment capacity through the Ballenger/McKinney System will be adequate to accommodate development within the Spring Ridge/Bartonsville Community.

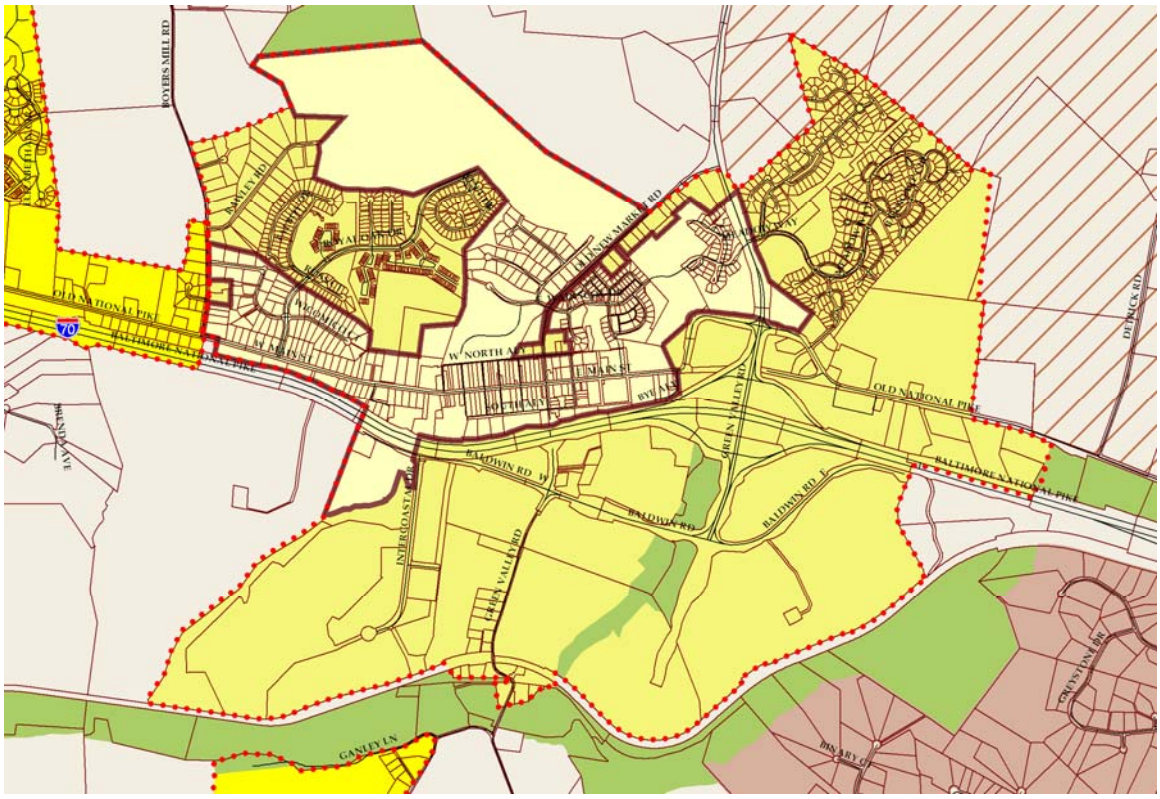
County Water and Sewerage Plan Revisions

- The water and sewer service area boundary will be revised to reflect the contraction of the community growth boundary on several parcels in the Meadow Rd. vicinity and on several parcels on the south side of Bartonsville Rd. Parcels removed from the growth area would be classified No Planned Service (NPS).
- Several parcels designated Natural Resource within the revised growth boundary are not suitable for public water and sewer service for future development purposes.

Issues and Opportunities

- Large area of existing well and septic subdivisions present within the Community could necessitate future connection to public water and sewer service.
- Opportunity for a corridor plan focusing on the MD 144 corridor with possible redevelopment of the existing commercial uses and explore ways to better integrate the Spring Ridge development on the north side and Bartonsville on the south side.

NEW MARKET COMMUNITY GROWTH AREA



The historic Town of New Market is the focal point of the New Market Community Growth Area. The Town's historic district is listed on the National Register of Historic Places. The New Market Community Growth Area has a combination of residential uses along with the largest concentration of employment designated land in the region.

Town of New Market Master Plan

The Town's 2005 Master Plan envisions an expansion of retail uses and service activities along Main Street by designating portions of historic Main Street as Mixed Residential Service and Mixed Commercial. Areas south of I-70 are designated Mixed Commercial/Industrial as well as Planned Residential Development on the Town's Plan. North of I-70, the designated uses mirror the existing land uses. The Town's growth/annexation area generally conforms to the County's delineation of the New Market community growth area with the exception that the Town's plan includes the Blentlinger and Casey tracts, which are designated Planned Residential Development in the Town's Plan and are not included in the growth area on the County's Plan.

Community Plan Highlights

Growth Boundary Revision

The Monrovia enclave, located along MD 75 between the railroad tracks and Bush Creek, is included within the New Market Community Growth boundary. On the south side of I-70 the employment area in the eastern section at the end of Baldwin Rd. has been revised to exclude the 26-acre Atanasoff property.

Residential

Areas designated Low Density Residential within the Community Growth Area includes several existing county subdivisions in addition to the Brinkley Manor, Royal Oaks and the Orchard at New Market developments within the Town of New Market. There is only one area, located east of the Meadows development, totaling 90 acres, that is undeveloped land designated Low Density Residential.

Commercial and Employment

The majority of employment designated land uses within the entire New Market Region are located in the New Market Community Growth Area. This employment area is located south of I-70 and includes a mix of General Industrial, Limited Industrial, General Commercial and Office/Research/Industrial designations. The Office/Research/Industrial land use plan designation in the southeast quadrant of the Community Growth Area can facilitate the application of a mixed-use zoning classification, which would permit residential and additional commercial uses, in addition to light manufacturing and warehouse uses.

Agricultural and Rural Communities Plan Highlights

The boundary of Eastern Priority Preservation Area adjoins the eastern edge of the New Market Community Growth Area.

Green Infrastructure Plan Highlights

The southern boundary of the New Market Community Growth Area is Bush Creek, a major Monocacy River tributary.

Development Staging Mechanisms

Annexation

The New Market Community Growth Area does not necessarily represent an annexation limit for the Town of New Market. Although the Town's 2005 Master Plan designates a growth area that represents their proposed annexation area, it is larger than the County's New Market Community Growth Boundary. Any property that is contiguous to the Town's municipal boundary could potentially be annexed regardless of whether the property is within the County's Community Growth Boundary. However, the county is the sole provider of public water and sewer service to the Town, thereby removing one incentive for county properties to pursue municipal annexation.

Land Use Plan Designation

All land within the New Market Community Growth Area has a land use plan designation other than Agricultural/Rural, generally indicating that development would be appropriate on these properties within a 20-year timeframe subject to completion of other staging mechanisms.

Zoning

In the employment area south of I-70 some properties designated Office/Research are zoned Agricultural to facilitate the application of the Mixed Use Development (MXD) floating zone. The remaining undeveloped residential area east of MD 75 is zoned Agricultural and would be considered for appropriate residential zoning either through a piecemeal application for a floating zone or Euclidean zoning through a comprehensive zoning process.

Table 10-29: New Market Community Land Use Plan: County Portion

Land Use Plan Designation	Acres Designated	Acres Undeveloped	Pipeline Dwellings (1)	Undev. Land Potential Dwellings (2)	Total Potential Dwellings
Residential					
Low Density Residential	366	90	0	237	237
Subtotal	*366*	*90*	*0*	*237*	*237*
Other					
Agricultural	0	0	0	0	0
Institutional	26	2	0	0	0
Natural Resources	34	33	0	0	0
Subtotal	*60*	*35*	*0*	*0*	*0*
Commercial/Employment					
General Commercial	153	122	0	0	0
General Industrial	166	142	0	0	0
Limited Industrial	193	144	0	0	0
Office Research Industrial	133	133	0	0	0
Village Center	6	0	0	0	0
Subtotal	*651*	*541*	*0*	*0*	*0*
New Market Total	***1,077***	***667***	***0***	***237***	***237***

Table 10-30: New Market Community Land Use Plan: Town Portion

Land Use Plan Designation	Acres Designated	Acres Undeveloped	Pipeline Dwellings (1)	Undev. Land Potential Dwellings (2)	Total Potential Dwellings
Residential					
Low Density Residential	306	177	257	51	308
Subtotal	*306*	*177*	*257*	*51*	*308*
Other					
Institutional	7	0	0	0	0
Public/Open Space	111	111	0	0	0
Subtotal	*118*	*111*	*0*	*0*	*0*
Commercial/Employment					
General Commercial	11	8	0	0	0
Subtotal	*11*	*8*	*0*	*0*	*0*
New Market Total	***434***	***296***	***257***	***51***	***308***

(1) Pipeline dwellings: unbuilt dwellings/units in approved developments.
(2) Potential dwellings: net (75%) of undeveloped acreage (minus undeveloped acreage in pipeline) at 3.5 du/acre (LDR); 7.5 du/acre (MDR); and 15 du/acre (HDR)

Water Service

The entire New Market Community Growth Area is identified for public water and sewer service; however the Town of New Market currently relies on individual well/septic for all but the new residential developments. The County and Town executed a Water Service Area Agreement that details the timing and process for allocating water and sewer taps by the County to the Town. The initial phase of extending water to the Main Street properties has been completed in 2009. Existing subdivisions and undeveloped land within the Community Growth Area, outside the municipal borders of New Market, also have the opportunity to connect to public water and sewer service.

Sewer Service

The New Market Community Growth Area is served by the Monrovia Waste Water Treatment Plant (WWTP) and the New Market WWTP. Both of these facilities are interim plants that will be closed when the Bush Creek Sewer Interceptor, a developer-funded project, is constructed, which will ultimately convey sewage from the New Market Community Growth Area to the Ballenger/McKinney WWTP.

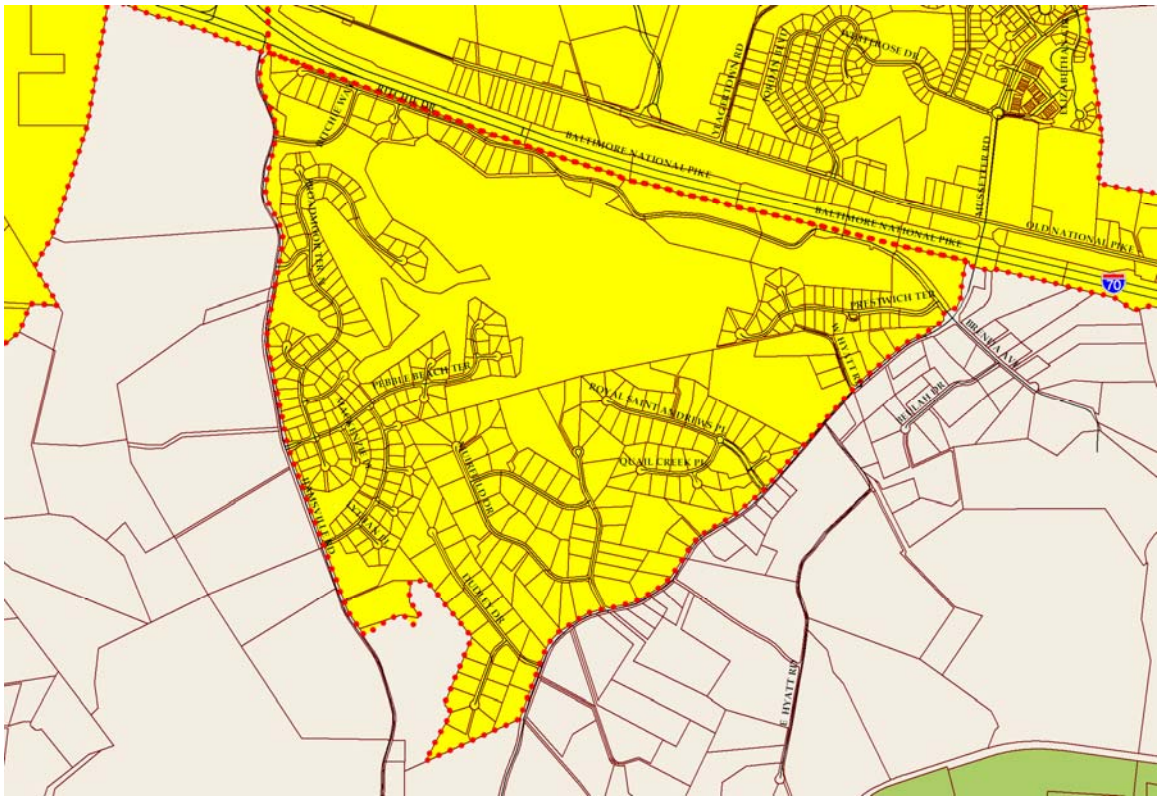
County Water and Sewerage Plan Revisions

- Water and sewer service area matches the revised community growth boundary within the New Market Community
- Agriculture/Rural plan designation replaces the ORI plan designation on 26 acres in the eastern portion of the community and is removed from the growth area boundary and water and sewer service area

Issues and Opportunities

- A road connection between Boyers Mill Road and MD 75 – a New Market Bypass – is part of a County CIP project to examine the feasibility for its potential to reduce traffic on Main Street. In addition, a bypass around New Market may be constructed as part of future municipal annexations.
- Prepare a Municipal – County Planning Agreement to address concurrence on appropriate annexation areas
- Address the appropriateness of Mixed-Use Development (MXD) Zoning, which would allow for residential uses, for areas designated LI/ORI

HOLLY HILLS COMMUNITY GROWTH AREA



This community is centered on an 18-hole golf course and country club, comprised of several residential subdivisions totaling 358 lots. The entire area is designated Low Density Residential and zoned R-1 Residential with the exception of the golf course, which is zoned Agricultural. The majority of the community is on public water and sewer, with a few scattered well and septic areas.

Community Plan Highlights

Growth Boundary Revision

A change was made to the southern growth boundary of the Holly Hills Community as shown on the 2008 New Market Region Plan. A 27-acre undeveloped parcel is removed from the Growth Area and designated Agricultural/Rural on the land use plan.

Residential

The entire Holly Hills Community Growth Area, including the golf course, is designated Low Density Residential. There are no other land use designations within this community.

Development Staging Mechanisms

Land Use Plan Designation

Very little development potential exists within the Holly Hills Community Growth Area. Any additional residential growth would occur through the resubdivision of existing large parcels or lots.

Table 10-31: Holly Hills Community Land Use Plan

Land Use Plan Designation	Acres Designated	Acres Undeveloped	Pipeline Dwellings (1)	Undev. Land Potential Dwellings (2)	Total Potential Dwellings
Residential					
Low Density Residential	634	24	0	64	64
Subtotal	*634*	*24*	*0*	*64*	*64*
Holly Hills Total	***634***	***24***	***0***	***64***	***64***

(1) Pipeline dwellings: unbuilt dwellings/units in approved developments.
(2) Potential dwellings: net (75%) of undeveloped acreage (minus undeveloped acreage in pipeline) at 3.5 du/acre (LDR); 7.5 du/acre (MDR); and 15 du/acre (HDR)

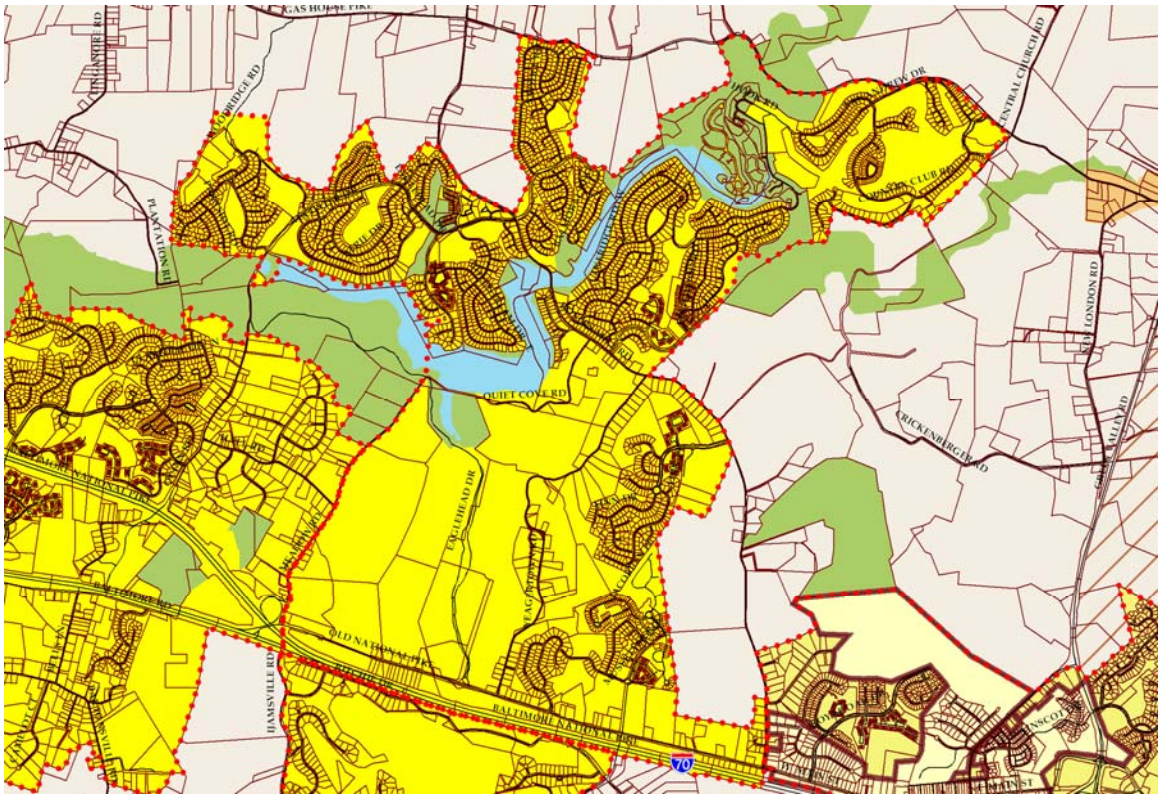
Zoning
Residentially-designated land within the Community Growth Boundary has existing R-1 Residential zoning. The R-1 zoning allows further subdivision of large lots within the community, assuming all other development regulations are met.

Water and Sewer Service
The entire Holly Hills Community Growth Area is identified for public water and sewer service. The properties that currently rely on individual wells and septic systems have the opportunity to connect to public water and sewer service, through the County's water and sewer amendment procedures.

County Water and Sewerage Plan Revisions

- Water and sewer service area boundary revised to reflect the removal of the LDR designation from 27 acres and from the community growth area in the southern tip of the Holly Hills Community

LINGANORE COMMUNITY GROWTH AREA



The Linganore Community Growth Area is centered on Lake Linganore, which was created in the early 1970's as a recreational amenity, for what was proposed at that time, a second home community. The Community Growth Area encompasses the developed portions of the Linganore Planned Unit Development (PUD), which was originally approved in the late 1960's in addition to other properties along Yeagertown Rd. and Meadow Rd.

The Linganore Community is the largest growth area in the New Market Planning Region. The Linganore PUD contains various "villages" and a Town Center planned for a variety of residential densities, commercial areas, and new road networks.

Community Plan Highlights

Growth Boundary Revisions

A separation between the Linganore Community Growth Area and the adjacent Spring Ridge/Bartonsville Growth Area is shown on the land use plan by removing the Alpine development areas along Eaglehead Dr. from the growth area. The Linganore Community Growth Boundary now borders the Lake and follows the existing residential lots in the villages of North Shore, Aspen, and Woodridge, essentially removing the Alpine Village from the growth boundary. A Natural Resource designation is applied to these wooded areas with steep slopes south of Lake Linganore. Additional contraction of the Linganore Community Growth Boundary from the 2008 New Market Region Plan has occurred as part of this plan update primarily north of the lake in Woodridge and Hamptons South. Those areas in addition to portions of Town Center and Island of Balmoral have resulted in either an Agricultural/Rural or Natural Resource land use plan designation.

Residential

The vast majority of lands within the Linganore Community Growth Area are designated Low Density Residential on the land use plan. Medium Density Residential is maintained on the Carey/Hutzel property within the planned Linganore Town Center area at Eaglehead Drive and Old National Pike.

This Plan maintains and integrates the land use densities that were established as part of the 2008 New Market Region Plan. That plan established new land use densities for the remaining development land bays. Within the Lake Linganore PUD, the maximum permitted density for the undeveloped/un-platted land bays shall be 3.0 dwelling units per gross acre. The Town Center land bay shall be permitted up to 5.0 dwelling units per gross acre and parcels comprising the Westwinds Golf Course no additional dwelling units are permitted as this area must be retained with a use consistent with open space approvals and to maintain the open space requirements of the Lake Linganore PUD. This Plan also maintains minimum and maximum thresholds for the mix of dwelling unit types for the development land bays.

Village/Land Bay	Density	Dwelling Unit Mix		
	DU/Gross Acre	Single Family Detached	Single Family Attached	Multi Family Including 2 over 2's
Town Center	5.0	12.5% Min	17.5% Min	60% Max
All Others	3.0	Dwelling unit types should be compatible with the existing development pattern and character of the adjoining village. The developer must demonstrate the proposed housing types are compatible and how it provides an appropriate mix of dwellings.		

Commercial and Employment

There is a small area of existing Office/Research/Industrial land designated at Meadow Road and MD 144. Commercial uses are planned for the Linganore Town Center, which would total approximately 200,000 square feet. Another General Commercial area is planned at the intersection of Old National Pike and Mussetter Road in the Greenview development.

Green Infrastructure Plan Highlights

Linganore Creek, a major Monocacy River tributary, flows into Lake Linganore within the Community Growth Boundary. The Creek, along with the extensive forested land south of Lake Linganore, are components of the county's Green Infrastructure.

Development Staging Mechanisms

Land Use Plan Designation

All land expected to be developed within the Linganore Community Growth Area has a land use plan designation other than Agricultural/Rural, indicating that development would be appropriate on these properties within a 20-year timeframe subject to completion of other staging mechanisms. Other land use designations within the community include Medium Density Residential, General Commercial, and Office/Research/Industrial.

Table 10-32: Linganore Community Land Use Plan

Land Use Plan Designation	Acres Designated	Acres Undeveloped	Pipeline Dwellings (1)	Undev. Land Potential Dwellings (2)	Total Potential Dwellings
Residential					
Low Density Residential	2,155	944	2,596	690	3,286
Medium Density Residential	51	50	0	283	283
Subtotal	*2,206*	*995*	*2,596*	*973*	*3,569*
Other					
Agricultural	33	33	0	0	0
Natural Resources	399	303	0	0	0
Institutional	127	0	0	0	0
Subtotal	*558*	*336*	*0*	*0*	*0*
Commercial/Employment					
Village Center	1	0	0	0	0
Office Research Industrial	41	27	0	0	0
General Commercial	40	4	0	0	0
Subtotal	*82*	*30*	*0*	*0*	*0*
Linganore Total	***2,847***	***1,361***	***2,596***	***973***	***3,569***

(1) Pipeline dwellings: unbuilt dwellings/units in approved developments.
(2) Potential dwellings: net (75%) of undeveloped acreage (minus undeveloped acreage in pipeline) at 3.5 du/acre (LDR); 7.5 du/acre (MDR); and 15 du/acre (HDR)

Zoning

The majority of lands, both developed and undeveloped, within the Linganore Community Growth Area are zoned PUD. Several properties within the Community Growth Area and a development land use plan designation are zoned Agriculture. The parcels currently zoned Agricultural would likely be rezoned as part of a piecemeal floating zone request outside of a plan update process.

Water and Sewer Service

The Linganore Community Growth Area is served by the New Design Water System and the Ballenger/McKinney Wastewater System. The county has upgraded many components of the 40+ year old water and sewer infrastructure within the Linganore PUD to better serve existing residents and provide for future planned development.

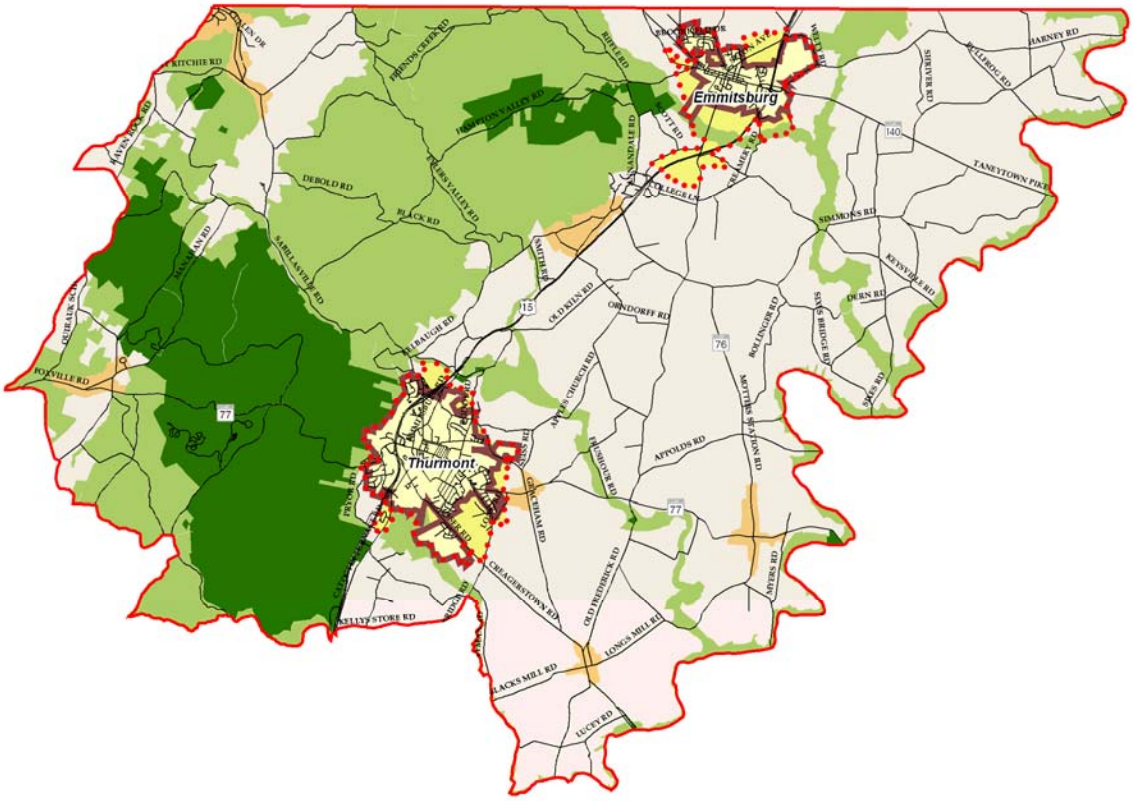
County Water and Sewerage Plan Revisions

- Changes to the water and sewer service area reflect the growth boundary changes separating the Linganore Community from the Spring Ridge/Bartonsville Community
- Lake Linganore's northern limit, corresponding to the edge of the Aspen, North Shore, and Woodridge Villages, demarcates the new water and sewer service area. Areas situated in between the Lake and the new Spring Ridge/Bartonsville Community are designated Natural Resource and are located outside the water and sewer service area.

Issues and Opportunities

- Support the build out of the Linganore PUD and the development of the Town Center to create a civic focal area for the Linganore community.
- How to facilitate improvements to the I-70/Meadow Road Interchange.
- Opportunity for a MD 144/Old National Pike corridor plan to address the transition or redevelopment of low density residential land uses. Need to consider viability of MD 144/Old National Pike as an arterial connection and how to maintain its designation as the Historic National Road Scenic Byway.

THURMONT PLANNING REGION PROFILE



Current Region Population:
19,735

Community Population:
Town of Thurmont: 6,437
Town of Emmitsburg: 2,852

Household Size:
2.85

Projected Population:
24,403 (2020)

Population Growth Rates:
1.8% (2000-2005)
1.5% (1990-2000)
0.4% (1980-1990)

Highways:
US 15, MD 140, MD 77, MD 550, MD 76

REGIONAL ISSUES AND UNIQUE FEATURES

- Thurmont Region has nearly 10,000 acres protected under agricultural land preservation programs and over 12,000 acres of public park land, including the 5,800 acre Catoctin Mountain Park (NPS) and the 5,000 acre Cunningham Falls State Park
- US 15 - functions as an interstate route connecting southern Pennsylvania – as well as northern Frederick County – with the City of Frederick and the Washington DC metropolitan area. Existing at-grade intersections provide safety challenges as usage of this highway continues to increase
- Thurmont Region's designated growth areas are centered on the two municipalities of Thurmont and Emmitsburg. Though sufficient land is available for future development, water and sewer system issues currently constraints.

Highways (cont'd):
Planned Improvements:
US 15 Grade-Separated Interchange at S. Seton Ave.
Collector road connecting W. Main St. and S. Seton Ave. in Emmitsburg

Transit/Railroad:
TransIT service between Frederick and Emmitsburg/Thurmont e

Maryland Midland Railway short line freight railroad serving commercial users at Rocky Ridge and Thurmont with connections to CSX.

Bike and Pedestrian Facilities:
Safer, interconnected sidewalk and trail network being developed in Thurmont. Emmitsburg plans to improve bike and pedestrian access between activity centers.

Planned continuation of H&F Trolley Trail beyond built segment in Thurmont to ultimately connect with City of Frederick (17 miles)

Emmitsburg Greenway and Trail to be developed as a 5-mile long multi-use trail encircling town on its south and east

Multi-jurisdictional 'Grand History Loop' (Multi Use Regional Trail) to utilize existing and proposed trail network in northern Frederick County en route to Gettysburg, PA

Schools:
Catoctin HS, Thurmont MS, Thurmont ES, Thurmont PS, Emmitsburg ES, Sabillasville ES

Parks:
Town of Thurmont Parks: Eyler Road Park, Thurmont community Park, East End Park, Frank Bentz Pond, Ice Plant Park, Mechanicstown Square Park, Pleasant Acres Park, Thurmont Memorial Park, Woodland Park

GENERAL PLAN COMPONENTS

Community Plan Elements

- Town of Thurmont – Municipal Growth Area
- Town of Emmitsburg – Municipal Growth Area

Green Infrastructure Plan Elements

- Natural Resource features include Catoctin Mountains, the Monocacy River, Toms Creek, Owens Creek, Hunting Creek,
- Park and Protected lands include Catoctin Mountain Park (Federal – 5,800 acres), Cunningham Falls State Park (including Catoctin Furnace site – 5,000 acres), and the Thurmont Watershed Area, Emmitsburg Watershed Area.

Agricultural and Rural Community Plan Elements

- While there are no proposed Priority Preservation Areas within the region, there are nearly 10,000 acres of land in agricultural preservation easements.
- Rural Communities – Creagerstown, Foxville, Graceham, Rocky Ridge, St. Anthony's, Sabillasville, Blue Ridge Summit, and Catoctin Furnace.

Water Service Areas

- The Town of Thurmont has a groundwater-based system and provides service within its boundaries as well as to the Catoctin High School and fifty other properties outside the municipal boundary.
- The Town of Emmitsburg system provides water service to an estimated 1,243 dwelling units. Approximately half of the Town's water is drawn from five wells and from Rainbow Lake, a 13-acre impoundment of Turkey Run.
- Emmitsburg has an interconnection with Mount St Mary's University's water system for emergency purposes.

Sewer Service Areas

- Thurmont's WWTP has a design capacity of 1.0 mgd with effluent discharged into Hunting Creek.
- The WWTP plant is set to undergo an Enhanced Nutrient Reduction (ENR) upgrade in 2010 and will be capable of handling anticipated residential growth projected for the next 20 years.

- Presently, the Town is subject to a Consent Agreement with the State due to severe Inflow and Infiltration (I&I) problems in the collection system. This agreement restricts development in Thurmont to fewer than 60 EDU's per year.
- Emmitsburg's WWTP has a design capacity of 0.75 mgd Effluent is discharged into Toms Creek with a portion of the effluent being used for spray irrigation, during the summer, on 180 acres of adjacent farm fields.
- The WWTP is capable of handling anticipated residential growth projected for the next 20 years while maintaining a design capacity buffer of 20%.

REGIONAL SUMMARY

The following tables summarize the residential development potential and the breakdown of county zoning based on this Plan. The residential potential is only for the community growth areas and includes the municipalities.

Table 10-33: Thurmont Region Residential Land Use Development Potential

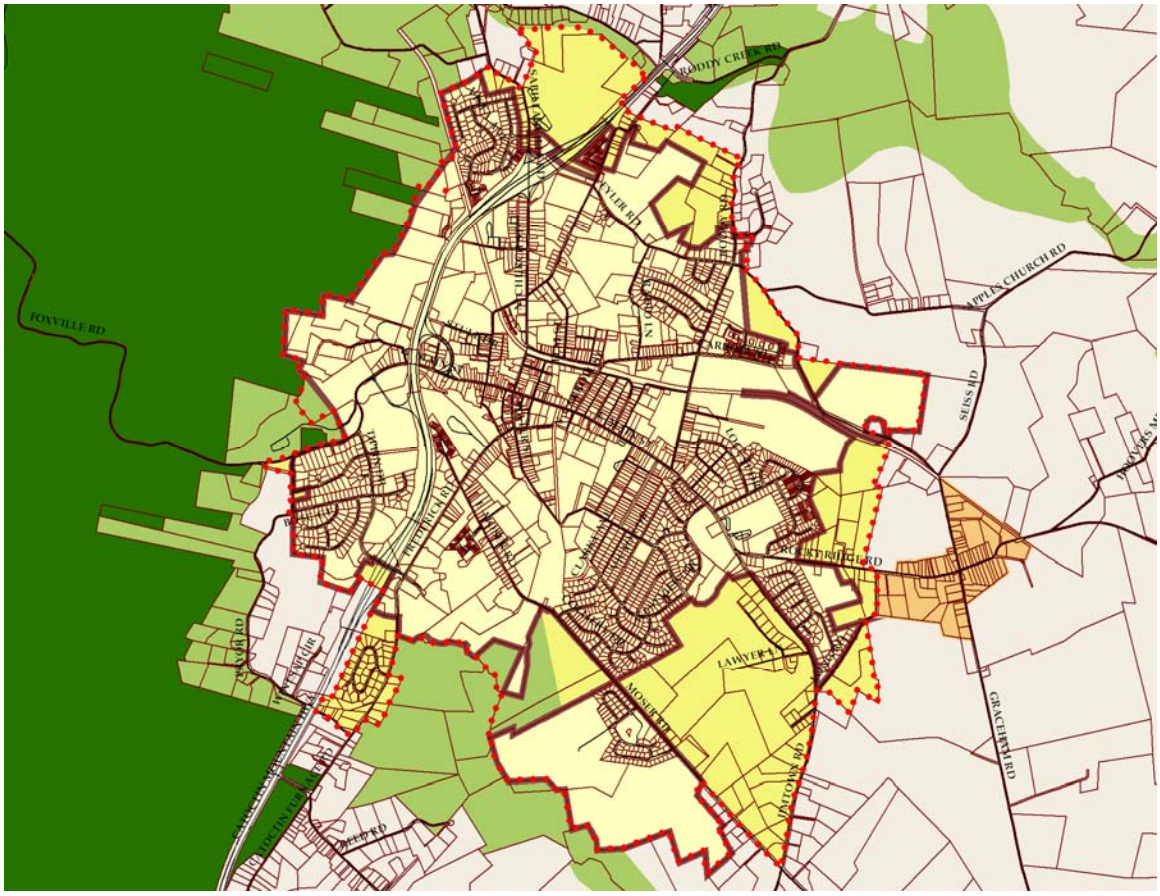
Growth Area	Acreage Designated Residential	Existing Dwellings	Total Potential Dwellings (1)	Total Dwellings	Total Projected Population
Emmitsburg	574	1,203	722	1,925	5,100
Thurmont	1,473	2,687	2,369	5,056	13,401
Total	**2,047**	**3,890**	**3,090**	**6,980**	**18,502**

Source: Frederick County Division of Planning
(1) Includes approved pipeline development and undeveloped land potential.

Table 10-34: Thurmont Region Zoning Acreage

Zoning District		Zoned Acres
Residential		
R1	Low Density Residential	1,468
R3	Low Density Residential	47
	Subtotal	*1,515*
Commercial and Employment		
GC	General Commercial	103
GI	General Industrial	229
LI	Limited Industrial	16
	Subtotal	*348*
Mixed Use		
VC	Village Center	110
	Subtotal	*110*
Other		
A	Agricultural	40,557
Ie	Institutional Euclidean	474
RC	Resource Conservation	30,263
	Subtotal	*71,293*
	Thurmont Region Total Acres	***73,266***

THURMONT COMMUNITY GROWTH AREA



The Thurmont Community Growth Area is composed primarily of the Town of Thurmont and some areas for future growth immediately adjacent to current municipal boundaries. Thurmont has a mixed use downtown area with small businesses and residential uses. The primary commercial areas are focused along N. Church St. and in the southern part of Town along Frederick Rd. Thurmont is home to several major employers including NVR and Structural Systems.

Thurmont supports a full complement of school facilities including a primary school and has its own municipal police force. Unique to most any other municipality in the State, Thurmont also operates its own municipal electric company.

Town of Thurmont Master Plan

The Town's current plan was adopted in 1998 and an update is expected to be adopted in 2010. Thurmont's Draft Master Plan addresses major land use issues including: preferred rates of residential growth and geographic expansion, new mixed use zoning districts, adequacy of public infrastructure, development of key transportation and pedestrian linkages, and traditional neighborhood design. The draft document:

- Establishes a four-pronged growth management strategy: setting goal of no more than 35 new homes constructed annually; avoiding growth beyond the designated Municipal

Growth Boundary; limiting the number of concurrent annexations; and controlling rezoning inside of existing town boundary
- Supports complementary infill development
- Seeks development of updated development standards that reflect tenets of traditional neighborhood design and low impact (environmentally-sound) site design

Community Plan Highlights

Growth Boundary Revisions

The Growth Boundary established in this Plan approximates the boundaries established in the County's 2008 Thurmont Region Plan with the exception of the removal from the Growth Area of the Medium Density Residential lands flanking US 15 at the Town's southern gateway and the addition to the Growth Area of the Catoctin High School property on the Town's northern boundary. The remaining growth area allows for municipal expansion primarily to the southeast and east of the current municipal limits.

Residential

Residential land supply within the Thurmont Community is located primarily outside of the current municipal boundaries on the Town's southeastern edge and is designated for Medium Density Residential uses. Approximately 100 acres of land inside of the Town have been identified for residential growth though much of this acreage is comprised of smaller infill parcels that are not readily developable.

Commercial and Employment

Convenience retail uses have emerged or expanded in recent years along Frederick Rd. (MD 806) and N. Church St. (MD 550) – at two of the Town's US 15 interchanges - to serve local residents as well as travelers on US 15. The Town's industrial area, located along the Maryland Midland RR freight line, provides some limited area for new employment uses to locate on vacant land or underdeveloped sites.

Much of the Thurmont Community's future commercial development is likely to occur as a result of incremental redevelopment of parcels along Frederick Road. The newly adopted Mixed Use Village zoning district will also allow for some smaller scale, mixed use commercial and employment activities along the Main Street corridor and at the Frederick Road/Moser Road intersection.

Agricultural and Rural Communities Plan Highlights

The Thurmont Community Growth Boundary is not immediately adjacent to any Priority Preservation Areas. There are several farm properties to the east and north of Thurmont that have agricultural preservation easements.

Green Infrastructure Plan Highlights

The Thurmont Community Growth Area is bounded to the west by the Catoctin Mountains. All of the adjoining mountain area to the west is part of either Cunningham Fall's State Park or Catoctin Mountain Park. The Hunting Creek stream corridor runs through the middle of Thurmont.

Table 10-35: Thurmont Community Land Use Plan: County Portion

Land Use Plan Designation	Acres Designated	Acres Undeveloped	Pipeline Dwellings (1)	Undev. Land Potential Dwellings (2)	Total Potential Dwellings
Residential					
Low Density Residential	14	0	0	0	0
Medium Density Residential	381	240	0	726	726
High Density Residential	42	42	0	393	393
Subtotal	*438*	*282*	*0*	*1,119*	*1,119*
Other					
Institutional	90	19	0	0	0
Natural Resources	51	42	0	0	0
Subtotal	*140*	*60*	*0*	*0*	*0*
Commercial/Employment					
General Commercial	2	0	0	0	0
Village Center	60	40	0	0	0
Subtotal	*62*	*40*	*0*	*0*	*0*
Thurmont Total	***640***	***383***	***0***	***1,119***	***1,119***

Table 10-36: Thurmont Community Land Use Plan: Town Portion

Land Use Plan Designation	Acres Designated	Acres Undeveloped	Pipeline Dwellings (1)	Undev. Land Potential Dwellings (2)	Total Potential Dwellings
Residential					
Low Density Residential	304	86	34	225	259
High Density Residential	47	1	0	7	7
Medium Density Residential	684	175	0	984	984
Subtotal	*1,035*	*261*	*34*	*1,216*	*1,250*
Other					
Institutional	79	1	0	0	0
Natural Resources	73	31	0	0	0
Public/Open Space	226	0	0	0	0
Subtotal	*378*	*31*	*0*	*0*	*0*
Commercial/Employment					
Village Center	74	5	0	0	0
Limited Industrial	165	52	0	0	0
General Commercial	86	5	0	0	0
Subtotal	*324*	*62*	*0*	*0*	*0*
Thurmont Total	***1,737***	***354***	***34***	***1,216***	***1,250***

(1) Pipeline dwellings: unbuilt dwellings/units in approved developments.
(2) Potential dwellings: net (75%) of undeveloped acreage (minus undeveloped acreage in pipeline) at 3.5 du/acre (LDR); 7.5 du/acre (MDR); and 15 du/acre (HDR)

Development Staging Mechanisms

Annexation

As a Municipal Growth Area, the annexation process will be the primary staging mechanism used by the Town. Annexation agreements, negotiated between the Town of Thurmont and the petitioner can address development phasing, limits of development, and responsibilities for public infrastructure and services not covered by the APFO. The Town has stated in its *Draft Master Plan* that as a primary growth management strategy it will seek to limit the number of annexations to those consistent with its growth rate policies.

Land Use Plan Designation

All land within the Thurmont Community Growth Area has a land use plan designation other than Agricultural/Rural, generally indicating that development would be appropriate on those properties within a 20-year timeframe subject to completion of other staging mechanisms.

Zoning

Zoning within the municipality is generally consistent with the land use designations identified in this plan. Future growth within the Thurmont Community Growth Area will occur through municipal annexation and will be zoned appropriately at that time.

Adequate Public Facilities Ordinance

The Town has its own Adequate Public Facilities Ordinance that closely mirrors that of the County. Development of additional residential uses will be constrained primarily by water and sewer capacity/distribution and local road impacts.

Water and Sewer Service

Presently, the Town is subject to a Consent Agreement ordered by the State due to severe Inflow and Infiltration (I&I) problems in the collection system. This agreement restricts new development in Thurmont to no more than 60 equivalent dwellings units (EDU's) per year. Water service is sufficient to serve future development.

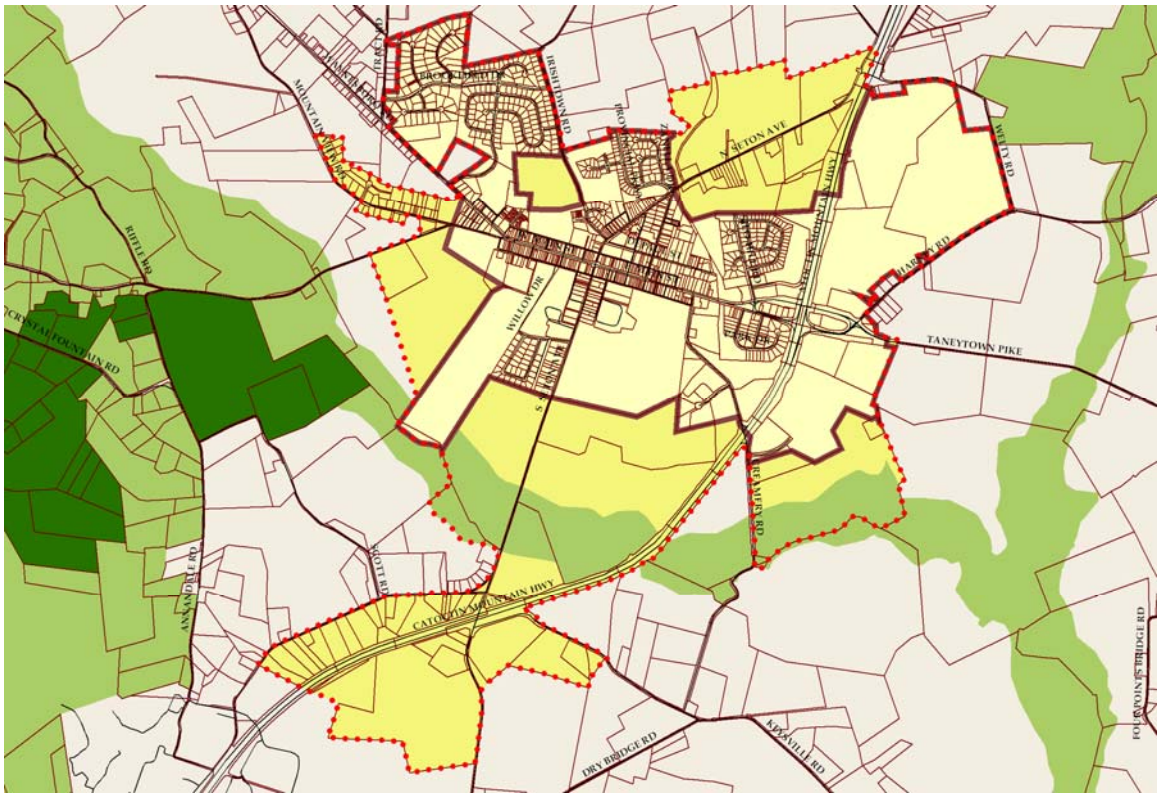
County Water and Sewerage Plan Revisions

The water/sewer service area will be revised to reflect adjustments to the community growth area boundary. County properties within the growth area that have a plan designation other than Agricultural/Rural or Natural Resource would have a Planned Service (PS) classification. County properties that have zoning other than Agricultural would have a W-5/S-5 classification.

Issues and Opportunities

- The close proximity of the Rural Community of Graceham to Thurmont's eastern municipal boundary, has sparked discussion during the Town's Master Plan update of the potential need to provide the small unincorporated community with public water and sewer service in the event of multiple well or septic failures. The Town's Draft Land Use Plan Map identifies a small area including Graceham as a "Conditional Annexation Area".
- Areas north of Roddy Creek Road, while not included in either the Town's or County's Growth Area, are designated by Thurmont as the "Franklinville Economic Opportunity Area" as a consideration of future employment potential on those northern lands situated on the eastern side of US 15.
- The presence of the commercial freight rail line in Thurmont provides opportunities for employment uses not entirely reliant on the highway system.
- Following the adoption of the Town's plan a municipal–county planning agreement that would address annexation areas and other issues should be prepared.

EMMITSBURG COMMUNITY GROWTH AREA



The Town of Emmitsburg supports a downtown business district with a mix of residential uses along its historic Main Street (MD 140) which serves as a distinctive opportunity for future infill development in the Town. The Town is home to several institutions including Mount St. Mary's University, the National Emergency Training Center, and the Daughters of Charity/National Shrine of St. Elizabeth Ann Seton.

Town of Emmitsburg Comprehensive Plan

The Town's current Comprehensive Plan was adopted in November 2009. Highlights of the Town's Plan:

- Addresses major land use issues including: residential growth capacity, open space preservation, adequacy of transportation infrastructure, mixed use development, and wise management of the Town's cultural and institutional resources.
- A significant reduction of its Municipal Growth Boundary consistent with the water resources available to serve new development.
- Supports complementary infill development.
- Seeks development of updated development standards that reflect tenets of traditional neighborhood design.

Community Plan Highlights

Growth Boundary Revisions

The Community Growth Boundary in this Plan contracts the boundary established in the 2008 Thurmont Region Plan, removing the area along Old Gettysburg Rd, several parcels on the east side of Irishtown Rd., and several parcels on the north side of Annandale Rd.. The Town's Adopted Comprehensive Plan illustrates a slightly larger Municipal Growth Boundary, the resultant boundary remains roughly consistent with the County's delineation of the Emmitsburg Community Growth Area.

While the parcels located along Old Gettysburg Road in the far northeastern corner of the community have been removed from the Growth Area, the northernmost parcels of non-municipal land immediately adjacent to the Mount St. Mary's University campus have been included in the CGA to accommodate institutional growth within the context of a municipal annexation.

Residential

Residential land supply in the Emmitsburg Community Growth Area is located primarily at two locations. The land located on the Town's western border, south of Annandale Road, provides the opportunity for Medium Density Residential development. Low density development on the Town's northern municipal boundary can be designed to integrate into the existing street network and traditional block pattern.

Commercial and Employment

Commercial activities are geographically divided between those in the downtown business district and those located adjacent to the US 15 corridor. Infill development and redevelopment for commercial activities will likely provide the Town with additional room to expand its commercial base.

Employment uses are planned primarily for those lands immediately abutting the US 15 corridor (east and west sides).

Agricultural and Rural Communities Plan Highlights

The Emmitsburg Community Growth Boundary is not immediately adjacent to any Priority Preservation Areas. There are a number of farm properties surrounding the Town that have agricultural preservation easements.

Green Infrastructure Plan Highlights

The Emmitsburg Community Growth Area is located in the Tom's Creek Watershed and draining into the Monocacy. The small stream corridors feeding into Tom's Creek – primarily Flat Run and Middle Creeks – provide opportunities for service as both passive and active open spaces in the Community.

The Town, in partnership with Mount St. Mary's University, envisions a network of multi-use, natural surface trails – the Emmitsburg Greenway and Trail - serving all areas of the municipality as well the University's campus and mountainside properties.

Table 10-37: Emmitsburg Community Land Use Plan: County Portion

Land Use Plan Designation	Acres Designated	Acres Undeveloped	Pipeline Dwellings (1)	Undev. Land Potential Dwellings (2)	Total Potential Dwellings
Residential					
Low Density Residential	230	105	0	263	263
Medium Density Residential	20	20	0	111	111
Subtotal	*250*	*124*	*0*	*374*	*374*
Other					
Agricultural	83	82	0	0	0
Institutional	301	175	0	0	0
Natural Resources	144	55	0	0	0
Subtotal	*528*	*311*	*0*	*0*	*0*
Commercial/Employment					
General Industrial	4	0	0	0	0
Limited Industrial	7	0	0	0	0
General Commercial	51	17	0	0	0
Subtotal	*63*	*17*	*0*	*0*	*0*
Emmitsburg Total	***840***	***453***	***0***	***374***	***374***

Table 10-38: Emmitsburg Community Land Use Plan: Town Portion

Land Use Plan Designation	Acres Designated	Acres Undeveloped	Pipeline Dwellings (1)	Undev. Land Potential Dwellings (2)	Total Potential Dwellings
Residential					
Medium Density Residential	30	2	0	10	10
Low Density Residential	294	143	52	286	338
Subtotal	*324*	*145*	*52*	*295*	*347*
Other					
Institutional	12	0	0	0	0
Public/Open Space	70	7	0	0	0
Natural Resources	32	19	0	0	0
Subtotal	*114*	*26*	*0*	*0*	*0*
Commercial/Employment					
Office Research Industrial	152	124	0	0	0
Limited Industrial	9	7	0	0	0
General Commercial	12	12	0	0	0
Village Center	110	38	0	0	0
Subtotal	*283*	*180*	*0*	*0*	*0*
Emmitsburg Total	***721***	***351***	***52***	***295***	***347***

(1) Pipeline dwellings: unbuilt dwellings/units in approved developments.
(2) Potential dwellings: net (75%) of undeveloped acreage (minus undeveloped acreage in pipeline) at 3.5 du/acre (LDR); 7.5 du/acre (MDR); and 15 du/acre (HDR)

Development Staging Mechanisms

Annexation

As a Municipal Growth Area, the annexation process will be the primary staging mechanism used by the Town. Annexation agreements, negotiated between the Town of Emmitsburg and the petitioner can address development phasing, limits of development, and responsibilities for public infrastructure and services not covered by an APFO.

Land Use Plan Designation

Most of the lands identified within the Emmitsburg Community Growth Area have a land use plan designation other than Agricultural/Rural, generally indicating that development would be appropriate on those properties within a 20-year timeframe.

Zoning

Residentially designated County land within the Community Growth Boundary will be zoned Agricultural. Land located within the growth area would require municipal annexation in order to obtain zoning appropriate for development.

Adequate Public Facilities Ordinance

The Town of Emmitsburg does not currently have an Adequate Public Facilities Ordinance (APFO). The Town has acknowledged the need to adopt such an ordinance once its Comprehensive Plan update is completed. In the meantime, new development occurring as a result of annexation will be wholly reliant upon a sufficiently constructed annexation agreement while development within municipal boundaries will have no such potential constraints.

Water and Sewer Service

The Town's sewerage system is capable of handling anticipated residential growth projected for the next 20 years while maintaining a design capacity buffer of 20%. The current water capacity has limited available capacity but with planned improvements is expected to accommodate planned future development.

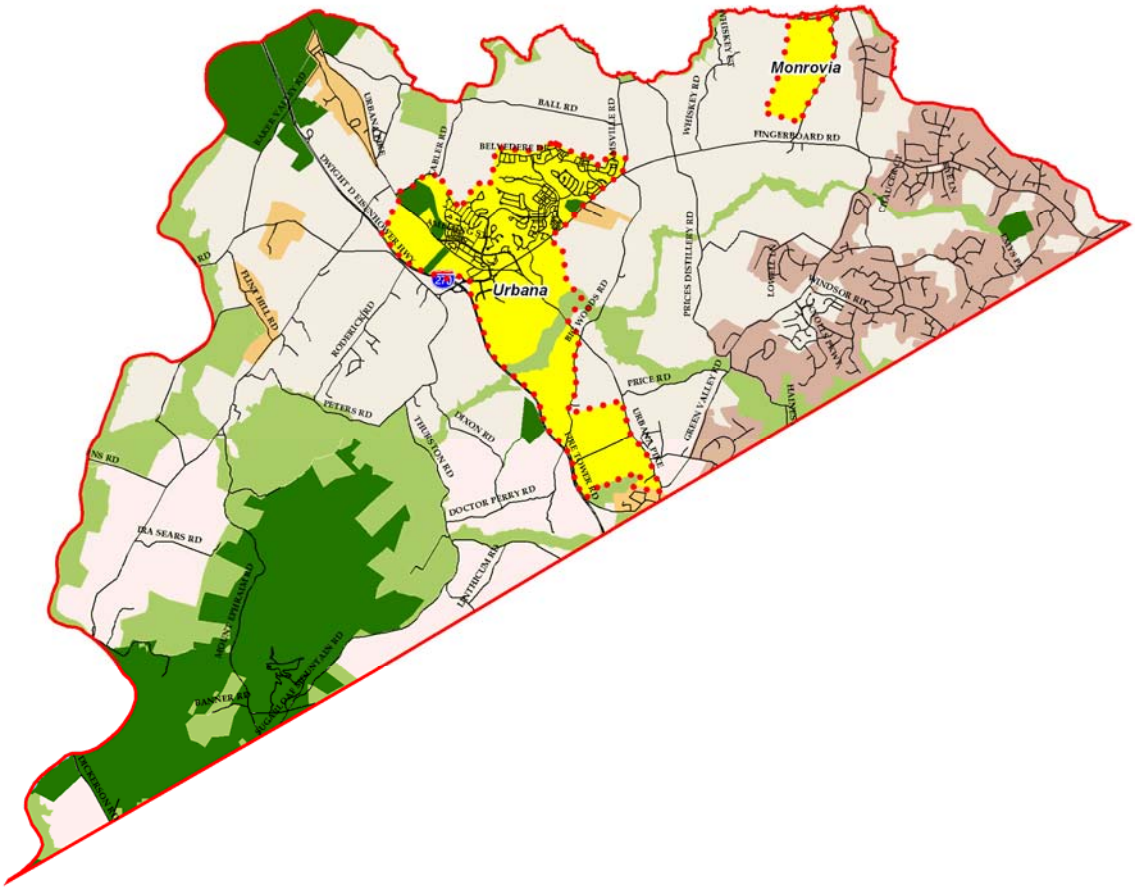
County Water and Sewerage Plan Revisions

The water/sewer service area are revised to reflect adjustments to the community growth area boundary. County properties within the growth area that have a plan designation other than Agricultural/Rural or Natural Resource will have a Planned Service (PS) classification. County properties that have zoning other than Agricultural will have a W-5/S-5 classification.

Issues and Opportunities

- Development of Mount St. Mary's University's properties – north of the existing campus on the east side of US 15 – provides an opportunity for development that can complement both the Town and University. The adequacy of US 15 access, however, remains a concern for development at this location.
- Although additional water treatment capacity remains in the existing facilities, the supply of water itself is a concern for long-term growth prospects in the Emmitsburg Community Growth Area.

URBANA PLANNING REGION PROFILE



REGIONAL ISSUES AND UNIQUE FEATURES

Current Region Population:
18,781

Community Population:
Urbana: 6,705
Monrovia: 23

Projected Population:
30,650 (2020) [based on 2004 Region Plan Growth Area]

Population Growth Rates:
7.6% (2000-2008)
1.4% (1990-2000)

Household Size:
2.9

Highways
Existing Primary and Arterials:
I-270, MD 355, MD 75, MD 80

- Urbana Region has two Unincorporated Growth Areas in Urbana and Monrovia. The Villages of Urbana and Urbana Highlands PUD's comprise the majority of residential development in the Urbana community. Urbana will also serve as the regional center for commercial and employment development.
- I-270 and MD 355 form a dual north-south transportation and employment corridor stretching from the border with Montgomery County to Urbana southern
- The Green Valley Rural Residential area – located between MD 75 and the Montgomery County border – is home to 1,850 residences.

Highways (cont.)

Planned Improvements:
I-270/US 15 Multi-Modal Study Improvements including widening of interstate and a new interchange located at a relocated MD 75.

Relocated MD 75 between Lewisdale Road and I-270.

Re-alignment of MD 75/MD 80 intersection in Monrovia Community.

Transit/Railroad
Existing Service:
MTA's 991 Commuter Bus service to Shady Grove Metro station; Montgomery County Ride-On bus service (peak periods only) to Shady Grove Metro station

Planned Improvements:
I-270/Transitway – Alignment would connect City of Frederick with Shady Grove Metro station. Right-of-way could accommodate either Light Rail Transit (LRT) or Bus Rapid Transit (BRT)

Bike and Pedestrian Facilities
Bike and pedestrian network developing in Urbana's PUD's.

State Highway road improvements accommodating bicycle and pedestrian access with sidewalks, dedicated bike lanes, and modern crosswalks, signals, and signage.

Pedestrian and bicycle improvements slated for Monrovia Community in association with development of the age-restricted PUD. Re-alignment of MD 80 and MD 75 to include pedestrian and bicycle improvements.

I-270 Transitway development could accommodate multi-use trail

Monocacy Greenway (Multi Use Regional Trail) linking Glade Creek and the Potomac River

Bush Creek Multi-Use Trail

Schools
Urbana HS, Windsor Knolls MS, Urbana MS, Urbana ES, Centerville ES, Green Valley ES, Kemptown ES

- Sugarloaf Mountain, situated in the southwestern corner of the region, is a 3,000 acre regional landmark owned and managed by the private non-profit organization, Stronghold Incorporated.

GENERAL PLAN COMPONENTS

Community Plan

- Urbana – Unincorporated Growth Area
- Monrovia – Unincorporated Growth Area
- I-270 Employment Corridor

Green Infrastructure Plan

Natural Resource Features:
- Monocacy River, Sugarloaf Mountain, Bush Creek, Bennett Creek,

Park and Protected Lands:
- Monocacy National Battlefield (majority of park within Urbana Region), Sugarloaf Mountain (Private non-profit; open to public), Kemptown Community Park, Urbana Community Park, Urbana District Park (under development)

Agricultural and Rural Community Plan

There are just 532 acres of land in agricultural preservation in the Urbana Region, which is by far the least amount of protected farmland of any region in Frederick County.

Rural Communities – Araby, Centerville, Flinthill, Hopeland, Hyattstown

Water/Sewer Service Areas:

Urbana Community Growth Area (includes I-270 Employment Corridor)
- Public services available to Urbana Community and northern portion of I-270 Employment Corridor, via connections to the County's Ballenger/McKinney Wastewater Treatment Plant and the New Design Water Treatment Plant.

- The I-270 Employment Corridor will be served by a series of at least three sewage pump stations providing service to industrial and office/research land uses between Urbana and the Montgomery County line.

Parks
Monocacy Natural Resource Area, Kemptown Community Park, Urbana Community Park, Urbana District Park (under development)

Private Parks: Sugarloaf Mountain (Private Non-Profit)

Federal Parks: Monocacy National Battlefield

Public Safety
Urbana Volunteer Fire Company, Green Valley Substation of the New Market Volunteer Fire Company

Planned Fire Station located in southern part of the I-270 Employment Corridor

Libraries
Urbana Regional Library

Monrovia Community Growth Area

- Public services are not yet available to the Monrovia Community, but the Growth Area would eventually be served via a connection to the County's Ballenger /McKinney Wastewater Treatment Plant and the New Design Water Treatment Plant. Transmission and distribution would be accomplished via the Bush Creek Interceptor (connecting to Ballenger/McKinney WWTP) and the extension of the County water main serving the area with treated water from the Potomac River.

Windsor Knolls Subregional System

- An existing sub-regional system serves the Knolls of Windsor development, the Windsor Knolls Middle School, and the Friends Meeting School.

REGIONAL SUMMARY

The following tables summarize the residential development potential and the breakdown of county zoning based on this Plan. The potential is only for the community growth areas and does not include the residential potential within the Agricultural/Rural or Natural Resource areas, which will have limited subdivision potential.

Table 10-39: Urbana Region Residential Land Use Development Potential

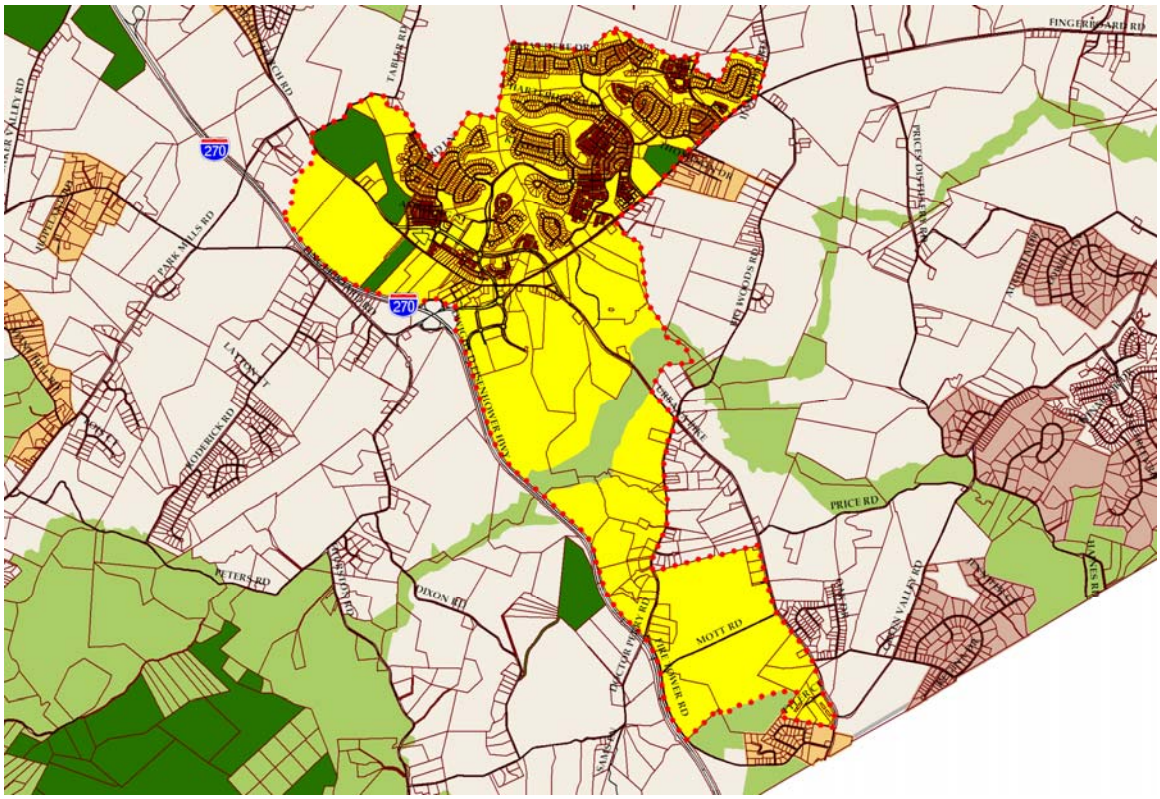
Growth Area	Acreage Designated Residential	Existing Dwellings	Total Potential Dwellings (1)	Total Dwellings	Total Projected Population
Monrovia	387	16	1,100	1,116	3,237
Urbana	970	2,218	1,015	3,233	9,376
Total	**1,357**	**2,234**	**2,115**	**4,349**	**12,613**

Source: Frederick County Division of Planning
(1) Includes approved pipeline development and undeveloped land potential.

Table 10-40: Urbana Region Zoning Acreage

Zoning District		Zoned Acres
Residential		
R1	Low Density Residential	4,099
PUD	Planned Unit Development	1,366
	Subtotal	*5,465*
Commercial and Employment		
GC	General Commercial	78
LI	Limited Industrial	394
MM	Mineral Mining	19
ORI	Office Research Industrial	557
	Subtotal	*1,048*
Mixed Use		
VC	Village Center	90
MXD	Mixed Use Development	388
	Subtotal	*477*
Other		
A	Agricultural	20,324
Ie	Institutional Euclidean	214
RC	Resource Conservation	10,656
	Subtotal	*31,193*
	Urbana Region Total Acres	***38,183***

URBANA COMMUNITY GROWTH AREA



The Urbana Community Growth Area is composed primarily of the Villages of Urbana/Urbana Highlands PUD and the older existing Urbana community centered along Urbana Pike (formerly MD 355). First designated as a growth area in 1972, the Urbana Community is located halfway between the City of Frederick and the Montgomery County line making it a convenient location for both residential and employment development in Frederick County.

- A mixed use community with 19th century and early 20th century architecture prevalent in the older core village area and neo-traditional neighborhood design forming the basis of new development in the PUD's and commercial locations.
- Existing facilities include four public schools, fire and rescue station, a regional library and senior center, public water and sewer service; limited regional transit service, a commercial and retail services center, and two County parks.
- Rezoning approvals granted for two large Mixed Use developments, north and south of the PUD's, with over a half million square feet of retail and over three million square feet of office & research uses. The community also includes the I-270 Employment Corridor.

Community Plan Highlights

Growth Boundary Revisions

The Growth Boundary established in this Plan follows closely the boundary established in the 1993 Urbana Region Plan which approximates the boundaries of the PUD's approved for the Community. Areas previously designated Agricultural/Rural as part of the 2004 Urbana Region Plan in the Future Growth Area north of the PUD's have been removed from the Growth Area.

Although the Urbana Community Growth Area and the I-270 Employment Corridor are identified as a single Growth Area, the employment area is discussed separately in this plan.

Residential

Residential land supply within the Urbana community is limited to infill development in 'Old' Urbana, designated Village Center, and planned development in the Urbana Town Center Employment MXD, which proposes 500 dwellings. These areas may ultimately yield between 500-600 additional residential units. Two hundred of these potential units are limited, by ordinance, to age-restricted units.

Commercial and Employment

Commercial activities are currently developing in and around the Urbana Town Center as part of the approved Villages of Urbana PUD. Convenience retail uses have emerged along MD 80, MD 355, and Urbana Pike to serve the growing residential and employment populations of the Urbana Community. Rezoning of the 181-acre Urbana Town Center Employment MXD was approved by the County in 2006 for close to 2 million square feet of employment uses and up to 50,000 square feet of associated commercial service uses. Additionally, there are opportunities for future commercial and employment uses in the Village Center-designated area of the original Urbana community along Urbana Pike.

Table 10-41: Urbana Community Land Use Plan

Land Use Plan Designation	Acres Designated	Acres Undeveloped	Pipeline Dwellings (1)	Undev. Land Potential Dwellings (2)	Total Potential Dwellings
Residential					
Low Density Residential	970	157	515	0	515
Subtotal	*970*	*157*	*515*	*0*	*515*
Other					
Institutional	199	19	0	0	0
Natural Resources	146	84	0	0	0
Public/Open Space	134	0	0	0	0
Agricultural	0	0	0	0	0
Subtotal	*480*	*102*	*0*	*0*	*0*
Commercial/Employment					
Village Center	116	11	0	0	0
Limited Industrial	377	312	0	0	0
Office Research Industrial	995	528	500	0	500
Subtotal	*1,488*	*851*	*500*	*0*	*500*
Urbana Total	***2,937***	***1,109***	***1,015***	***0***	***1,015***

(1) Pipeline dwellings: unbuilt dwellings/units in approved developments.
(2) Potential dwellings: net (75%) of undeveloped acreage (minus undeveloped acreage in pipeline) at 3.5 du/acre (LDR); 7.5 du/acre (MDR); and 15 du/acre (HDR)

Agricultural and Rural Communities Plan Highlights

The Urbana Growth Boundary is not immediately adjacent to any Priority Preservation Areas. The closest PPA, the Carrollton Manor Priority Preservation Area, extends to the western boundary of the Urbana Region approximately 3 miles west of the Urbana Community.

Green Infrastructure Plan Highlights

The vegetated small stream corridors feeding into Bush Creek comprise the primary natural areas in the Urbana PUD's and serve as both passive and active open spaces in the Community.

The interconnected multi-use trails constructed and planned for the Urbana Growth Area provide future opportunities to link this residential and employment center to trail systems along Bush Creek, the Monocacy River, and the multi-use trail that would parallel the I-270 Transitway. This network may also be used to link the Urbana Community with the Monocacy National Battlefield, Sugarloaf Mountain, and Little Bennett Regional Park (in Montgomery County).

Development Staging Mechanisms

Land Use Plan Designation
All land within the Urbana Community Growth Area has a land use plan designation other than Agricultural/Rural, generally indicating that development would be appropriate on those properties within a 20-year timeframe subject to completion of other staging mechanisms.

Zoning
All of the zoning necessary to implement the land use plan is in place in the Urbana Community.

Adequate Public Facilities Ordinance
Development of additional residential uses – particularly as infill or redevelopment in the Village Center zoned areas of old Urbana along Urbana Pike – will be constrained primarily by school capacity.

Water and Sewer Service
Water is provided through the County's New Design System, which has sufficient treatment capacity to accommodate the build out of the Urbana community. Wastewater treatment is provided through the Ballenger/McKinney WWTP which is adequate to serve the community.

County Water and Sewerage Plan Revisions

The Future Growth Area that is removed from the Urbana Community Growth Area will also be removed from the water/sewer service area and be classified as No Planned Service (NPS).

Issues and Opportunities

- How to maintain the distinct character of the "Old" Urbana village area along Urbana Pike.
- Identify opportunities to link, via bicycle, pedestrian, and transit, the residential developments in the PUD with the employment areas in the Urbana Town Center MXD and the Urbana Office Research Center MXD.

I-270 EMPLOYMENT CORRIDOR

Part of the Urbana Community Growth Area, the I-270 Employment Corridor comprises approximately 1,350 acres of land designated for Limited Industrial and Office/Research/Industrial uses between MD 355 and I-270. This employment area continues the land use concept of the "I-270 Technology Corridor", which extends along the Montgomery County portion of I-270.

- A Transitway alignment has been identified along I-270 to connect to the Corridor Cities Transitway (CCT) planned in Montgomery County to connect the Shady Grove Metro station to Clarksburg. The I-270 Transitway would link the City of Fredrick with employment and mixed use centers in northern Montgomery County as well as provide a link to the Metro system at Shady Grove.

Community Plan Highlights

Growth Boundary Revisions

The Growth Boundary established in this Plan for the I-270 Employment Corridor follows closely the boundary established in the 2004 Urbana Region Plan. A small portion of the Growth Area on the far southern end along Fire Tower Rd. has been removed and designated Natural Resource and Agricultural/Rural.

Residential

The Employment Corridor is not intended, nor is it encouraged, for the development of residential uses. However, it is currently possible for the MXD floating zone to be applied to lands designated Office/Research/Industrial, which would allow for limited residential uses. The Urbana Town Center MXD has a residential component for 500 dwellings.

Commercial and Employment

The southern portion of the corridor is oriented to Limited Industrial uses on those properties that do not have frontage along I-270. There is some existing well/septic industrial development that could be redeveloped once public water/sewer is available. Properties fronting along I-270 are designated Office/Research/Industrial with a focus on corporate office uses.

Commercial activities that do not support the employment uses in this corridor are not considered preferred uses in this portion of the Growth Area. Commercial uses that serve the needs of employers and employees in the corridor would be encouraged but limited in scope so as to maintain acreage for office, research and industrial uses.

Agricultural and Rural Communities Plan Highlights

The I-270 Employment Corridor is located approximately 3 miles east of the Carrollton Manor Priority Preservation Area.

Green Infrastructure Plan Highlights

Located in the Bennett Creek Watershed, the vegetated small stream corridors feeding into the larger waterway will be protected from harmful impacts during the plan review process as individual and clusters of parcels are developed over time for employment uses.

Development Staging Mechanisms

Land Use Plan Designation

All land within the I-270 Employment Corridor has a land use plan designation other than Agricultural/Rural, generally indicating that development would be appropriate on those properties within a 20-year timeframe subject to completion of other staging mechanisms.

Zoning

Most of the zoning is currently in place to implement the land use plan for the Corridor. A few parcels along Doctor Perry Road remain zoned Agricultural and may be considered for rezoning to ORI or LI either as part of a piecemeal request or through the comprehensive zoning process. Lands at the far southern end of the corridor – primarily along Fire Tower Road – have been removed from the Growth Area and the zoning reflects Agricultural and Resource Conservation to match the land use plan.

Adequate Public Facilities Ordinance

The APFO would be addressed as part of any site plan or subdivision review process. The primary constraints for the planned Limited Industrial and Office/Research uses would involve road and capacity and water/sewer capacity. Any residential uses proposed through the approval of MXD zoning in the corridor would be subject to school capacity standards.

Water and Sewer Service

The extension of the community water and sewer system, particularly for the southern portion of the corridor below Bennett Creek will be the primary constraint to the full build-out of the corridor. The development of the corridor beyond the immediate Urbana area will be dependant on the construction of several sewage pump stations and the transmission pipe system. These improvements are expected to be developer funded and constructed.

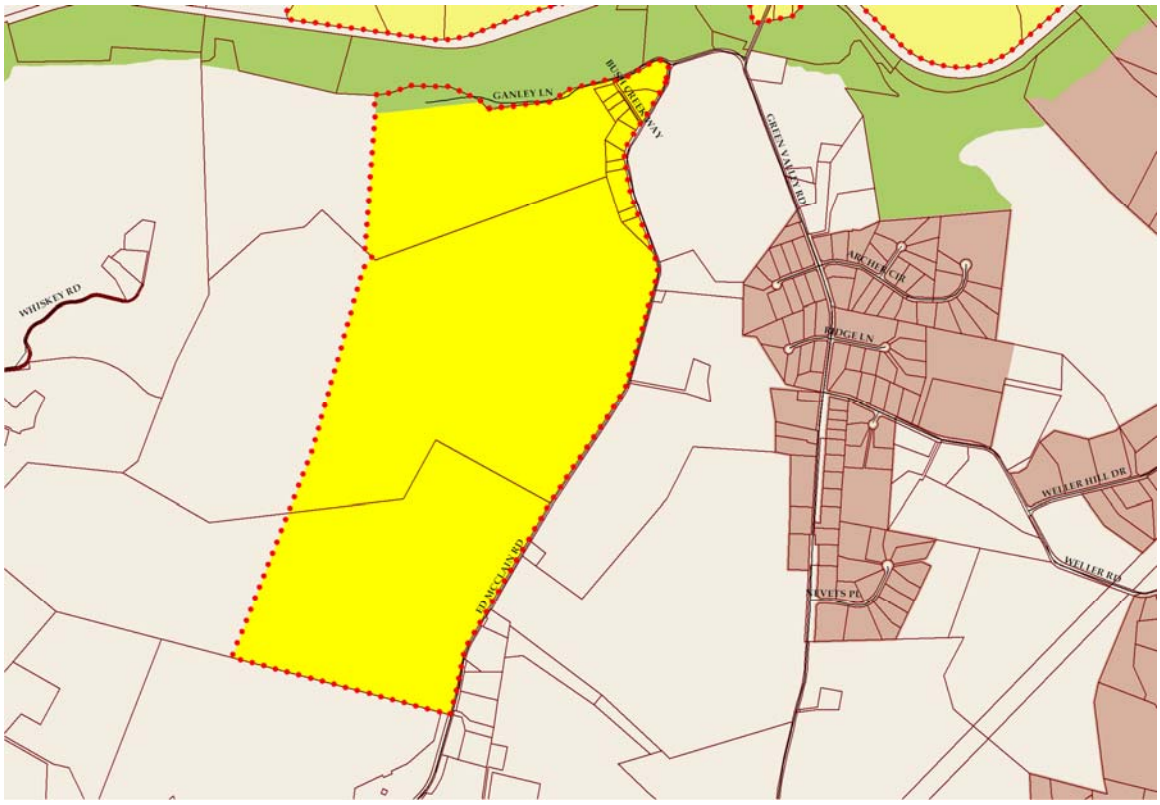
County Water and Sewerage Plan Revisions

- The water/sewer service area boundary is adjusted to reflect the revised growth areas boundary in the southern portion of the corridor. Parcels removed from the growth boundary are classified No Planned Service (NPS).

Issues and Opportunities

- Given the long term plans for the I-270 Transitway, new development must still address preservation of the right-of-way and how development could implement Transit Oriented Design (TOD) elements.
- Opportunity for a corridor plan to focus on how TOD could be implemented along the I-270 Transitway alignment.
- Ensure that industrial development that is initially on individual well/septic systems can be appropriately redeveloped once public water/sewer is available throughout the corridor.
- As part of a future corridor plan effort, determine the appropriateness, if any, for residential uses that may be proposed as part of MXD floating zone applications.
- While a fire station symbol is not shown on the Land Use Plan map, a station in this area between I-270 and MD 355 would be considered if the Hyattstown Fire Station is closed.

MONROVIA COMMUNITY GROWTH AREA



The Monrovia Community Growth Area includes the area generally coinciding with the boundaries of the Landsdale Planned Unit Development (PUD) an age-restricted development of 1,100 dwellings on the west side of Ed McClain Road. The 2004 Urbana Region Plan designated a larger growth area, which included the adjacent planned Monrovia Town Center age-restricted PUD as well as a general commercial area located at the intersection of MD 75 and MD 80.

- Existing nearby facilities (outside of the growth area) includes a fire and rescue station, a bank, and nearby access to elementary and middle schools. A site has been set aside for a possible school or park facility near the MD 75/MD 80 in association with one of the development proposals in the growth area.
- Re-alignment of the MD 75/MD 80 intersection and a realignment of MD 75 north of the proposed development, bypassing the older community of Monrovia and bridging Bush Creek, are planned.

Community Plan Highlights

Growth Boundary Revisions

The Growth Boundary established in this Plan for the Monrovia Community Growth Area is scaled down considerably from the boundary identified in the 2004 Urbana Region Plan. All but a small portion of the 2004 Growth Area – an area coinciding with the boundaries of the Landsdale PUD west of Ed McClain Road - has been removed and instead designated primarily Agricultural/Rural.

Residential
The adjusted Growth Area would provide for the build out of the approved 1,100 dwelling units in the Landsdale PUD, which is planned as an age-restricted community. No additional acreage is designated for future residential growth.

Commercial and Employment
The entirety of this Growth Area is designated for Low Density Residential uses. General Commercial uses at the MD 75/80 intersection include a bank, a restaurant, and an insurance office continue to be designated General Commercial.

Table 10-42: Monrovia Community Land Use Plan

Land Use Plan Designation	Acres Designated	Acres Undeveloped	Pipeline Dwellings (1)	Undev. Land Potential Dwellings (2)	Total Potential Dwellings
Residential					
Low Density Residential	387	376	1,100	0	1,100
Subtotal	*387*	*376*	*1,100*	*0*	*1,100*
Other					
Natural Resources	5	5	0	0	0
Subtotal	*5*	*5*	*0*	*0*	*0*
Monrovia Total	***392***	***381***	***1,100***	***0***	***1,100***

(1) Pipeline dwellings: unbuilt dwellings/units in approved developments.
(2) Potential dwellings: net (75%) of undeveloped acreage (minus undeveloped acreage in pipeline) at 3.5 du/acre (LDR); 7.5 du/acre (MDR); and 15 du/acre (HDR)

Agricultural and Rural Communities Plan Highlights

The Monrovia Community Growth Area, at its closest point, is approximately 2-3 miles from the Eastern Priority Preservation Area in the New Market region.

Green Infrastructure Plan Highlights

Located in the Lower Bush Creek Watershed, the Monrovia Community Growth Area extends northward up to the Resource Conservation acreage bordering Bush Creek itself. A Special Use Park – to be acquired and developed by the County as a condition of the PUD zoning of the Landsdale Community – occupies the northernmost acreage in the Growth Area. An internal trail system would provide links into the park from the residential neighborhoods in the Growth Area.

Development Staging Mechanisms

Land Use Plan Designation
All land within the Monrovia Community Growth Area has a land use plan designation of Low Density Residential, generally indicating that development would be appropriate on those properties within a 20-year timeframe subject to completion of other staging mechanisms.

Zoning
Residentially designated County land within the Community Growth Boundary is currently zoned Planned Unit Development.

Adequate Public Facilities Ordinance

Developers of the Landsdale project have APFO approvals and an agreement (Letter of Understanding) with the County detailing the necessary improvements needed to proceed with various stages of the project.

Water and Sewer Service

Drinking water would be provided through the New Design Road System, which would be able to accommodate the build out of the Monrovia community. Wastewater treatment would be provided through the Ballenger/McKinney WWTP. The connection to the Ballenger/McKinney system is dependant on the construction of the Middle Phase of the Bush Creek interceptor, which will be funded and constructed by the Landsdale developer.

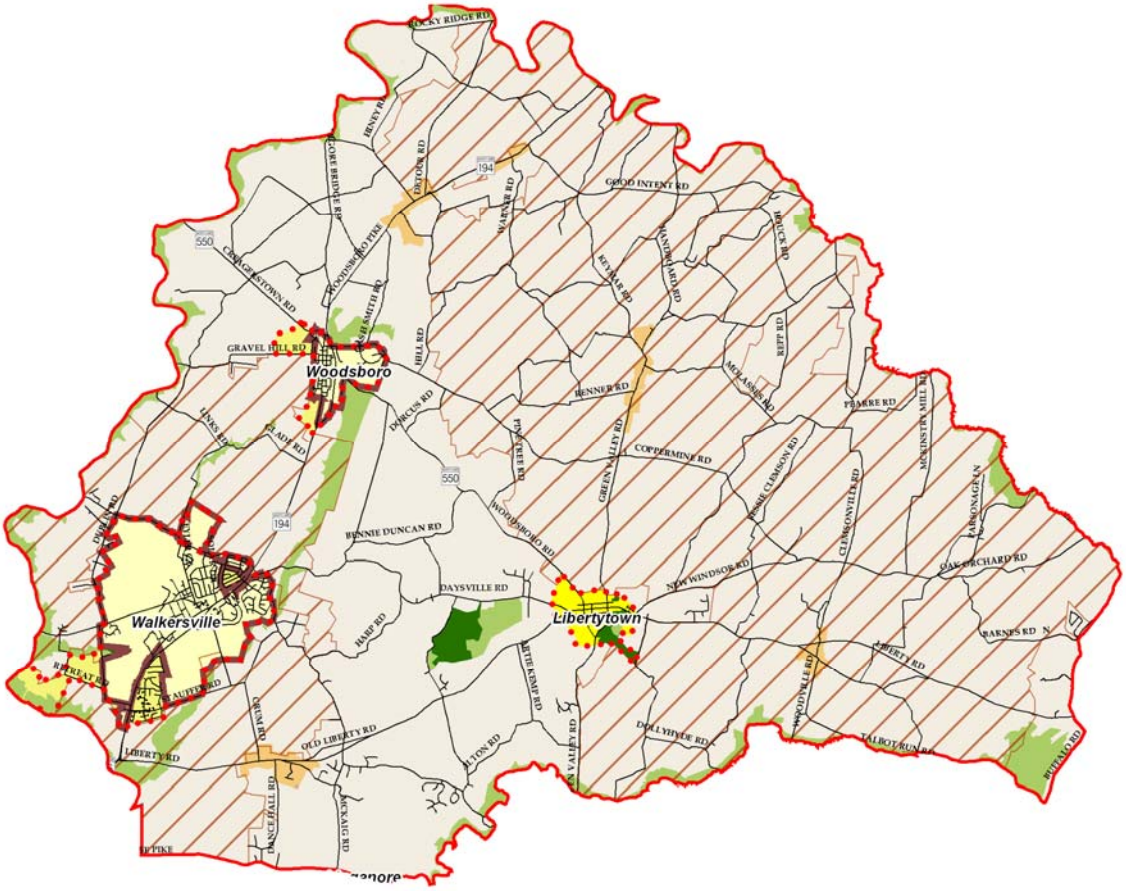
County Water and Sewerage Plan Revisions

The area removed from the growth boundary will also be removed from the water/sewer service area and would all be classified No Planned Service (NPS).

Issues and Opportunities

- Facilitate improvements to MD 75 at the intersection with MD 80 and for a planned relocation for section across Bush Creek to the I-70 interchange.

WALKERSVILLE PLANNING REGION PROFILE



Current Region Population:
21,363

Community Population
Town of Walkersville: 5,855
Town of Woodsboro: 961
Libertytown: 739

Projected Population:
34,045 (2030)

Population Growth Rates:
1.5% (2000-2005)
2.3% (1990-2000)

Household Size:
2.9 Walkersville
3.1 Woodsboro
2.8 Libertytown

REGIONAL ISSUES AND UNIQUE FEATURES

- The corridor between Walkersville and Woodsboro has one of the largest areas of prime farmland soils in the County. This is the basis for the Walkersville Priority Preservation Area.
- This Plan delineates an 'Area of Planning Influence' around the Town of Walkersville that recognizes the Town's desire to promote the preservation of agricultural uses within this area.
- Walkersville is situated in karst terrain where ground water resources are under the influence of surface conditions.
- Region includes three quarry operations around Woodsboro and in the eastern part of the region near Union Bridge.

Major Roads/Highways

Existing
MD 194, MD 26, MD 75, MD 31, MD 550

Planned
Connector road between MD 550 and MD 75 on north side of Libertytown

Transit

Expanded service to Walkersville

Bike/Pedestrian

Planned trail corridors along Israel Creek, southern portion of Glade Creek and Monocacy River.
Monocacy Water Trail (canoe/kayak trail)

Schools

Walkersville HS, Walkersville MS, Walkersville ES, Glade ES, Woodsboro-New Midway ES

Parks

Fountain Rock Nature Center, Heritage Farm Park, Woodsboro Community Park, Libertytown Community Park

Public Safety

Walkersville, Woodsboro, Libertytown and New Midway Volunteer Fire Companies

Library

Walkersville Regional Library

- Freight rail access is available in Walkersville, Woodsboro, New Midway, and Ladiesburg via the Maryland Midland Railway

GENERAL PLAN COMPONENTS

Community Plan Elements

- Town of Walkersville – Municipal Growth Area and Area of Planning Influence
- Town of Woodsboro – Municipal Growth Area
- Libertytown – Unincorporated Growth Area

Green Infrastructure Plan Elements

- Natural Resource features include the Monocacy River, Israel Creek, Glade Creek, and Upper Linganore Creek
- Park and protected land features include the Fountain Rock Spring and Nature Center, Woodsboro Community Park (along Israel Creek), Libertytown Community Park (along Town Branch), Heritage Farm Park

Agricultural and Rural Community Plan Elements

- Walkersville Priority Preservation Area
- Eastern Priority Preservation Area
- Rural Communities – Mt. Pleasant, Unionville, Johnsville, New Midway, Ladiesburg

Water and Sewer Service Area

- Both Walkersville and Woodsboro maintain their own municipal water systems, which are groundwater based. Libertytown does not currently have a community wide system. The older developed areas along MD 26 rely on individual wells while three newer developments each have their own community systems which rely on groundwater. The County maintains two of these systems and the third is privately maintained.
- Woodsboro maintains its own municipal wastewater system with a wastewater treatment plant located on Israel Creek. The Walkersville and Libertytown communities are served by the County and are connected to the system that is ultimately treated at the Ballenger/McKinney WWTP.

REGIONAL SUMMARY

The following tables summarize the residential development potential and the breakdown of county zoning based on this Plan. The residential potential is only for the community growth areas and includes the municipalities. It does not include the residential potential within the Agricultural/Rural or Natural Resource areas, which will have limited subdivision potential.

Table 10-43: Walkersville Region Residential Land Use Development Potential

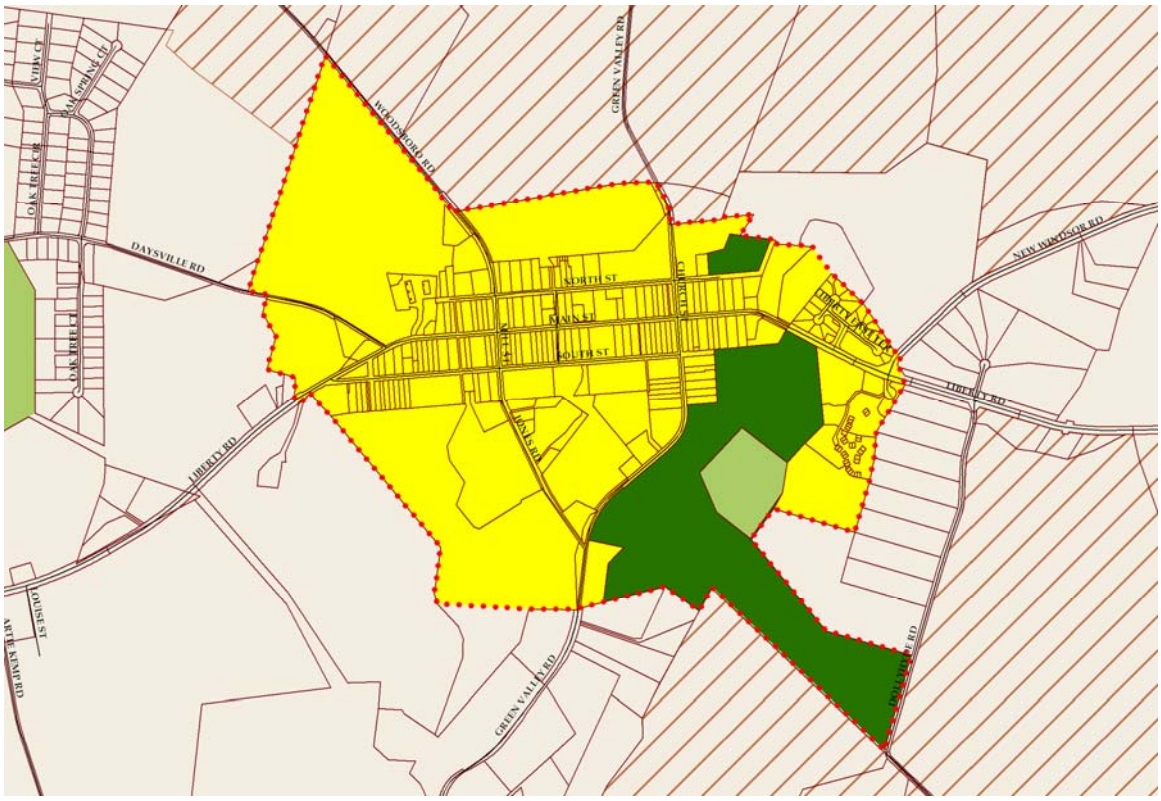
Growth Area	Acreage Designated Residential	Existing Dwellings	Total Potential Dwellings (1)	Total Dwellings	Total Projected Population
Libertytown	262	251	499	750	2,099
Walkersville	901	2,903	578	3,481	9,317
Woodsboro	298	362	370	732	2,270
Total	**1,461**	**3,516**	**1,447**	**4,963**	**13,686**

Source: Frederick County Division of Planning
(1) Includes approved pipeline development and undeveloped land potential.

Table 10-44: Walkersville Region Zoning Acreages

Zoning District		Zoned Acres
Residential		
R1	Low Density Residential	1,644
R3	Low Density Residential	309
	Subtotal	*1,953*
Commercial and Employment		
GC	General Commercial	16
GI	General Industrial	16
LI	Limited Industrial	119
MM	Mineral Mining	2,678
	Subtotal	*2,830*
Mixed Use		
VC	Village Center	222
MXD	Mixed Use Development	168
	Subtotal	*390*
Other		
A	Agricultural	62,559
Ie	Institutional Euclidean	11
RC	Resource Conservation	3,007
	Subtotal	*65,577*
	Walkersville Region Total Acres	***70,750***

LIBERTYTOWN COMMUNITY GROWTH AREA



Libertytown is an unincorporated community of approximately 770 residents located along MD 26 east of Mt. Pleasant. The community's "Main Street" is characterized by a mix of residential and commercial uses in late 19th century and early 20th century structures. Only since the 1990's have there been several new developments constructed in the community including Liberty East, Liberty Village, and the Liberty Condominiums.

As part of the 2006 Walkersville Region Plan, a Small Area planning process was conducted for Libertytown to provide greater detail to areas including land use/zoning, community facilities, circulation, and design.

Community Plan Highlights

Growth Boundary Revisions

The growth area has been reduced significantly from the area designated in the 2006 Walkersville Region Plan. Beyond the core of existing development only two significant undeveloped properties are proposed to remain within the growth area, including a large portion of the Wormald property on the west side of Jones Rd. and the Mayne property between MD 550 and Daysville Rd.

Residential

The Village Center along MD 26 between North St. and South St. is retained to support a mix of residential and commercial uses. The Low Density Residential designation on largely undeveloped land is retained on the Mayne, Wormald, and Hood properties.

Commercial and Employment

The Village Center plan designation would facilitate less intensive commercial, retail, and office uses along MD 26. A small area of General Commercial is retained at the intersection of MD 26 and Daysville Rd. The community does not have any industrial/office employment designations.

Table 10-45: Libertytown Community Land Use Plan

Land Use Plan Designation	Acres Designated	Acres Undeveloped	Pipeline Dwellings (1)	Undev. Land Potential Dwellings (2)	Total Potential Dwellings
Residential					
Low Density Residential	262	186	10	489	499
Subtotal	*262*	*186*	*10*	*489*	*499*
Other					
Institutional	15	0	0	0	0
Public/Open Space	105	0	0	0	0
Subtotal	*120*	*0*	*0*	*0*	*0*
Commercial/Employment					
General Commercial	8	8	0	0	0
Village Center	68	7	0	0	0
Subtotal	*76*	*14*	*0*	*0*	*0*
Libertytown Total	***457***	***200***	***10***	***489***	***499***

(1) Pipeline dwellings: unbuilt dwellings/units in approved developments.
(2) Potential dwellings: net (75%) of undeveloped acreage (minus undeveloped acreage in pipeline) at 3.5 du/acre (LDR); 7.5 du/acre (MDR); and 15 du/acre (HDR)

Agricultural and Rural Communities Plan Highlights

The community is adjoined on the north side and southeast sides by the Eastern Priority Preservation Area. There is one agricultural preservation easement adjoining the community growth boundary on the north side of Libertytown at MD 75.

Green Infrastructure Plan Highlights

To the west of Libertytown is a contiguous forest area adjoining a parcel owned by the Town of Walkersville, which was formerly used as a water source for the Town. Other natural resource features within Libertytown include several small tributaries of Linganore Creek. The Libertytown Community Park is wholly within the growth area boundary for Libertytown.

Development Staging Mechanisms

Land Use Plan Designation

Undeveloped properties identified within the Community Growth Area are designated for Low Density Residential to allow for appropriate residential development. These future development

areas are situated in such a way as to take full advantage of the existing development pattern and road network in Libertytown.

Zoning
The R-3 zoning is retained on the Mayne and Wormald properties, while the Hood property is zoned Agricultural.

Adequate Public Facilities Ordinance
The Mayne and Wormald properties will still be subject to an APFO review with water and sewer capacity as the primary constraint.

Water and Sewer Service
The provision of public water and sewerage service are the most significant constraints to allowing for new development in Libertytown. For sewerage service the Phase I improvements for the new pump station and force main system are operational and provide a total capacity of 180,000 gallons/day, which could serve 720 equivalent dwelling units (EDU). With current allocations for existing development and existing vacant lots there would be an unallocated capacity of approximately 106 EDU. The ultimate pump station capacity will be 300,000 gallons/day with the additional capacity to provide approximately 480 EDU, which including the unallocated capacity from Phase I could accommodate a total of 586 EDU.

Currently, Libertytown is served by several community water systems that only serve individual developments (Liberty East, Liberty Village, Libertytown Apartments, and Liberty Elementary School) in the community. They are not connected in a single community system. The majority of residents are currently served by individual wells. Ultimately, a single community water system is planned for Libertytown as new development takes place. It is expected that the new developments will be responsible for preparing the necessary studies and for constructing - at a minimum - the initial portions of a community system.

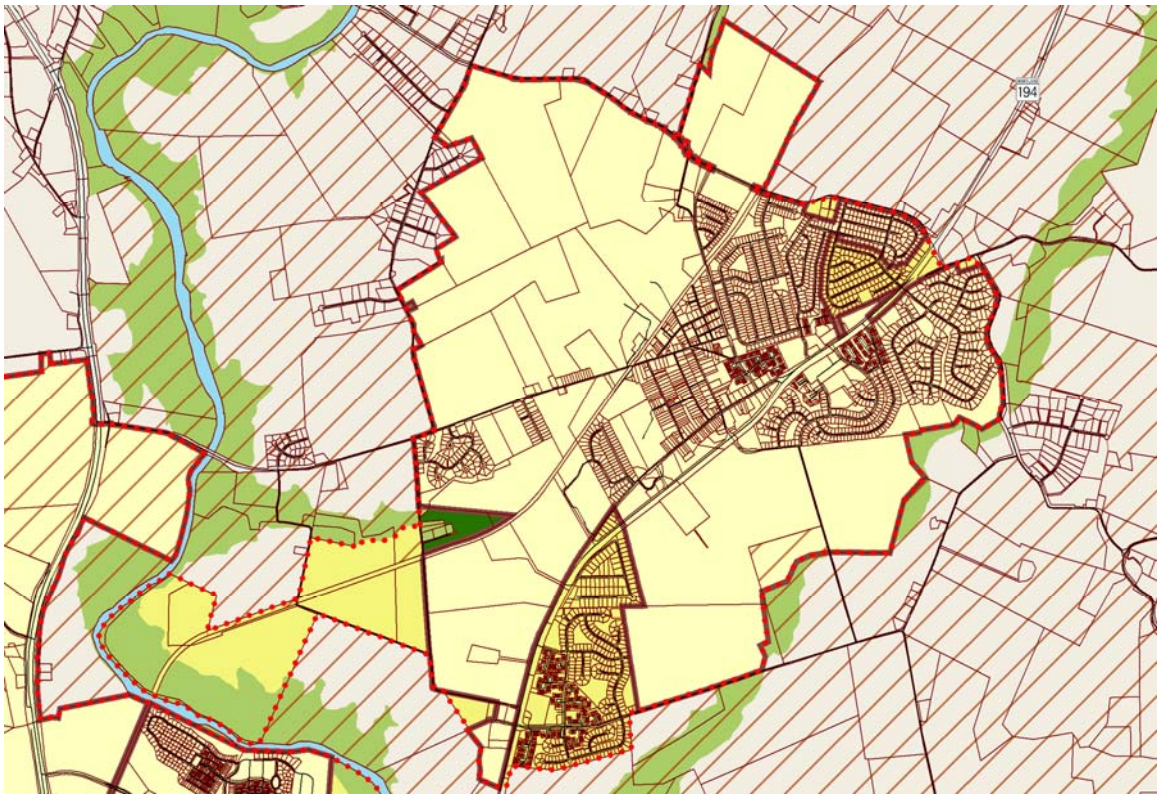
County Water and Sewerage Plan Revisions

The water/sewer service area boundary is revised to reflect the contraction of the community growth area boundary. Properties with the Agricultural/Rural plan designation will have the water/sewer classification changed to No Planned Service (NPS). Properties that have a plan designation other than Agricultural/Rural or Natural Resource would have a Planned Service (PS) classification.

Issues and Opportunities

- Conduct a community plan update for Libertytown based in part upon recommendations identified in the Libertytown Small Area Plan prepared as part of the 2006 Walkersville Region Plan.
- Facilitate coordination between the County and developers to construct the initial phases of a community wide water system.
- Pursue an alternative route between MD 550 north to MD 75 south to primarily facilitate truck movement away from the current MD 550/MD 26 intersection.

WALKERSVILLE COMMUNITY GROWTH AREA



Walkersville is the largest community within the Walkersville region with an estimated population of 5,855 in 2009. The community is supported by all three school levels and a small branch library. A unique feature of Walkersville is the substantial amount of agricultural land both within the current Town limits, and within the municipal Area of Planning Influence.

Town of Walkersville Comprehensive Plan

The Town's current Plan was adopted in 2003 and is currently being updated. The basic premise of the Town's Comprehensive Plan is to identify only enough land to accommodate the new development anticipated within the next five (5) years though their growth boundary is based on a 20+ year timeframe. The Town assumes an average growth rate of 40-50 dwellings per year, although it has experienced much less. Walkersville's 2003 Comprehensive Plan land use map designates nearly 4,000 acres of land as Agricultural of which approximately 210 acres are currently developed. Most of this Agriculturally-designated vacant land sits beyond the municipal boundaries of Walkersville. The Town's plan remains unclear as to the long term disposition of Agriculturally-designated lands within its future annexation limits, though it encourages participation in the County and State Agricultural Land Preservation programs by farmers whose lands are within this area.

Community Plan Highlights

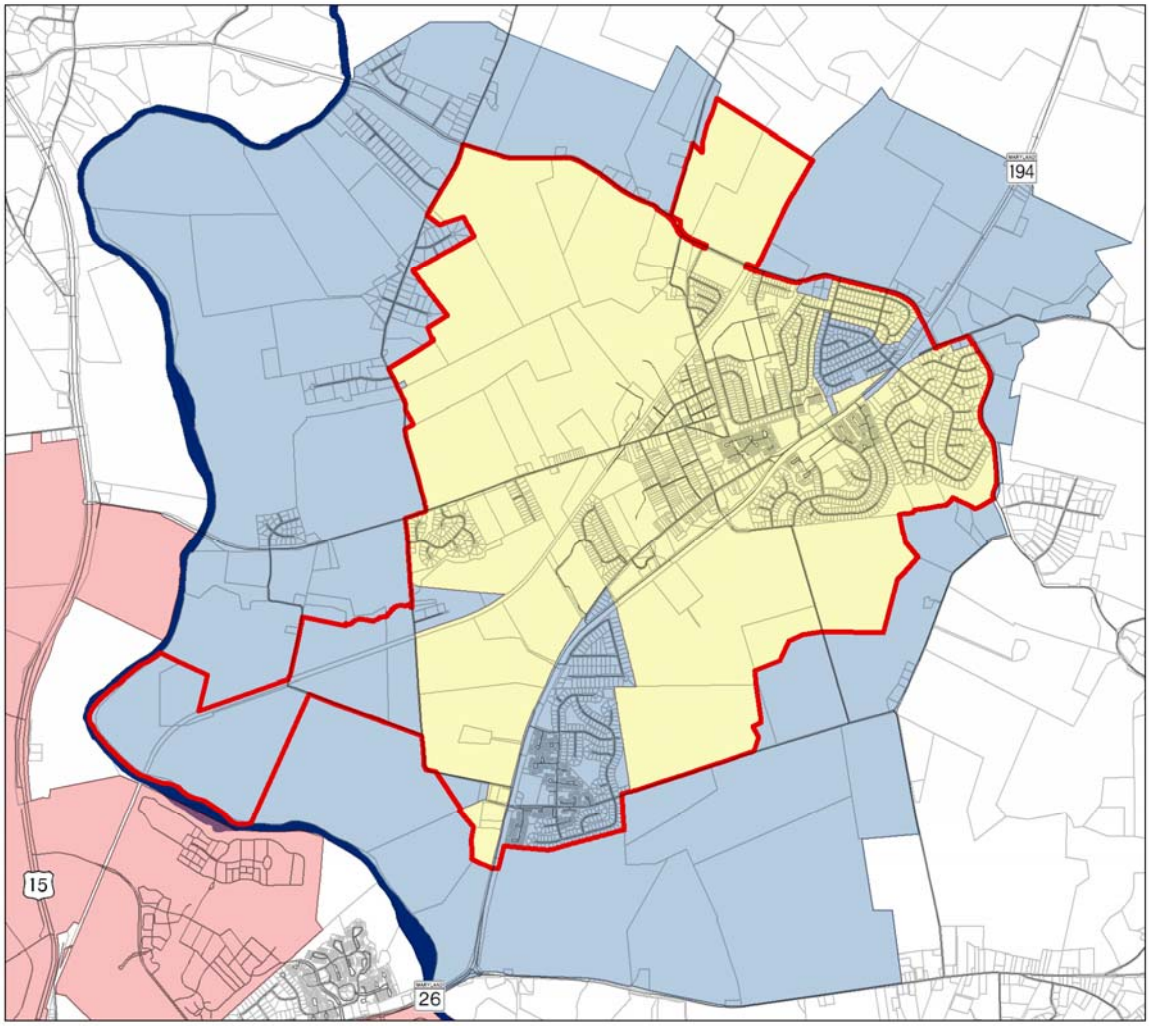
Growth Boundary Revisions

The notion of a conventional growth area surrounding Walkersville is, instead, jointly recognized by both the Town and the County as an 'Area of Planning Influence' surrounding the

municipality on all sides and encompassing all those lands previously identified in Walkersville's 2003 Comprehensive Plan as being within the Town's Annexation Limits. The Growth Boundary itself has been retracted significantly from the 2006 Walkersville Region Plan encompassing only the existing municipal limits and two properties designated Limited Industrial along the railroad right-of-way west of Walkersville.

This Plan recognizes the Town's ability to annex properties within the PPA and the Area of Planning Influence with the intent to maintain agricultural uses on those lands. Furthermore, the Town and County remain in agreement that farmland identified within the Walkersville PPA shall be a priority for farmland preservation efforts.

The recognition of Walkersville's Area of Planning Influence also serves to re-iterate the County's and the Town's desire to see the land between Walkersville's boundary and the Monocacy River remain predominantly undeveloped and to serve as a buffer between the City of Frederick and Walkersville.



Walkersville Community Growth Area | Walkersville Area of Planning Influence | Town of Walkersville | City of Frederick

Residential

With the PPA encompassing the area around Walkersville, the sole opportunities for residential development will be within the existing Town limits. Within the current municipal limits are approximately 1,067 acres of land, currently designated 'Agriculture' on the Town's plan that may be available for future residential development.

Commercial and Employment

This Plan maintains the area west of Walkersville along the railroad tracks for Limited Industrial uses. Additional employment opportunities exist within the Walkersville municipal limits. Opportunities for new commercial development would also be limited to properties within the current municipal limits along Frederick St.

Municipal Annexation

In support of the Goals and Policies stated in this Countywide Comprehensive Plan that:

- Seek to encourage compact community design (MG-G-13);
- Prevent the expansion of Community Growth Areas into Priority Preservation Areas (MG-P-02); and
- Seek to direct future growth into redevelopment areas instead of into greenfields (MG-P-03);

And, in support of the many proposed Action items that would implement these Policies;

The County states its preference that any municipal annexation occurring on the east side of the Monocacy River should be incorporated into the Town of Walkersville and not the City of Frederick.

Agricultural and Rural Communities Plan Highlights

- The County has proposed a Walkersville Priority Preservation Area that includes most of the growth area designated in the 2006 Walkersville Region Plan.
- There are 730 acres of land in permanent agricultural preservation within the PPA immediately around the Town of Walkersville including 30 acres inside the municipal boundary.
- The Town and County are in agreement that agricultural preservation resources will be directed to qualifying agriculturally-designated properties within the Walkersville Priority Preservation Area, many of which are also located within Walkersville's Area of Planning Influence.

Green Infrastructure Plan Highlights

- Significant natural resource features include Israel Creek, which runs along the eastern boundary of the Town and the Monocacy River to the west of the community.

Development Staging Mechanisms

Annexation

There are few vacant properties within the growth area that would be subject to annexation for development purposes. Most prominently, the former Rotorex site has existing LI zoning in the County and may be able to get public sewerage service through the County to allow for the reuse of the existing building or for new development on the property.

This Plan would support municipal annexation of properties designated Agricultural/Rural within the Priority Preservation Area for the purpose of protecting long term agricultural uses within the Town.

Land Use Plan Designation

The community growth area includes two properties, in the County, with a plan designation of Limited Industrial indicating that development is appropriate within the 20+ year term of this Plan.

Zoning

The former Rotorex site has existing Limited Industrial zoning in the County and could proceed with the reuse of the existing building, or with new development, subject to the County's Adequate Public Facilities Ordinance (APFO). Zoning on the other property designated Limited Industrial would only be applied as part of an annexation into the Town of Walkersville.

Adequate Public Facilities Ordinance

The Town has an APFO, which would address water, sewer, school, and road capacities as part of any development plan review.

Table 10-46: Walkersville Community Land Use Plan: County Portion

Land Use Plan Designation	Acres Designated	Acres Undeveloped	Pipeline Dwellings (1)	Undev. Land Potential Dwellings (2)	Total Potential Dwellings
Residential					
Low Density Residential	178	5	0	9	9
Medium Density Residential	47	0	0	0	0
Subtotal	*225*	*5*	*0*	*9*	*9*
Other					
Agricultural	0	0	0	0	0
Public/Open Space	20	0	0	0	0
Natural Resources	111	105	0	0	0
Subtotal	*131*	*105*	*0*	*0*	*0*
Commercial/Employment					
General Commercial	18	2	0	0	0
Limited Industrial	223	199	0	0	0
Subtotal	*241*	*200*	*0*	*0*	*0*
Walkersville Total	***597***	***310***	***0***	***9***	***9***

Table 10-47: Walkersville Community Land Use Plan: Town Portion

Land Use Plan Designation	Acres Designated	Acres Undeveloped	Pipeline Dwellings (1)	Undev. Land Potential Dwellings (2)	Total Potential Dwellings
Residential					
Low Density Residential	631	192	65	503	568
Medium Density Residential	39	0	0	0	0
High Density Residential	6	0	0	0	0
Subtotal	*676*	*192*	*65*	*503*	*568*
Other					
Public/Open Space	211	1	0	0	0
Agricultural	1,092	1,067	0	0	0
Institutional	136	6	0	0	0
Natural Resources	207	161	0	0	0
Subtotal	*1,645*	*1,235*	*0*	*0*	*0*
Commercial/Employment					
Village Center	84	4	0	0	0
General Commercial	56	8	0	0	0
Limited Industrial	145	110	0	0	0
Subtotal	*284*	*122*	*0*	*0*	*0*
Walkersville Total	***2,605***	***1,549***	***65***	***503***	***568***

(1) Pipeline dwellings: unbuilt dwellings/units in approved developments.
(2) Potential dwellings: net (75%) of undeveloped acreage (minus undeveloped acreage in pipeline) at 3.5 du/acre (LDR); 7.5 du/acre (MDR); and 15 du/acre (HDR)

Water and Sewer Service

The Town provides drinking water to the municipal area and for any property that would be annexed.

Sewerage service is provided by the County through the County's Ballenger/McKinney WWTP. The primary constraint related to sewerage service is the need to upgrade a pump station located in the vicinity of MD 26 and the Monocacy River. Treatment capacity at the Ballenger/McKinney WWTP is not a constraint to serve projected development.

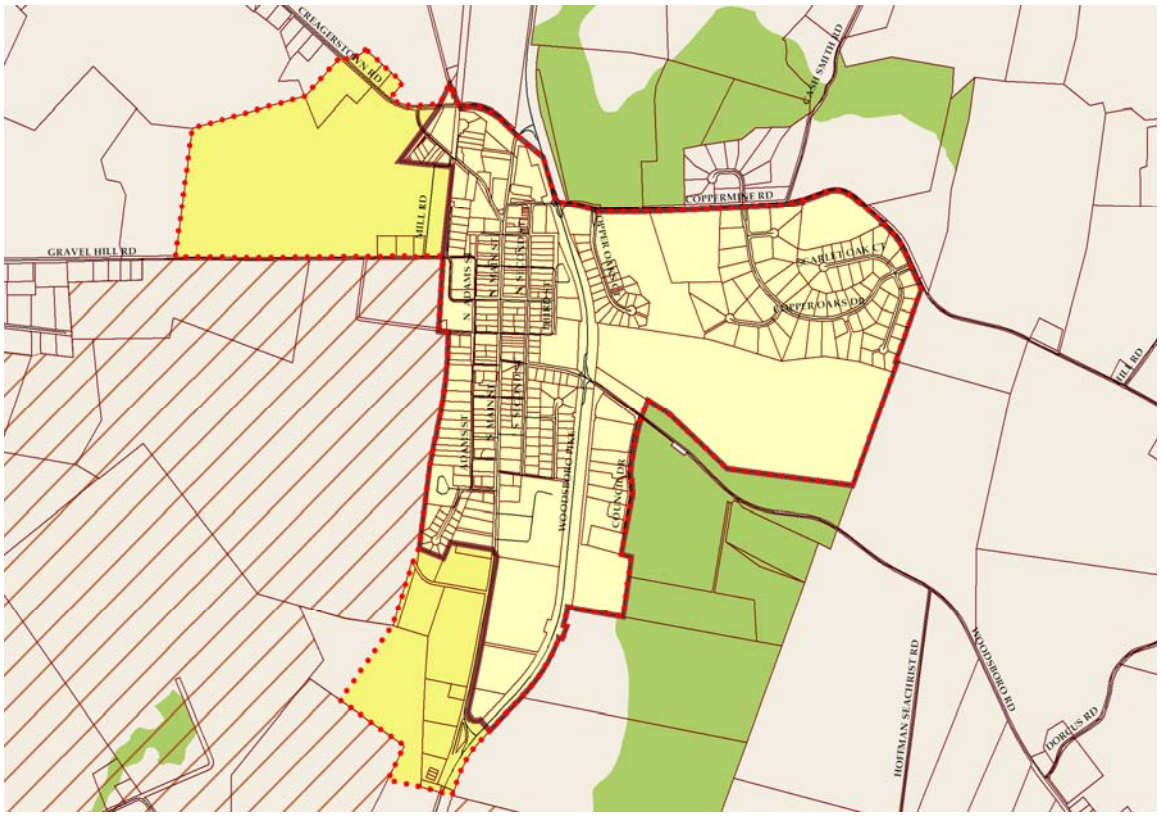
County Water and Sewerage Plan Revisions

The two properties designated Limited Industrial will be retained in the water/sewer service area boundary with the former Rotorex property retaining its W-5, S-5 classification.

Issues and Opportunities

- Prepare a municipal–county planning agreement to address concurrence on annexation issues, water/sewerage service and the implementation of the Priority Preservation Area. This agreement may also further refine the application of the Area of Planning Influence based on an updated municipal comprehensive plan.

WOODSBORO COMMUNITY GROWTH AREA



The Town of Woodsboro has a current population of 907 centered along its Main St. of predominantly 19th century structures with a mix of residential and commercial uses. Unique features of Woodsboro are the two quarry operations that immediately adjoin the municipal limits. To the north of Woodsboro is the Barrick/LeGore quarry currently owned by Laurel Sand and Gravel that has been in operation since the late 1800's. To the southeast of Town is the Lehigh quarry.

Town of Woodsboro Comprehensive Plan

The Town's current comprehensive plan was adopted in 2008. In general, the expansion of the Town is very limited due to the adjoining quarry operations and the agricultural preservation easements on several farms around the Town. The primary revision relative to new development is for a greater focus on residential and commercial uses for the S. Main St. corridor rather than for industrial.

Community Plan Highlights

Growth Boundary Revisions

The growth area has been adjusted to reflect the recently adopted Town Comprehensive Plan. One parcel on the southeast part of the growth area and included in the growth area in the County's 2006 Walkersville Region Plan has been removed to be consistent with the Town's 2008 Comprehensive Plan, while lands located on the Town's northeastern edge – and identified as future growth areas in the Town' plan – have been removed from the County's Community Growth Area.

Table 10-48: Woodsboro Community Land Use Plan: County Portion

Land Use Plan Designation	Acres Designated	Acres Undeveloped	Pipeline Dwellings (1)	Undev. Land Potential Dwellings (2)	Total Potential Dwellings
Residential					
Low Density Residential	105	97	0	254	254
Medium Density Residential	17	17	0	95	95
Subtotal	*122*	*114*	*0*	*349*	*349*
Commercial/Employment					
General Commercial	11	2	0	0	0
Limited Industrial	34	26	0	0	0
Medium Density Residential	3	0	0	0	0
Subtotal	*48*	*29*	*0*	*0*	*0*
Woodsboro Total	***170***	***142***	***0***	***349***	***349***

Table 10-49: Woodsboro Community Land Use Plan: Town Portion

Land Use Plan Designation	Acres Designated	Acres Undeveloped	Pipeline Dwellings (1)	Undev. Land Potential Dwellings (2)	Total Potential Dwellings
Residential					
Medium Density Residential	3	0	0	0	0
Low Density Residential	173	15	7	14	21
Subtotal	*176*	*15*	*7*	*14*	*21*
Other					
Institutional	21	9	0	0	0
Public/Open Space	110	0	0	0	0
Subtotal	*131*	*9*	*0*	*0*	*0*
Commercial/Employment					
General Commercial	30	15	0	0	0
Limited Industrial	33	0	0	0	0
Village Center	17	0	0	0	0
Subtotal	*79*	*15*	*0*	*0*	*0*
Woodsboro Total	***387***	***39***	***7***	***14***	***21***

(1) Pipeline dwellings: unbuilt dwellings/units in approved developments.
(2) Potential dwellings: net (75%) of undeveloped acreage (minus undeveloped acreage in pipeline) at 3.5 du/acre (LDR); 7.5 du/acre (MDR); and 15 du/acre (HDR)

Residential

The residential developments within the current Town limits are essentially built out. The Town will be able to accommodate new residential uses through the annexation of property in two areas. One area is designated Low Density Residential and is located between Gravel Hill Rd. and MD 550. A second area along the S. Main St. corridor is designated Medium Density

Residential, based on the Town's Plan, on property previously designated Limited Industrial in the 2006 Walkersville Region Plan.

Commercial and Employment
This Plan maintains opportunities for commercial and industrial development in the south end of Town along Main St. and the railroad tracks.

Agricultural and Rural Communities Plan Highlights

The Walkersville Priority Preservation Area adjoins the southern and western boundary of the growth area. There are several farm properties with agricultural preservation easements surrounding the community growth area.

Green Infrastructure Plan Highlights

The main natural resource feature is Israel Creek, extending through the east of the community. Within the Town limits much of the floodplain along the creek is public parkland.

Development Staging Mechanisms

Annexation
This will be the primary development staging mechanism used by Woodsboro to stage its future growth, especially since the current Town limits are mostly built out.

Land Use Plan Designation
All of the County properties within the community growth area have plan designations consistent with the Town's 2008 Comprehensive Plan.

Zoning
The existing General Commercial, Limited Industrial, and General Industrial County zoning in the southern portion of the growth area is only retained for the existing businesses. The undeveloped properties with County zoning are rezoned to Agricultural to facilitate annexation into Woodsboro.

Adequate Public Facilities Ordinance
The Town does not have an APFO.

Water and Sewer Service
The Town maintains its own water and sewerage systems. The primary constraint will be with the water system as the wastewater treatment plant has been recently upgraded to increase its treatment capacity. At present, there are less than 10 water service connections available. The improvements to the wastewater treatment plant provide capacity for 1,000 sewer connections; at present there are 438 connections to the Town's system.

County Water and Sewerage Plan Revisions

The water/sewer service area boundary will be revised to reflect adjustments made to the community growth boundary.

Issues and Opportunities

- Prepare a municipal – county planning agreement to address concurrence on annexation issues.

12 Implementation

To achieve the goals and realize the vision as set forth in this plan, Frederick County's leaders will need to embrace the policies and make progress toward fulfilling the action items as laid out in the respective chapters. This chapter identifies those action items and assigns a general timeframe for implementation. In addition to the specific action items, this chapter defines overarching or general strategies for implementation that will guide the County in its effort to achieve the vision.

	Amendment Status
Goals, Policies, Action Items	**N/A**
Maps and Graphics	**N/A**
Background Information	**04/08/2010**

PLAN IMPLEMENTATION

County officials, leaders and citizens should understand that implementing the policies and actions set forth in this chapter is often difficult, dynamic and progressive in nature. The action items should provide the framework for developing the "workplan" of the County. Additional specific tasks may be necessary of the County to fully achieve success for a specific action item. The County can perform many actions with minimal investment and activity, while others will require significant resources including staff time and direct funding from both public and private interests. As with any endeavor, the County should strive to utilize existing facilities, services, resources, and funding to implement future projects, programs, and activities.

IMPLEMENTATION PLAN STRATEGIES

- Incorporate the Action Items as part of the formulation of the ***Board of County Commissioners Strategic Plan*** Objectives.
- Ensure the Action Items are integrated into individual agency and departmental work plans.
- Prepare a ***Plan Implementation Progress Report*** two years following adoption of the Countywide Plan, and every two years thereafter. A key component of the progress report will be the use of indicators or metrics to evaluate progress and completion of the action items.

GENERAL USE OF THE COMPREHENSIVE PLAN

A Dynamic Guide for Decision-Making

The physical development and character of the County is a result of various plans, policies, and regulations implemented over time through actions by elected and appointed officials and by the private sector. It is recognized that as a guide, the implementation of this Plan is affected by the dynamic nature of the economic, political, and regulatory conditions that may be beyond the

control of the County. These variables, however, should not diminish the importance of this Plan to effectively guide the County's decision-making process when considering: infrastructure improvements, zoning changes, land-use regulations, and the initiation of new programs and projects. In implementing the Plan, every effort will be made to incorporate the Plan policies into the various tools (zoning, subdivision, adequate public facilities ordinances) in order to create a stronger regulatory mechanism and compliance of the Plan.

Consistency with the County Comprehensive Plan

Review for consistency of the County Plan and its elements will be guided by the fundamental concept of "consistency" under the State Planning Act wherein, land use regulations and land use decision should be consistent with, and implement the Plan's goals, policies, and recommendations. With respect to a capital facility or program, consistency is reviewed for the location, character and extent of the improvement or project. A consistent regulation or decision may show clear support for the Plan. It may also be neutral – but it should never undermine the Plan. In addition, it is recognized that the County Plan includes a breadth of goals and policies that may conflict with one another, therefore a "finding of consistency" determination should be focused on the subject matter and specific issue before a deciding body in relation to the respective goals and policies of this plan.

Plan Amendments

As described in the introduction and structured throughout, this Plan is intended to be a dynamic document, one that can respond to changing needs and conditions. To that end, this Plan will be subject to amendments of its goals, policies, and action items, its maps/graphics, and the background information as new issues are identified, state planning mandates are created or other changes occur necessitating revisions to a particular chapter of the Plan. Plan amendments should be made after thorough analysis of both the near-term needs and long-term implications and effects on how it supports the Plan's vision, goals and policies.

Community and Corridor Plans

As described in this Plan, more detailed physical land use analysis/design and community based planning efforts will be undertaken for individual community growth areas and for corridor areas. The goals and policies in the County Plan will provide guidance for these Community and Corridor Plans, which will include more specific and detailed plans and actions to be undertaken in particular community or corridor.

County Plan Update

The County Plan will be reviewed and updated as needed as prescribed by State Law. Currently the State of Maryland requires jurisdictions to review and if necessary revise their comprehensive plans every six-years.

Plan Implementation Progress Report

In an effort to ensure the Plan goals and policies and action items are being implemented, two steps will need to be undertaken. First, is to identify appropriate indicators or metrics to evaluate Plan implementation. These indicators and metrics may be taken from various census derived data and from local development data. The adoption of this Plan will coincide with the decennial 2010 US Census, which will allow for the use of this census data as a baseline of key indicators. The maturation of the County's Geographic Information System (GIS) will further aid in

development monitoring and provide for more sophisticated data collection and analysis. The second step will be the preparation of a *Plan Implementation Progress Report* two years following adoption of the County Plan, with updates to occur every two years thereafter. A progress report will aid in monitoring the status of various action items, particularly the short-term and ongoing activities. This will allow the County to refine the Strategic Plan Objectives and/or an individual agency or departmental work plan to better respond to meeting the Plan goals.

APPROACH TO ACTION ITEM PROGRESS

It is important to underscore that there are various opportunities and a multitude of considerations that must be made by the County as part of the implementation of the action items. Many of the Plan's action items can be realized through amendments of the various land use controls (such as the zoning map, zoning ordinance, subdivision regulations, etc.), through funding initiatives in the capital improvements program, or through the establishment of new development standards or programs.

Topical Based Plan Implementation

In an effort to reinforce the interrelationship of the chapter themes and the General Plan components the Action Items are organized based on broader topics than the individual chapter themes. By categorizing the action items under different topical areas rather than by the chapters it should help to strengthen the understanding of the actual action being considered in context to other Plan goals, policies and actions. The topical areas include:

- Land Use Controls
  - Land Use Map and Zoning Map
  - Land Use Ordinances, Regulations and Codes
- Infrastructure and Facilities
- Programs, Projects, and Studies
- Land Use Incentives
- Guidelines, Standards and Data Collection
- Financial & Personnel Resources
- Public Outreach and Intergovernmental Coordination

Each Action Item is listed separately under its primary topical area. The listing includes the Action Item identifier indicating which Plan chapter it originates from; the action item description; related goals; responsible and supporting department/agency; and the timeframe. The time-frames are intended to indicate the general priority for which the action is to be completed, including short-term (0-2 years), intermediate (2-6 years), long-term (6+ years), or on-going (no specific beginning or end time). The timeframe and extent to which a particular action item is completed is dependant on many factors including but not limited to, available resources both personnel and financial, public support and Countywide priorities at any given time. A brief description of the topical areas is provided below followed by the matrix.

LAND USE CONTROLS

Map Amendments

Map amendments may involve revisions to the land use plan map and/or the zoning map. The land use plan maps would be amended as part of subsequent County Plan updates or as part of the individual community and corridor plans. Zoning map amendments will continue to be done *comprehensively* (as part of a County Plan Update or with a Corridor or Community Plan) -or- *Piecemeal* (for Floating Zone applications or Change/Mistake application). However, the staging or timing of that development must be carefully weighed against all infrastructure and community facility needs to support the development. The timing may also be delayed until certain development regulations to control or even permit the type of development is in place. Map amendment recommendation in the Plan may include property specific zoning amendments or may be more general or cover a larger geographic area than a single property and use.

Zoning Ordinance Amendments

The Zoning Ordinance remains the County's most significant tool to implement the goals and policies of the Plan in addition to the land use plan map. Recognizing the difficulty in attempting to update the entire Zoning Ordinance at the same time, it is recommended to continue with a piecemeal approach. The County has employed a thematic approach in updating the Zoning Ordinance utilizing the 2004 Citizens Zoning Review Committee Final Report as a framework for the amendments. Any action items requiring amendments to the Zoning Ordinance will be folded into the respective review of a particular theme (i.e. commercial or residential uses; environmental regulations; review procedures; design standards, etc…). From time-to-time individual amendments will be identified that implement the goals and policies and further the vision. The periodic monitoring and consideration of the implementation plan in the various agency/departmental work plans will aid in prioritizing these amendments and identify resources to allocate for their completion.

Other Development Regulations

These regulations would include the Adequate Public Facilities Ordinance, Subdivision Regulations, Forest Resources Ordinance, design manuals, and other related regulations. These regulations need to be reviewed and updated periodically to maintain consistency with and implement the County Comprehensive Plan.

INFRASTRUCTURE AND FACILITIES

Certain action items will require the construction of capital projects that may be the responsibility of the County, the State or the development community. In reviewing the Capital Improvement Program on an annual basis the County needs to consider the relationship the infrastructure has on the Plan.

PROGRAMS, PROJECTS AND STUDIES

The Plan reference the initiation of new programs, projects, and studies in addition to regular updates of existing plans and studies. These plans and studies may also result in the identification of additional action items or Plan amendments.

LAND USE INCENTIVES

Incentives come in various forms and mechanisms to provide opportunities for land use development or the provision of infrastructure and facilities.

GUIDELINES, STANDARDS AND DATA COLLECTION

The Plan described a variety of information to be collected that forms the basis of other actions, or would be in land planning and performance monitoring. In addition, new standards or guidelines to assist in implementing plans goals, policies and actions are identified.

FINANCIAL AND PERSONNEL RESOURCES

Certain action items may specifically require additional operating funding and/or personnel resources to implement a particular goal or policy.

PUBLIC OUTREACH AND INTERGOVERNMENTAL COORDINATION

Many action items require coordination with between County and State agencies and with the County's municipalities. In addition, a number of action items were identified that are targeted to increase public awareness and education of a particular issue.

ACTION ITEM MATRIX

The Action Item Matrix is included as an appendix to this Plan as it will be used as the 'work plan' of the County.

IMPLEMENTATION ACTION MATRIX

To achieve the goals and realize the vision as set forth in the Countywide Comprehensive Plan, Frederick County's leaders will need to embrace the policies and make progress toward fulfilling the action items as laid out in the respective chapters. This appendix to the Implementation chapter identifies action items and assigns a general timeframe for implementation. In an effort to reinforce the interrelationship of the chapter themes and General Plan components, the Action Items are organized based on broader topics than the individual chapter themes to strengthen the understanding of the action being considered in context to other plan goals, policies and actions. The broader topical areas include:

- Land Use Controls
- Land Use Map and Zoning Map
- Land Use Ordinances, Regulations and Codes
- Infrastructure and Facilities
- Programs, Projects, and Studies
- Land Use Incentives
- Guidelines, Standards and Data Collection
- Financial & Personnel Resources
- Public Outreach and Intergovernmental Coordination

Each Action Item is listed only once under its primary topical area. The matrix includes the Action Item number indicating which Plan chapter it originates from; the action item description; responsible and supporting department/agency; and the timeframe. The time-frame is intended to indicate the general priority for which the action is to be completed, including short-term (0-2 years), intermediate (2-6 years), long-term (6+ years), or on-going (no specific beginning or end time). The timeframe to which a particular action item is completed is dependent on many factors including but not limited to, available resources both personnel and financial, public support and Countywide priorities at any given time.

The designation of a responsible/supporting department or agency does not indicate that full responsibility falls to that respective entity. It merely assigns a general responsibility of who is likely to take the lead in implementing or initiating the action item. The listing of the responsible and supporting departments and agencies include the following:

DPZ	Division of Planning & Zoning	**CAO**	County Attorney's Office
DPDR	Division of Permitting and Development Review	**DPR**	Division of Parks and Recreation
DPW	Division of Public Works	**OED**	Office of Economic Development
DUSWM	Division of Utilities and Solid Waste Management	**OES**	Office of Environmental Sustainability
DCS	Division of Citizens Services	**DTS**	Division of Transit Services

Action Item # corresponds to the following chapters/themes/elements:

NR	Conserving our Natural Resources and Green Infrastructure	**PU**	Public Utilities
HP	Protecting and Preserving our Heritage	**HO**	Housing
AG	Preserving our Agricultural and Rural Community	**WR**	Assessing our Water Resources
TR	Providing Transportation Choices	**DW**	Drinking Water
SC	Serving our Citizens	**WW**	Waste Water
ED	Supporting a Diversified Economy	**SW**	Stormwater
		MG	Managing our Growth
		CP	Community and Corridor Plans

LAND USE CONTROLS

#	Action Item #	Description	Responsible/ Supporting Agency	Timeframe
1	**NR-A-07**	Establish a new variable-width development setback/buffer area, specific to the Monocacy River, which addresses water quality protection, topography and other landscape elements, wildlife habitat, historic and archeological resources and scenic viewsheds.		
2	**NR-A-08**	Identify environmental features and landscape elements, including karst topography and habitats of rare, threatened and endangered species, that constitute a Natural Resources Inventory and determine how such inventory can be included as part of all future development plan submissions.		
3	**NR-A-13**	Amend the Forest Resource Ordinance (FRO) to permit FRO banking easements on existing forestlands in the Resource Conservation zoning district.		
4	**NR-A-14**	Study the need for a new zoning district that would afford greater protection of natural resources and environmentally sensitive features.		
5	**HP-A-9**	Incorporate the Maryland State Highway Administration's Context Sensitive Design Solutions for the Maryland Historic National Road Scenic Byway in development reviews along the Historic National Road corridor in Frederick County, and the Context Sensitive Solutions for Work on Scenic Byways on Maryland's scenic byways in the County, including the Catoctin Mountain Scenic Byway.		
6	**AG-A-02**	Prepare Zoning Ordinance Amendment to support Agricultural industries and supporting businesses in Rural Communities.		
7	**AG-A-07**	Prepare revisions to the County's Zoning Ordinance, Subdivision Regulations, building codes, and other related regulations/ordinances to address the evolving technological and operational characteristics of farm operations. This review will include zoning changes for appropriate agricultural uses.		
8	**TR-A-16**	Incorporate Transit Oriented Development design guidelines into the County's Zoning Ordinance and development review process.		
9	**TR-A-17**	Establish appropriate TOD development overlay zones around existing and future Transit Centers.		

LAND USE CONTROLS

#	Action Item #	Description	Responsible/ Supporting Agency	Timeframe
10	**TR-A-23**	Prepare parking design guidelines that address general parking lot design, the provision of parking structures, application of permeable surfaces, LEED and/or LID guidelines.		
11	**TR-A-24**	Update the parking section of the zoning ordinance to address the following items by existing and proposed land uses: defining the appropriate treatment of parking provision for residential and commercial uses including loading and unloading, provision of structured parking, provide guidance for the requirement of bicycle parking where appropriate and address reductions in required parking where transportation demand management measures are implemented.		
12	**TR-A-28**	Establish airport, highway, truck and rail noise ordinances where appropriate.		
13	**TR-A-34**	Protect air safety in Frederick County by permitting expansion of public general aviation operations only at Frederick Municipal Airport.		
14	**SC-A-08**	Review the Zoning Ordinance to allow for implementation of human services in appropriate districts to further the delivery of the services to the community.		
15	**PU-A-02**	Watershed Management Plans should be considered as part of the development review process.		
16	**HO-A-02**	Review regulations and codes in order to alleviate potential barriers to the production of affordable, accessible housing.		
17	**HO-A-03**	Explore amendments to the Zoning Ordinance to enhance the use of accessory apartments/dwelling units.		
18	**ED-A-02**	Coordinate with the Office of Economic Development (OED) to identify short and long-term needs for employment-zoned land.		
19	**ED-A-03**	Identify strategic locations for future light industrial uses.		

LAND USE CONTROLS

#	Action Item #	Description	Responsible/ Supporting Agency	Timeframe
20	ED-A-04	Revise the LI-Limited Industrial Zoning District into several different zoning districts to distinguish the diversity of uses currently permitted within the LI district.		
21	ED-A-05	Review County regulations to identify obstacles to revitalization of older commercial and industrial employment areas.		
22	ED-A-07	Continue to explore amendments to the Zoning Ordinance to promote agricultural and heritage tourism.		
23	ED-A-08	Identify obstacles in zoning and land preservation requirements that may preclude the agricultural industry from increasing the sale of products directly to the consumer.		
24	ED-A-09	Address through the Zoning Ordinance means of encouraging and supporting mixed-use and transit-oriented development.		
25	ED-A-13	Consider a redevelopment overlay zone as a tool to encourage redevelopment of underutilized commercial and employment areas.		
26	DW-A-01	Explore the application of water recharge easements as a complement to existing agricultural and land preservation easement programs.		
27	DW-A-07	Explore options such as providing public water and limiting permitted land uses in karst areas.		
28	SW-A-08	Reduce regulatory barriers to implementation of low impact development measures and create incentives to facilitate their use where appropriate.		
29	SW-A-13	Amend County ordinances to reference stormwater management best management practices and implement the 2007 Storm Water Management Act guidelines.		

LAND USE CONTROLS

#	Action Item #	Description	Responsible/ Supporting Agency	Timeframe
30	MG-A-01	Update and illustrate community design standards and integrate these standards into zoning, subdivision, and other land development ordinances.		
31	MG-A-03	Develop plans and design standards for designated County Growth Areas, special districts, and development corridors that reflect the Community Design policies identified in the Countywide Comprehensive Plan.		

INFRASTRUCTURE AND FACILITIES

#	Action Item #	Description	Responsible/ Supporting Agency	Timeframe
1	**TR-A-11**	Address how on-street bicycle and pedestrian improvements can be retro-fitted to existing roads.		
2	**PU-A-05**	Construct a regional energy recovery facility or waste-to-energy (WTE) per the BOCC approved plan in the McKinney Industrial Park adjacent to the Ballenger Creek WW TP and DUSWM headquarters.		
3	**HO-A-11**	Determine the County's future role in the development and construction of new affordable housing, including the identification of properties owned by the County that could be utilized for affordable housing projects.		
4	**ED-A-06**	Identify an area to create an Alternative Energy Demonstration Project to educate and promote the use of alternative energies and energy conservation.		
5	**DW-A-02**	Explore the use of impoundments to supplement other drinking water sources.		
6	**DW-A-03**	Coordinate with Frederick, Middletown and Walkersville regarding the feasibility of interconnections with the County distribution system for mutually declared emergencies.		
7	**WW-A-01**	Explore funding sources and programs to address inflow and infiltration problems in wastewater collection systems.		
8	**WW-A-02**	Identify and prioritize retrofitting failing septic systems using the Bay Restoration Fund (flush tax) and other programs.		
9	**SW-A-04**	Continue to retrofit untreated impervious surface area in the County with storm water management in accordance with the NPDES permit.		
10	**SW-A-07**	Incorporate the use of non-structural storm water management best practices (vegetated swales, rain gardens, cooling buffers and bio-retention) with maintenance and monitoring agreements.		

PROGRAMS, PROJECTS, AND STUDIES

#	Action Item #	Description	Responsible/ Supporting Agency	Timeframe
1	**NR-A-01**	Identify specific protection strategies for lands that are critical to the quality of public water supplies including groundwater recharge areas, which may include easements, fee simple acquisition, and transfer of development rights.		
2	**NR-A-03**	Continue to develop and implement watershed management plans, including the National Pollutant Discharge Elimination System program initiatives, to help guide land use policy and zoning decisions.		
3	**NR-A-06**	Initiate an update of the 1990 Monocacy Scenic River Study and Management Plan, including examination of a Monocacy River Greenway and optional forms it could take.		
4	**NR-A-11**	Continue implementation of the Lower and Upper Monocacy River Watershed Restoration Action Strategies (WRAS) and the Maryland Chesapeake Bay Tributary Strategies, including detailed stream corridor growth management and environmental quality enhancement studies.		
5	**NR-A-12**	Prepare a functional Green Infrastructure Plan to identify strategies to protect, connect, and enhance significant natural resource features in Frederick County.		
6	**HP-A-10**	Study the feasibility of establishing a historic materials recycling entity supported by partnerships with public, private, and non-profit organizations.		
7	**HP-A-12**	Through coordination with the National Park Service (NPS), examine impacts to NPS lands from proposed development activities adjacent to or in close proximity to NPS facilities, and develop compatibility guidelines for these areas. Protection of NPS units through buffering, alternative site design, or other land management controls should be considered.		
8	**HP-A-13**	Consider a process to prioritize historic sites, structures, and areas related to the County's identification and designation of Areas of Special Merit through updating the inventory.		
9	**AG-A-01**	Study the feasibility of a transfer of development rights (TDR) concept and other alternatives that would support protecting agricultural land in the County.		

PROGRAMS, PROJECTS, AND STUDIES

#	Action Item #	Description	Responsible/ Supporting Agency	Timeframe
10	AG-A-05	In coordination with the Office of Economic Development, prepare an Agricultural Action Program to identify strategies that promote agricultural support industries and the growing agri-tourism industry.		
11	AG-A-08	Develop proposal to minimize farmland loss to residential activity such as establishing maximum lot size in agricultural zoning district.		
12	TR-A-01	Maintain a countywide travel demand model of the existing and proposed highway and transit network to assist with identifying and assessing highway needs and analysis of corridor and community plan recommendations.		
13	TR-A-05	Prepare a truck origin and destination study to assess existing conditions and needs for routing and enhancing the mobility of freight through and within Frederick County while considering options for mitigating any existing or potential impacts to roadway infrastructure and sensitive land uses.		
14	TR-A-06	Prepare pre-planning/feasibility studies for priority county and state highway corridor upgrades.		
15	TR-A-07	Update the County Bikeways and Trails Plan with the assistance of a broad-based citizen's advisory committee.		
16	TR-A-09	Prepare detailed shared-use path corridor feasibility studies.		
17	TR-A-13	Require the accommodation of Safe Routes to School planning for all existing and proposed County School's by preparing plans that address coordinated education, enforcement, encouragement, design and school siting to provide for safe bicycling and walking options for students.		
18	TR-A-19	Study the feasibility of fixed heavy rail, light rail, and bus rapid transit in the county including connections between existing and proposed local and regional residential and commercial development centers.		
19	TR-A-20	Conduct a detailed design/engineering study of the I-270 Transitway master plan alignment. This study should address type of facility, specific station/stop locations, opportunities for connections beyond those previously identified, parking location (s) for a yard and shop facility.		

PROGRAMS, PROJECTS, AND STUDIES

#	Action Item #	Description	Responsible/ Supporting Agency	Timeframe
20	TR-A-27	Update Master Transportation Plan to focus on the countywide roadway assessment prioritization and financial analysis and revisions to the recommended projects.		
21	TR-A-30	Develop and encourage tree planting and landscaping projects, using native species where approved, along designated State and National Scenic Byways.		
22	TR-A-31	Incorporate Scenic Byways Corridor Management Plan recommendations into appropriate county programs and plans.		
23	SC-A-01	Develop a school site land banking program as part of its overall land development review process.		
24	SC-A-02	Promote Safe Routes to Schools program through plans and programs that enhance pedestrian accessibility and safety.		
25	SC-A-05	Periodically undertake comprehensive reviews of public safety needs based upon future growth projections to establish minimum standards for police and fire/rescue protection.		
26	SC-A-09	Map (assess) human services components to better gauge issues and opportunities in an effort to identify, predict and prioritize county and community level needs.		
27	HO-A-01	Develop new and refine existing County affordable housing programs in regard to consumer needs and demand.		
28	HO-A-06	Collaborate on affordable housing projects/partnerships to increase affordable housing or address housing issues.		
29	HO-A-12	Locate and prioritize infill and redevelopment areas that would be appropriate for affordable housing development.		
30	HO-A-14	Identify neighborhoods in need of revitalization and enhancement efforts and prioritize a set of achievable projects.		

PROGRAMS, PROJECTS, AND STUDIES

#	Action Item #	Description	Responsible/ Supporting Agency	Timeframe
31	**ED-A-14**	Determine the ideal jobs to housing ratio for Frederick County.		
32	**DW-A-08**	Conduct an assessment of the availability and reliability of groundwater resources in the County.		
33	**SW-A-02**	Develop an action plan to improve watershed health in watersheds where impervious cover is reaching or exceeding 10%.		
34	**SW-A-03**	Develop a strategy for protecting native brook trout populations that includes an impervious cover threshold, minimum distance between roads and habitats, and reduced road density for those watersheds where native brook trout are present.		
35	**SW-A-09**	Continue to explore and implement new techniques and technologies to reduce the impacts to streams during mass grading for development.		
36	**SW-A-10**	Work with Natural Resources Conservation Service and Maryland Department of Agriculture to identify additional incentives or measures that would reduce direct cattle access to streams.		
37	**SW-A-15**	Monitor pollutant loads and conduct Use Attainability Analyses on those watersheds with Total Maximum Daily Loads (TMDL's).		
38	**SW-A-16**	Develop a monitoring system of local ground water conditions, aquifer recharge, watersheds and streams.		
39	**WW-A-04**	Identify means to reduce pharmaceuticals and other compounds believed to be endocrine disruptors out of the County's wastewater stream and/or develop treatment strategies which have been demonstrated to remove or destroy the contaminants.		
40	**MG-A-04**	Identify solutions to design conflicts arising in areas in which increased development density, application of traditional neighborhood design principles, and the close physical proximity of structures results in the need to: negotiate shared access to rights-of-way, ensure adequate public safety access to buildings and structures, and provide safe and adequate infrastructure within our communities.		

LAND USE INCENTIVES

#	Action Item #	Description	Responsible/ Supporting Agency	Timeframe
1	**NR-A-10**	Amend the Agricultural Preservation ranking system to grant additional points to farms with frontage along the Monocacy and Potomac Rivers.		
2	**HP-A-04**	Promote existing incentives for appropriate adaptive reuse of historic structures and their setting; including the Maryland Heritage Preservation Tax Credit, the Federal Rehabilitation Tax Credit for Historic Structures, and the Frederick County Property Tax Credit for locally designated historic structures through brochures, flyers, workshops, the County web site, and any available and appropriate new technologies.		
3	**AG-A-06**	In cooperation with other participating counties and the County's State Delegation, obtain appropriate revisions to the easement programs of the Maryland Agricultural Land Preservation Foundation and the Maryland Environmental Trust to make the programs more attractive to farmers. Particular attention should be paid to the amount of funding available and the appraisal system in the easement program.		
4	**TR-A-08**	Create options and incentives, which will encourage voluntary landowner participation in the establishment of greenways and trails.		
5	**TR-A-33**	Enhance the travel demand management program in the County to include additional policies and programs that provide options and incentives for switching single occupant vehicle trips to higher occupancy alternatives, walking or bicycling.		
6	**HO-A-08**	Implement incentives, to facilitate affordable housing construction by private non-profits, such as reducing building fees and allowing for fast track permitting.		
7	**ED-A-01**	Evaluate and facilitate a permanent, year-round farmers' market in Frederick County where people can purchase locally produced goods and services in a setting similar to Lexington Market (Baltimore, MD) or Pike Place Market (Seattle, WA).		

GUIDELINES, STANDARDS, AND DATA COLLECTION

#	Action Item #	Description	Responsible/ Supporting Agency	Timeframe
1	**NR-A-05**	Target areas along the Monocacy River as Forest Resource Ordinance priority areas (forest planting and forest banking) in addition to streams in the Agricultural zoning district.		
2	**NR-A-09**	Encourage construction techniques designed to protect roads, buildings and utility lines if they are to be permitted in areas prone to develop sinkholes.		
3	**HP-A-01**	Using the identified special views and sites in the Management Plans of the Historic National Road and the Catoctin Mountain Scenic Byway as a starting basis, prepare a list of prioritized critical scenic views and sites and identify various means for protection, including, but not limited to, fee simple purchases, easement purchases or donations, agricultural land preservation programs, bond issues, and transfer of development rights.		
4	**HP-A-03**	As part of all major land development applications (i.e., rezonings, major subdivisions, site plans, etc.); create a checklist to include identification and evaluation of historical resources, including archeological sites, as well as a plan for the preservation of those resources that are significant.		
5	**HP-A-06**	Publish a historical inventory book about the County's historical architecture, archeological sites, and historic cultural landscapes.		
6	**HP-A-14**	Prepare guidelines and regulations to encourage sustainability and adaptive reuse of historic structures and sites.		
7	**AG-A-03**	Develop and maintain a database of ag-remainder properties and the development potential of properties zoned Agriculture and adopt incentives to promote the use of protective easements on existing ag-remainders.		
8	**AG-A-04**	Revise standards for County road improvements in the Agricultural areas, basing the new standards on the needs of the agricultural community rather than the needs of non-agricultural uses.		

GUIDELINES, STANDARDS, AND DATA COLLECTION

#	Action Item #	Description	Responsible/ Supporting Agency	Timeframe
9	TR-A-02	Revise the County's streets and roads design manual to refine design standards for roadway functional classifications, street lighting, transit, bicycle and pedestrian facilities, traffic calming tools, emergency and maintenance vehicle access and standard right-of-way needs including appropriate coordination with municipalities while maintaining vehicle traffic flow and safety.		
10	TR-A-03	Develop a county roads needs inventory that would list and prioritize capital improvements to county roads, intersections and new road alignments, including a listing of bridge priority and emergency through routes.		
11	TR-A-04	Assess and update county neighborhood traffic calming policy.		
12	TR-A-14	Revise county roads and bridges ordinance to provide the optional waiver of sidewalk maintenance requirements by abutting property owner(s).		
13	TR-A-15	Update transit-friendly design standards for new development, including transit amenities and improved bicycle and pedestrian access to transit.		
14	TR-A-22	Adopt county-wide complete streets ordinance, regulation and guidelines that requires the provision of facilities and design features for all user groups where needed including: public transit, cyclists, pedestrians and people of all ages and disabilities in the design and implementation of all County CIP and Developer funded road projects.		
15	TR-A-32	Require screening using native species where approved and context sensitive design solutions for site development on designated State and National Scenic byways.		
16	SC-A-03	Update the pupil yield factor study every two years.		
17	SC-A-04	Establish standards for the provision of recreational amenities servicing commercial and employment projects.		
18	SC-A-07	Establish Response Time Standards for fire and rescue services and ensure that fire and ambulance services are provided in accordance with these adopted standards.		

GUIDELINES, STANDARDS, AND DATA COLLECTION

#	Action Item #	Description	Responsible/ Supporting Agency	Timeframe
19	HO-A-09	Track & evaluate available housing stock to ensure that choices and flexibility are being provided to consumers.		
20	DW-A-06	Develop a water-resources-based GIS database for staff to review in regard to development plans and proposals.		
21	WW-A-03	Require that new septic systems use the best technologies available to reduce nitrogen pollution.		
22	SW-A-01	Develop a GIS database to refine methods for calculating impervious cover to provide baseline data and aid in prioritizing restoration efforts.		
23	MG-A-02	Develop procedures and regulations to ensure that all new development and redevelopment is reviewed in coordination with community design guidelines.		
24	CP-A-02	Establish a review/update process for preparing community and corridor plans.		
25	CP-A-03	Establish a Countywide Zoning update process subsequent to the Countywide Plan Updates		

FINANCIAL AND PERSONNEL RESOURCES

#	Action Item #	Description	Responsible/ Supporting Agency	Timeframe
1	**HP-A-02**	Continue the Planning Division's participation in the management entities of the Heart of the Civil War Heritage Area, the Catoctin Mountain Scenic Byway/Journey Through Hallowed Ground National Heritage Area, and the Maryland National Road Association to support these organizations' historic preservation goals and their focus on heritage tourism.		
2	**HP-A-05**	Update and continue the inventory of historic sites in the County.		
3	**HP-A-07**	Develop and adopt a County-based loan program to assist owners of historic buildings needing rehabilitation.		
4	**AG-A-10**	Implement the Priority Preservation Plan strategies.		
5	**TR-A-25**	Pursue grant funding of transportation projects to maximize the implementation of transportation goals and pol.		
6	**TR-A-26**	Explore possibility of transportation excise tax funding by district to facilitate area specific funding resources or use for non-highway transportation facilities.		
7	**PU-A-01**	Implement Source Water Protection Plans.		
8	**HO-A-04**	Apply for additional Housing Choice Vouchers in response to any published Notice of Funding Availability, especially for very low income, senior citizens, and persons with special needs.		
9	**HO-A-05**	Find opportunities for State and Federal funding in support of the production of affordable rental housing.		
10	**ED-A-10**	Implement the Heart of the Civil War Heritage Area Management Plan.		
11	**DW-A-04**	Implement the Linganore Source Water Action Plan and consider countywide source water protection efforts.		

FINANCIAL AND PERSONNEL RESOURCES

#	Action Item #	Description	Responsible/ Supporting Agency	Timeframe
12	SW-A-05	Increase staffing and capabilities for storm water management inspections and the review of sediment control and grading plans.		
13	SW-A-06	Investigate the feasibility of a Storm water Management Utility Fee to pay for inspection/enforcement.		
14	SW-A-12	Expand the County's watershed planning and management capabilities.		
15	SW-A-14	Continue implementation of the Lower and Upper Monocacy River Watershed Restoration Action Strategies (WRAS) and the Maryland Chesapeake Bay Tributary Strategies.		

PUBLIC OUTREACH AND INTERGOVERNMENTAL COORDINATION

#	Action Item #	Description	Responsible/ Supporting Agency	Timeframe
1	**NR-A-02**	Develop various media and environmental outreach education programs to encourage private landowners to protect their wetlands and/or to minimize wetland alteration during such activities as farming and timber harvesting and to increase public awareness of wetland values and the status of wetlands.		
2	**NR-A-04**	Investigate the applicable process to designate the 52-mile segment of the Monocacy River from Bridgeport to the Potomac identified by the National Park Service in its National Rivers Inventory as a National Scenic River.		
3	**HP-A-08**	Identify potential historic districts eligible for the County Register of Historic Places and focus educational efforts on these areas to promote nominations. Potential historic districts may include, but are not limited to: Adamstown, Johnsville, Braddock Heights, Kemptown, Buckeystown, Libertytown, Catoctin Furnace, Wolfsville.		
4	**HP-A-11**	Update existing and create new educational materials to promote historic preservation practices and methods, including, but not limited to, the current Frederick County Register of Historic Places brochure, the County web site, and any available and appropriate new technologies.		
5	**HP-A-15**	Investigate new tools for outreach and education.		
6	**AG-A-09**	Develop a program to educate the public and the farming community on planning and agricultural issues.		
7	**AG-A-11**	Promote and expand the farm market network in the County.		
8	**TR-A-10**	Establish a bicycle/pedestrian advisory group.		
9	**TR-A-12**	Provide opportunities for bicycle and pedestrian safety education and enforcement.		
10	**TR-A-18**	Work with the Maryland Transit administration and Montgomery County to explore and coordinate scheduling improvements and stop options for MARC trips from Frederick, Point of Rocks, Germantown, Gaithersburg and Rockville; and make direct link between MARC and Metro at Shady Grove.		

PUBLIC OUTREACH AND INTERGOVERNMENTAL COORDINATION

#	Action Item #	Description	Responsible/ Supporting Agency	Timeframe
11	**TR-A-21**	Work with SHA, MTA, county municipalities and surrounding jurisdictions to identify locations for and address specific needs for existing and future park and rides and intermodal transportation centers.		
12	**TR-A-29**	Participate in the Frederick County Community Traffic Safety Task Force to take full advantage of the programs offered by the Maryland Highway Safety Office division of the Governor's Office for Highway Safety. Car, truck, bicycle, pedestrian, transit and rail safety problems in Frederick County shall be identified using statistics from the Maryland Highway Safety Office, local traffic and law enforcement data, and citizen concerns.		
13	**SC-A-06**	Mutual aid agreements between Frederick County and all adjoining jurisdictions should continue to be sought and/or refined to clarify responsibilities and improve protection services.		
14	**PU-A-03**	Work with the Health Department to accommodate new technologies.		
15	**PU-A-04**	Maintain representation on regional boards that evaluate the feasibility and implementation of regional solid waste acceptance and processing facilities.		
16	**HO-A-07**	Facilitate a continued dialogue with municipal leaders on affordable housing issues, needs and priorities.		
17	**HO-A-10**	Develop an outreach/marketing campaign to dispel negative stereotypes and perceptions associated with affordable housing.		
18	**HO-A-13**	Coordinate with the private and nonprofit sectors to achieve affordable housing goals.		
19	**ED-A-11**	Coordinate with municipalities to promote their historical, cultural and natural assets.		
20	**ED-A-12**	Further expand Frederick County's '*Homegrown Here' label, 'Buy Local Challenge'* week, and other efforts including review of the County's procurement process to support buying local products, especially for the school system.		
21	**DW-A-05**	Develop a water conservation education program for residents and businesses of Frederick County.		

PUBLIC OUTREACH AND INTERGOVERNMENTAL COORDINATION

#	Action Item #	Description	Responsible/ Supporting Agency	Timeframe
22	**DW-A-09**	Coordinate the development of GIS mapping and drinking water data with the municipalities.		
23	**SW-A-11**	Showcase examples of low impact development and environmental site design techniques to increase public awareness of best practices.		
24	**CP-A-01**	Establish a template for County-Municipal Planning Agreements.		