

2010 Carroll County Master Plan: Challenges & Choices

Carroll County preserves its unique rural agricultural heritage, protects its environmental resources, and promotes a balanced approach to new growth and economic opportunities consistent with the character of its communities. County amenities, infrastructure, and facilities provide a high quality of life that helps ensure Carroll continues to be a great place to live, work, and play.



Approved by Carroll County Planning Commission

October 19, 2010

Copies of the adopted Carroll County Master Plan are available...

In hardcopy or on CD at:

Carroll County Planning
225 North Center Street, Suite 204
Westminster, Maryland 21157

Online (text and maps) at:

<http://ccgovernment.carr.org/ccg/compplan/masterplan2010/default.asp>

For additional information, contact the Carroll County Planning Department:

By phone: 410-386-2145

By e-mail: ccplanning@ccg.carr.org

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Resolution No. 03 - 10

A RESOLUTION APPROVING REVISIONS TO THE CARROLL COUNTY MASTER PLAN 2000
KNOWN AS *2010 CARROLL COUNTY MASTER PLAN: CHALLENGES & CHOICES* AND
RECOMMENDING ADOPTION

Whereas the County Commissioners of Carroll County adopted *Carroll County Challenges and Choices: A Master Plan for the Future* on December 20, 2000; and

Whereas, the Maryland Annotated Code, Article 66B, Section 3.05 et seq. provides for the adoption, periodic review and revisions of a comprehensive plan by jurisdictions in the State of Maryland; and

Whereas, the Carroll County Planning and Zoning Commission has thoroughly reviewed and evaluated the contents of the Master Plan for Carroll County and has developed certain revisions, changes, and updates thereof which have been compiled into a document titled *2010 Carroll County Master Plan: Challenges & Choices* (hereinafter the "Master Plan") which is comprised of all text, maps, and illustrations included in the document, and

Whereas, the Carroll County Planning and Zoning Commission has followed requirements set forth in Maryland Annotated Code, Article 66B, Section 3.07 for a 60-day public review and comment period and held a public hearing on August 19, 2010, which was duly advertised as required by law and was attended by interested citizens; and

Whereas, the Carroll County Planning and Zoning Commission, following consideration of the scope and content of all revisions and all comments, testimony, and discussions of the Master Plan, do conclude that the adoption of this Master Plan by the County Commissioners of Carroll County, in the form attached hereto, is in the best interest of the County; and

Whereas, the Carroll County Planning and Zoning Commission has certified the Master Plan to the Commissioners for Carroll County and hereby provides copies of comments received during the public review and comment period and the public hearing as required by Maryland Annotated Code Article 66B Section 3.07; and

NOW, THEREFORE BE IT RESOLVED, this 19th day of Oct, 2010, that the Carroll County Planning and Zoning Commission, in consideration of the aforementioned recitals and in accordance to Maryland Annotated Code, Article 66B Sections 3.07-3.08, do approve, certify, and recommend to the County Commissioners of Carroll County, Maryland the adoption of the revised Master Plan contained in a document titled the *2010 Carroll County Master Plan: Challenges & Choices* in the form attached hereto.

THE CARROLL COUNTY PLANNING
AND ZONING COMMISSION



David L. Brauning, Chairman

Approved for Legal sufficiency



Terri A. Jones, Deputy County Attorney

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Chapter 1: Concepts & Intentions

Quality of Life

The 2000 Master Plan for Carroll County, *Challenges & Choices*, represented the first review and revision of the direction set forth by the original 1964 Carroll County Master Plan. It also was the first time the master plan had a plan document to accompany the land use plan map and goals. The 2010 update of this document is the second review and revision to the original 1964 plan. While no one would argue that much has changed in Carroll County since 1964, the fundamental elements of quality communities that were present then continue to invite new residents to the county today. People move to the county because they believe it offers the quality of life for which they are looking. They find safe neighborhoods, good schools, and relatively uncongested streets. Many people also move to Carroll County because they can afford a nicer home due to comparatively lower housing and living costs. Unlike 1964, however, it is becoming increasingly difficult to balance the community desire to maintain, and even increase, the quality of life residents have come to expect without increasing the costs to the general citizen.

Challenges & Choices

The planning process used to develop this plan focused on identifying the challenges that the County is facing and making choices of how to address these challenges. The Goals for how those challenges were and are addressed are contained in Chapter 5 “Vision Statement and Goals.” Policies and recommendations for implementation chosen by the citizens and officials of the County are also presented. They are not simple choices, based solely on the cost of implementing the plan or what would be nice in an ideal world. Rather, the significance of the quality of life enjoyed by residents of Carroll County was recognized as a major factor in development of the plan.

Recognizing the traditional challenges posed by residential and commercial development and their respective demands on a variety of public services, the 2010 edition of the Carroll County Master Plan essentially reaffirmed support for the basic premises, concepts, and development patterns charted in the 1964 and 2000 plans. Carroll’s Designated Growth Areas (DGAs), which are centered on or contain municipalities, will continue to receive priority to accommodate the majority of the new growth projected to take place in the county. The locally successful and nationally-recognized Agricultural Land Preservation Program will be maintained to continue to encourage farmland preservation, thereby preserving the rural, scenic, and cultural character of the county.

Among the principal concerns raised by county citizens during an open and inclusive planning process, and subsequently addressed by the plan, was the timely provision of facilities that serve new development. In April of 2004, the Board of County Commissioners

significantly amended the Concurrency Management Ordinance. Capital improvement projects are prioritized and appropriately programmed to reflect the public improvements that are necessary to maintain minimum levels of service for communities. These minimum service levels apply to most public facilities, such as: roads; schools; police; fire and emergency services; and water and sewer services. Because Concurrency ties development approval to the County's ability to fund infrastructure improvements and services, the Community Investment Plan (CIP) will have an impact on the amount and rate of growth in different areas of the county.

In addition to the demands that development places on facilities, the impacts of development on environmental resources can vary greatly in terms of physical and financial effect. This plan recognizes the far-reaching impacts of development on the environment and presents methods for maintaining the quality and quantity of those resources present. Environmental concerns, especially water quality, will have an increasing impact on how development occurs. The Water Resources Element begins to address these issues as they relate to water supply and water quality.

The 2010 plan addresses the types of challenges typical of a community at a crossroads in its history. The 2000 plan reflected the choices of the citizens to reaffirm support for the direction dictated by the original Carroll County Master Plan. The core planning principles of facilitating and encouraging higher-density growth in the DGAs, the vigorous pursuit of agricultural land preservation, the protection of natural resources, and the timing and phasing of development, at a rate the County can afford to fund the new and improved facilities, are all contained in this plan. Specific methods to improve on the level of success achieved by the 1964 and 2000 plans are also included in the 2010 version.

Through the successful implementation of the recommendations contained herein, this plan will assist Carroll County in achieving the vision and goals developed during the drafting of the plan and as set forth in the following chapters. While it is the role of Carroll County Government to adopt and implement the plan, the citizens of the county have a responsibility to monitor the commitment to, and continued support for, the directions contained in the 2010 Carroll County Master Plan and subsequent revisions.

The Definitions

Vision or Vision Statement – A vision is a statement that defines a community's preferred future. To choose a direction, a community first must have developed a mental image of a possible and desirable future state. This vision should articulate a feasible, achievable, realistic, and attractive future for the community, which should be a future that is better than that of existing conditions. The process of developing a vision not only helps to define the community's preferences and desires for the future but also helps to empower members of the community. A *shared* vision builds community between the public and private, the leaders and the residents. It encourages cooperation and coordination among the stakeholders. It is also easier to establish priorities when community leaders know toward what end they are working. The defined vision must become an integral part of the management and operation of the County and the activities in which residents participate.

The purpose of this vision statement is to serve as a guide that community leaders and decision makers use as a basis for the decisions made and activities undertaken.

Goals – A goal identifies the purpose toward which an endeavor is directed. Goals are broad statements of intended accomplishments which, if accomplished as a whole, would bring the community closer to meeting its overall vision of the future. They do not identify specific activities that will be undertaken. Rather, a set of objectives or recommendations that are more specific actions are developed to guide the community toward meeting its goals.

Policies – A policy identifies the course of action to be taken when presented with a decision to be made on a given issue. To fulfill its role as a guidance tool, policy statements are included in the plan. These policy statements express the community's desires for future decisions and help to guide the achievement of the goals they have developed. The policies indicate the direction that decision-makers would take when decisions are to be made regarding County services and land use development. The policy statements are based on an overall set of goals for the community and its future.

Recommendations – Optional courses of action which assist in the achievement of goals. Goals help to identify where a community wants to be and toward what they are striving. However, they do not identify specific things that can be done to help the community get there. Recommendations are planning, land use, and general government-related activities that can be pursued, ideally as a whole, to help the community meet its goals. Recommendations can also be described as implementation measures.

Maryland Planning Legislation & Authority

■ Article 66B of the Annotated Code of Maryland

Article 66B, added to the Maryland Code in 1927 and now entitled "Land Use," delegates basic planning and land use regulatory powers to the state's municipalities, Baltimore City, and non-charter counties. Important sections of Article 66B apply to charter counties as well.

Under Article 66B, it is the function and duty of the Planning Commission to develop and approve a plan which will be recommended to the local legislative body for adoption. This required plan serves as a guide to all public and private actions and decisions to ensure that development of public and private property occurs in appropriate relation to each other. This plan document satisfies the requirement to provide a statement of goals and objectives, principles, policies, and standards which shall serve as a guide for the development and economic and social well being of the jurisdiction.

■ Economic Growth, Resource Protection, and Planning Act of 1992

On October 1, 1992, the Maryland Economic Growth, Resource Protection, and Planning Act of 1992 (the Planning Act) was passed with the intent of encouraging economic growth,

limiting sprawl development, and protecting the state's natural resources. The Planning Act amended Article 66B. Most local jurisdictions in the state have established priority areas for resource protection. The Planning Act encourages these jurisdictions to build on that base with consistent development regulations and targeted infrastructure investment by the state.

A premise of the Act is that the comprehensive plans prepared by counties and cities are the best place for local governments to establish priorities for growth and resource conservation. Once those priorities are established, it is the State's responsibility to back them up.

The Planning Act was based on eight "Visions," which were revised and expanded in 2009 as part of the Smart, Green, and Growing legislation (see below). County and municipal plans are required to be amended so that the plans implement and establish a set of policies based on the Visions.

Making the Visions part of Maryland's planning and zoning enabling legislation gives local jurisdictions a concise statement of Maryland's priorities for their plans. Local Planning Commissions must review, and if necessary, amend their plans at regular six-year intervals. Until the adoption of the Planning Act, there had been no statewide requirement that local jurisdictions review their plans on a regular basis. This provision ensures that plans are frequently reconsidered in light of new needs.

■ **Smart Growth and Neighborhood Conservation Act of 1997**

The 1997 General Assembly adopted several specific programs, which together form the Smart Growth initiatives. Under these initiatives, counties may designate areas as Priority Funding Areas if they meet guidelines for intended use, availability of plans for sewer and water systems, and permitted residential density. Existing communities and areas where industrial or other economic development is desired are the areas that are eligible for county designation. Counties may also designate areas planned for new residential communities which will be served by water and sewer systems and meet density standards. As of October 1, 1998, the State is prohibited from funding growth-related projects not located in a Priority Funding Area (PFA). The State will not put their funds where development is low in density; there must be an average density of 3.5 dwelling units per acre to qualify for state funds.

Smart Growth also established a Rural Legacy program to preserve sensitive rural areas and to help jurisdictions purchase agricultural land easements, a brownfields program to encourage redevelopment, a Job Creation Tax Credit to promote revitalization, and a Live Near Your Work program to promote settling in older urban areas.

■ **House Bill 1141 - Land Use - Local Government Planning; House Bill 2 - Agricultural Stewardship Act of 2006; and, House Bill 1160 - Workforce Housing Grant Program - Establishment**

The 2006 session of the Maryland General Assembly produced three notable bills related to land use planning and the comprehensive plan: HB 1141, HB 2, and HB 1160. The new legislation requires four new plan elements, though some may only apply to the County and others may only apply to municipalities. These elements are: a Water Resources Element, a Municipal Growth Element, a Priority Preservation Area Element, and a Workforce Housing Element.

Water Resources Element

The Water Resources Element is designed to express the relationship between planned growth, as identified in the plan, and the water resources that will serve and be affected by it. The Water Resources Element must:

- Identify drinking water and other water resources adequate for the needs of existing and future development proposed in the land use element of the comprehensive plan; and,
- Identify suitable receiving waters for both wastewater and stormwater to meet the needs of existing and projected development proposed in the land use element of the comprehensive plan.

Municipal Growth Element

The Municipal Growth Element requires municipalities to identify future growth areas that will implement their long-range vision for the future. These areas are to be based upon population projections, an assessment of land capacity and needs, and an assessment of infrastructure and sensitive areas, among other things. The element should be done in conjunction with the County, since it will guide future annexations, a process involving both jurisdictions.

Priority Preservation Area Element

The Priority Preservation Area Element, addressed in HB 2, is required of the County to maintain certification of its agricultural land preservation program. This element requires the County to identify priority preservation areas based upon the productivity of and/or profitability of agricultural and forestry enterprises, and that policies be in place in these areas to prevent them from being converted to or compromised by development. The acreage goal for land in a priority preservation area to be preserved through easements and zoning must equal at least 80 percent of the undeveloped land within the area. Counties also must demonstrate in future plan updates how they are contributing towards the statewide preservation goals of the Maryland Agricultural Land Preservation Foundation (MALPF) and what they can do to address any shortcomings.

Workforce Housing Element

The Workforce Housing Element is required of local governments only if they wish to be eligible for participation in the Workforce Housing Grant Program, which was established in

2006 by HB 1160. The Workforce Housing Element should assess workforce housing needs and contain goals, objectives, and policies to preserve or develop workforce housing. “Workforce housing” is defined in the bill as rental housing that is affordable to households with an annual income between 50 percent and 100 percent of the area median income, or homeownership housing that is affordable to households with an annual income between 60 percent and 120 percent of the median income. Measures that could be included in the element to address workforce housing include:

- Preservation and renovation of existing housing stock
- Redevelopment of existing residential areas
- Streamlined regulatory processes and reduced regulatory fees for construction or renovation
- Financial incentives for construction and renovation including local property tax credits
- Special zoning regulations for construction and renovation including inclusionary zoning
- Efforts to preserve workforce housing stock for subsequent first-time homebuyers and renters
- Coordination with neighboring jurisdictions
- Coordination with private sector employers
- Leveraging of federal financial assistance
- No date for inclusion of this element in the local plan has been established.

Other Changes

Annexation and rezoning procedures also were altered by the adoption of HB 1141. The legislation requires that annexations be consistent with the municipal growth element. Additionally, all annexation proposals must contain an “annexation plan” outlining the extension of services and public facilities. The annexation plan must be provided to the County 60 days prior and to the State (Maryland Department of Planning (MDP)) 30 days prior to the public hearing for their review and comment.

Another change that applies to annexations relates to the “five-year rule.” Previously under this rule, unless a zoning waiver was obtained from the County, the zoning on an annexed property could not be changed for five years if the desired zoning was substantially different from that envisioned in the master plan (comprehensive plan). This requirement no longer applies, unless the proposed zoning is more dense than the current County zoning by 50 percent or more. A municipality still may request a waiver of zoning from the County to avoid waiting five years.

Changes also were made to the PFA criteria. Now, municipalities must base their PFAs on an analysis of the capacity of land available for development, infill, or redevelopment and an analysis of the land area needed to satisfy demand for development at densities consistent with the master plan.

If all of the elements required are not in place on or before October 1, 2009, the affected jurisdiction (County or City) “may not change the zoning classification of a property until that county or municipal corporation” is in compliance.

■ **Smart, Green, and Growing Legislation: SB 273/HB 294 – The Planning Visions; SB 280/HB 297 – The Smart and Sustainable Growth Act of 2009; SB 276/HB 295 – Smart Growth Goals, Measures, and Indicators and Implementation of Planning Visions**

The Smart, Green, and Growing Legislation passed in 2009 includes three significant planning bills designed to update prior planning legislation and further enhance State and local implementation.

The *Planning Visions* bill (SB 273/HB 294) replaced the eight visions established in the 1992 Planning Act with twelve new visions (see below). These visions relate to:

- quality of life and sustainability;
- public participation;
- growth areas;
- community design;
- infrastructure;
- transportation;
- housing;
- economic development;
- environmental protection;
- resource conservation;
- stewardship; and,
- implementation of the visions.

The visions establish a State policy towards land use, and they are to be reflected in local comprehensive plans and implemented through local regulations. The Planning Visions bill also contains reporting requirements for local jurisdictions and MDP related to the effect of Adequate Public Facility Ordinances on PFAs. Lastly, the bill permits local jurisdictions to develop Transfer of Development Rights (TDR) programs in PFAs that will offset the cost to acquire land and construct public facilities in PFAs with proceeds from the sale of transferred development rights.

The Smart and Sustainable Growth Act of 2009 (SB 280/HB 297) attempts to strengthen comprehensive plans by requiring implementation measures and decisions to be consistent with the plan. In addition to explicitly indicating the legislative intent to overturn the Court of Appeals ruling in *David Trail, et al. v. Terrapin Run, LLC et al.*, 403 Md. 523 (2008), the bill defined actions that are “consistent with” or have “consistency with” a comprehensive plan as those that further, and are not contrary to, the plan with respect to:

- policies;
- timing of implementation of the plan;
- timing of development;
- timing of rezoning;
- development patterns;

- land uses; and,
- densities or intensities.

Actions that would fall under this definition include local ordinances and regulations, variances or special exceptions, annexations, and water and sewer plan amendments. An exception to the definition was made for PFAs to exclude the need for consistency with land uses and densities or intensities expressed in the plan. This exception provides flexibility in permitting mixed-use development and density bonuses in areas where development is meant to be focused. The bill also requires Planning Commission and Board of Zoning Appeals members to complete an education course.

The Smart Growth Goals, Measures, and Indicators and Implementation of Planning Visions bill (SB 276/HB 295) identifies a statewide land use goal to increase the percentage of growth within PFAs and decrease the percentage of growth outside PFAs. Towards this end, the bill requires that a local jurisdiction issuing more than 50 building permits per year submit an annual report that indicates how well it is achieving smart growth measures and indicators. Each jurisdiction must establish its own local goal towards achieving the statewide land use goal. This is to be identified in the annual report along with a time frame for achieving the goal, the resources that will be necessary for providing infrastructure inside the PFA and land preservation outside the PFA, and any progress that has been made since the last report in achieving the goal. The report also must describe the following in terms of what is inside and outside the PFAs: amount and share of growth; net density of growth; and creation of new lots and residential and commercial building permits issued. Also to be included is a report on the jurisdiction's development capacity analysis, which should be updated every three years or when there is a significant change in zoning or land use. Additionally, the report should identify the number of acres preserved using local agricultural land preservation funds.

Local land use goals established and reported to MDP not only will be used in the County's annual report, but also will be used to set policy as it is related to the location, timing, and funding for growth, infrastructure, land preservation, and resource protection. When the Master Plan is reviewed at the six-year review period, the progress indicated in the annual reports can be used to make adjustments to the goal and/or the mechanism put in place to achieve it.

Maryland's Twelve Visions

■ The Visions

The 1992 Planning Act was based on eight visions. These visions were replaced with twelve new visions in 2009 as part of the Smart, Green, and Growing legislation. The new visions are as follows:

- (1) Quality of life and sustainability: a high quality of life is achieved through universal stewardship of the land, water, and air resulting in sustainable communities and protection of the environment;
- (2) Public participation: citizens are active partners in the planning and implementation of community initiatives and are sensitive to their responsibilities in achieving community goals;
- (3) Growth areas: growth is concentrated in existing population and business centers, growth areas adjacent to these centers, or strategically selected new centers;
- (4) Community design: compact, mixed-use, walkable design consistent with existing community character and located near available or planned transit options is encouraged to ensure efficient use of land and transportation resources and preservation and enhancement of natural systems, open spaces, recreational areas, and historical, cultural, and archeological resources;
- (5) Infrastructure: growth areas have the water resources and infrastructure to accommodate population and business expansion in an orderly, efficient, and environmentally sustainable manner;
- (6) Transportation: a well-maintained, multimodal transportation system facilitates the safe, convenient, affordable, and efficient movement of people, goods, and services within and between population and business centers;
- (7) Housing: a range of housing densities, types, and sizes provides residential options for citizens of all ages and incomes;
- (8) Economic development: economic development and natural resource-based businesses that promote employment opportunities for all income levels within the capacity of the State's natural resources, public services, and public facilities are encouraged;
- (9) Environmental protection: land and water resources, including the Chesapeake and coastal bays, are carefully managed to restore and maintain healthy air and water, natural systems, and living resources;
- (10) Resource conservation: waterways, forests, agricultural areas, open space, natural systems, and scenic areas are conserved;
- (11) Stewardship: government, business entities, and residents are responsible for the creation of sustainable communities by collaborating to balance efficient growth with resource protection; and
- (12) Implementation: strategies, policies, programs, and funding for growth and development, resource conservation, infrastructure, and transportation are integrated across the local, regional, state, and interstate levels to achieve these Visions.

■ Meeting the Twelve Visions

The 2010 Carroll County Master Plan implements the vision for *quality of life and sustainability* by striking a balance between directing growth to designated growth areas and preserving the balance of the county as a rural working landscape. The plan's recommendations include strategies to provide the facilities necessary for growth that is compatible with the master plan and an attractive asset for the community.

A variety of options for enhancing *public participation* are laid out in the plan's Community Involvement Chapter. The plan recognizes the importance of involving the community not just in the development of plans, but also in their ongoing implementation. Enhancing community awareness of planning efforts and providing them with timely information on how they can become involved and stay involved are recognized as essential.

Carroll County's designated *growth areas* have been identified as the most suitable areas for development in the county. The growth areas are designated to accept new development. Public water and sewer service are generally provided here, along with other services. Most of the growth areas also are centered on an incorporated municipality. Most of these cities and towns have been in existence since the 19th century and historically have been the places where densities tend to be higher and public services more plentiful.

Preserving and enhancing places like the county's cities and towns helps achieve the vision for *community design*. The plan encourages thoughtful, sustainable community design through recommendations that "promote development design that is in harmony with the surrounding built and natural environments, encourages community interaction, and, in rural areas, preserves the county's rural character." (Land Use & Growth Management Chapter) Through its housing and transportation chapters, the plan encourages the creation of mixed-use, walkable communities in the DGAs. Recommendations to cluster development and protect sensitive environmental features, particularly during the development process, help to ensure that community design reflects an ethic of sustainability.

Ensuring that the proper *infrastructure* is in place to support the County's designated growth areas is a major objective of the plan. The new Water Resources Element (WRE) of the plan provides the information necessary to evaluate the sustainability of our land use policies compared to the ability to provide adequate water/wastewater systems and to restore and maintain water quality. The Concurrency Management program requires the preparation of an annual Concurrency Management Report that analyzes the residential development activity of the past year, assesses the available capacity of public facilities and services, and recommends ways to better achieve the stated purpose of the Code of Public Local Laws and Ordinances, Chapter 71 Adequate Public Facilities and Concurrency Management.

The plan's chapter on *transportation* contains recommendations for improvements that will maintain the viability and efficiency of the county's transportation network. Based on an analysis of the feasibility and cost-effectiveness of various transportation solutions, this chapter establishes a foundation for future transportation improvements that reflects the demands that will be placed on the network over time as the land use plan is realized. While

the planned major streets include two bypasses and several significant collector roadways, much of the plan is grounded in fiscal responsibility and the need to focus on system preservation and connectivity.

The need to provide adequate and varied *housing* for the residents of Carroll County is expressed in the plan in several ways. By directing the majority of growth to the county's DGAs, the likelihood of creating housing diversity is increased. It is in the DGAs that public facilities are available, and, therefore, greater flexibility in design and density can be realized. Additionally, the plan contains recommendations for enhancing housing options through various incentives, the creation of accessory dwelling units, and opportunities to create mixed-use developments.

Economic development is a vital part of Carroll's economy and tax base. Therefore, the plan also addresses measures to ensure that economic development consistent with the State's vision is encouraged. The plan goal is for commercial and industrial uses to represent a minimum of 12 percent of the tax base as new development occurs. A better balance of the County's tax base will help the County provide needed services and the economic development will bring jobs to the county without residents shouldering an undue share of the tax burden. A study conducted in 2007 assessed commercial and industrial land available and projected job growth, and estimated the need for additional commercial and industrial land. This plan considers the results of that study in its recommendations. Additionally, the plan contains recommendations to support the agribusiness industry and the viability of agriculture as a livelihood. It also contains recommendations for maintaining the viability of resource industries, such as mineral extraction and forestry, through the Mineral Resources Element and the Priority Preservation Area Element.

The vision to safeguard and manage natural resources through *environmental protection* and *resource conservation* is expressed in the plan in several ways. At the broadest level, the practice of directing growth to DGAs and discouraging development in rural areas helps to protect sensitive environmental features by limiting the geographic extent of the impacts of development. Goals contained within the plan seek to create built environments that are in harmony with the natural environment, even in the DGAs. Additionally, the plan's Environment chapter defines and addresses the sensitive areas required by Article 66B of the Annotated Code of Maryland and as modified by 2006 legislation. Additional sensitive areas representing important environmental resources to Carroll County are addressed as well. The Water Resources Element of the plan explores ways to achieve a sustainable balance between planned growth and the ability to provide water supply to serve it. The WRE also identifies wastewater limitations and measures to address those limitations. The WRE further addresses water quality issues through strategies to address nonpoint sources. This element is the result of exhaustive research and analysis, and provides a level of information never before available to the County. It will be a significant factor in guiding future land use decisions. The Priority Preservation Areas Element contains recommendations for conserving a part of the county that is rich in farmland, forest land, wildlife habitat, and scenic beauty. It is to this area that land preservation efforts are to be focused so that resource conservation goals can be most effectively and cost-efficiently achieved.

The responsibility of local government to provide *stewardship* of the land and resources under its purview is paramount in the plan. The longstanding commitment of the County and the eight municipalities that lie within its borders to direct growth to the towns and their surrounding growth areas, and to maintain the rural landscape beyond these areas, is reinforced with this plan. The chapter on interjurisdictional coordination recommends ways to continue and enhance efforts to manage an approach to development and conservation that is mutually sustainable and beneficial. Additionally, the combined recommendations related to land use, environmental protection, resource management, concurrency management, and public facilities result in a balanced and efficient plan for the county's future.

The plan addresses the vision for plan *implementation* that is multifaceted. The Interjurisdictional Coordination and Community Involvement chapters identify ways in which all of the stakeholders in the plan can be involved in its ongoing implementation. Existing structures such as the Town/County Agreements and State agency guidance provide effective methods for ensuring that communication continues throughout the life of the plan. Numerous recommendations also are contained in the plan that are aimed at improving the policies, programs, and funding necessary for the plan to be implemented as envisioned.

Relationship to Community Comprehensive Plans

Carroll's eight municipalities and the Freedom area serve as the county's Designated Growth Areas (DGAs). These are the areas in which the majority of planned growth is focused and the majority of public facilities and services are concentrated. The County Master Plan is a countywide comprehensive plan that addresses the unincorporated areas outside of the DGAs. Each municipality develops a comprehensive plan to address future growth and planning-related issues within its DGA.

Municipalities are mandated, and given the authority under Article 66B of the Annotated Code of Maryland, to develop a Municipal Growth Element. The Municipal Growth Element must identify municipal annexation areas, which are those areas, not currently within the corporate limits, that the municipality intends to annex at some point in the future. The purpose of identifying these areas is to ensure the municipality is able to adequately plan for future growth and facilities. While counties have no approval authority over annexations, the incorporated areas within the DGAs are shown on the County Master Plan map (also known as the land use map) to indicate support to the municipalities for the intended future zoning of these municipal annexation areas.

While the policies and recommendations included in the County Master Plan generally apply to all incorporated areas, deference is usually given to the more detailed community comprehensive plan that covers each DGA.

Chapter 2: Past, Present, & Future Trends

From the time of its founding in 1837 until the late 1950s, Carroll County was basically a rural farming community interspersed with small towns and villages where trade, civic, and cultural activities took place. In 1959, realizing that growth was inevitable given the county's geographic location, the County Commissioners appointed the County's first Planning Commission. By 1964, the first master plan had been formulated and adopted for Carroll County.

In addition, each of the municipalities has since adopted a community comprehensive plan, as has the County for the Freedom area. These community comprehensive plans address issues and future land use patterns at the smaller community level. They cover the municipalities and the identified annexation areas surrounding them. These areas as a whole, including the Freedom area, are the county's Designated Growth Areas (DGAs).

During the past 45 years, small area amendments to the original plan have been made, and new elements have been added. However, the basic premises and visions of the original plan have not changed. A periodic assessment needs to be made of the Master Plan to determine how well it is working. Considerable changes have taken place since the first plan was adopted in 1964.

■ Population

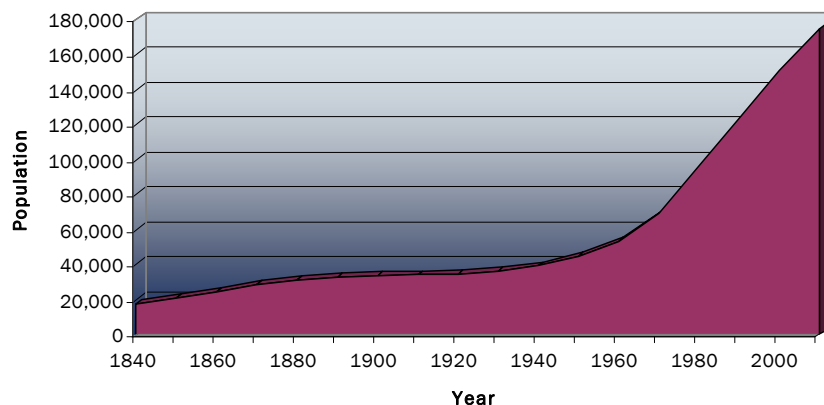
Changes in population result from two factors. The first is natural change, which is caused by births and deaths of the existing population. The second factor is migration of people to and from an area.

Carroll County was created in 1837. The 1840 Census was the first official tabulation of the county's

population, which was set at that time at 17,241. The county has experienced growth during every decade since then. However, the rate of growth was very slow in the early years. Beginning in 1940, the rate of growth in Carroll County increased to parallel the rate of growth experienced by the State of Maryland and the United States as a whole.

By 1960, when the first County Master Plan was being developed, the county had grown to a population of 52,785. Since then, the county has grown at a faster rate than both the State of Maryland and the United States.

Carroll County Population
1840 to 2008

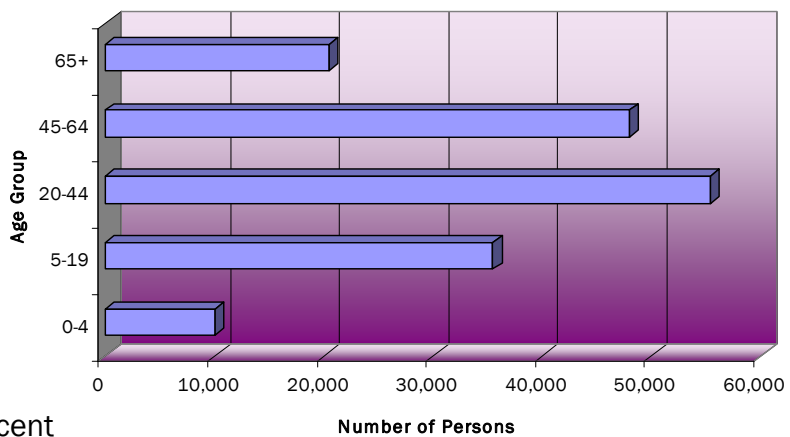


Source: 2000 U.S. Census

From 1840, it took 80 years for the county's population to double to 34,245 people in 1920. From 1920, it took nearly another 50 years for the population to double again. Since 1970, the population doubled in only 25 years. The greatest amount of growth occurred from 1970 to 1980, during which time the population grew by 27,350, a 40 percent increase. Since 1980, the growth rate has remained steady at an annual average rate of 2.9 percent. The population at the end of 2008 was estimated to be 174,650 (Bureau of Comprehensive Planning Monthly Population estimates).

Between 1964, when the first plan was adopted, and 2009, Carroll County added about 118,650 people, a 219 percent increase. Despite this immense growth, some of the demographic characteristics have remained the same. In 1960, the population was 95.8 percent white and 4.2 percent non-white. In 2008, the MDP reported the county's population was 93.2 percent white and 6.8 percent non-white. According to the 2000 Census, the

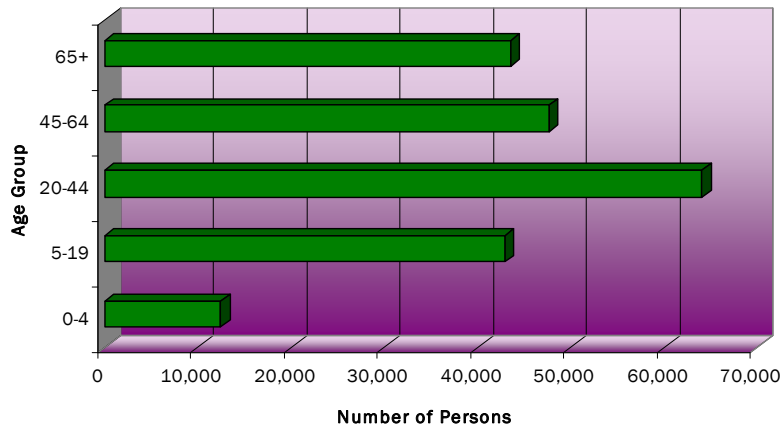
Carroll County Estimated Age Distribution
2008



Source: 2000 U.S. Census

gender of the population has also remained the same at 49 percent male and 51 percent female. The percentage of the population that is of school age remained relatively constant at 20 percent between 1960 and 2008. However, the actual number has grown from 10,000 in 1960 to 27,702 in 2008. The median age increased from 32.2 in 1960 to 30.7 in 1980 to 36.9 in 2000. The percentage of people falling

Carroll County Projected Age Distribution
2030



Source: 2000 U.S. Census

within the primary income earning years has increased since 1960. In 2008, roughly 61 percent (103,342) of the county's population was between 20 and 64 years of age, compared to 53 percent in 1960. The percentage of the population 65 and over increased slightly from 11.5 percent in 1960 to 12.2 percent in 2008; however, the actual number more than tripled from 6,071 to 20,520.

Finally, the population density of Carroll County in 1960 was 116 persons per square mile. As of 2008, that figure increased to 381 per square mile.

Population growth is expected into the future. Natural increase is expected to continue at a fairly steady rate, although growth resulting from net immigration is more difficult to project. Based on the growth trend experienced since 2000, it is estimated that the projected build out population of 218,677 would be reached the 2035 (which is the forecast horizon for the BMC Round 7C projections). During the latter part of the decade, new housing starts have slowed. Population growth will more likely reach the 200,000 mark around the year 2025 (BMC Round 7C Population Projections). By 2030, the characteristics of the population will have changed. It is estimated that 21 percent of the population in 2030, or 43,500 people, will be 65 years of age and over (MDP). There will be approximately 42,940 school-age children comprising 20 percent of the population (MDP). While Carroll County will continue to be an attractive area for young families in the near future, in the long range there will be an aging of the population.

Cooperative Forecasting Group Round 7C Summary of Carroll County

	2000	2005	2010	2015	2020	2025	2030	2035
Total Household Population	147,316	165,650	171,739	179,625	188,178	195,782	203,036	208,851
Average Household Size	2.81	2.79	2.79	2.74	2.70	2.67	2.67	2.65
Total Households	52,503	59,401	61,594	65,658	69,647	73,436	76,148	78,731
Group Quarters Population	3,581	3,581	3,781	3,981	4,081	4,181	4,281	4,381
Grand Total	150,897	169,231	175,520	183,606	192,259	199,963	207,317	213,232

Date: December 2009, prepared by CC Bureau of Comprehensive Planning for Baltimore Metropolitan Council Round 7C Forecasts

■ Housing

In 1960, there were 14,957 dwelling units in Carroll, of which 14,186 were occupied. Each dwelling unit represents a household. Of the occupied units, 9,702 (68%) were owner-occupied, and 4,484 (32%) were renter-occupied. The vacancy rate was 5 percent. By 2000, the number of occupied units had increased to 52,503, of which 81.9 percent were owner-occupied. In 2000, only 3.2 percent of the housing stock was vacant. In 1960, 76.9 percent of all units were single-family detached (11,491 units). By 2000, the number of single-family detached units had increased to 42,272, representing 77.9 percent of all units. The number of county households paying more than 30 percent of their gross income for housing expenses (contract rent and utilities for tenants; principal, interest, taxes, insurance and utilities for owners) is estimated to have grown from 2,787 in 1990 to 3,200 in 2000, a 3.1 percent increase given the number of available rental units. About 16 percent of these households are paying more than 50 percent of their income for housing. The median value of owner-occupied units in 1960 was \$11,100. By 2000, the median value of owner-occupied units in the county was \$162,500. The condition of the housing stock is generally very good.

Seven of the incorporated towns have established a Growth Area Boundary (GAB). The town and surrounding annexation areas are considered to be a Designated Growth Area, or DGA. The Finksburg area has a small area plan, but is not associated with any incorporated town. The eighth town, Sykesville, resides within the Freedom Growth Area, which is an unincorporated DGA within the county. Presently, there are 38,661 households in the DGAs, or 63 percent of all households. For the period 2000 through 2008, 72 percent of new residential units added were located in the nine DGAs.

In 1960, the number of persons per household in Carroll County was 3.32. This figure declined steadily to 2.81 in 2000. This declining trend is expected to continue, which will result in a greater growth in units than in population. In 1960, 4,444 units, or 30 percent of all units, were located in an incorporated town. By 2000, 14,366 households, or 27 percent of all households, were located in an incorporated town. Presently, 17,715 households (29%) are within a municipality.

New residential units are planned to be constructed in the future and will add significantly to population growth in the county, even though the average household size is expected to continue to decline. During the period 2000 through 2008, an average of 973 dwelling units were completed every year. An average of 388 units were constructed in the towns each year during this period, while an average of 585 units per year were constructed in the unincorporated county, which includes the Freedom Growth Area. Based on 2009 county and municipal land use designations, it has been estimated that an additional 34,411 potential residential units can be created countywide. As was mentioned in the Population section, past growth trends (1970 to 2000) are not expected to continue. It will more likely take 30 years to add approximately 20,000 units, or an average of 660 units per year. Based on land use designations and the slower growth rate, by the year 2030, the southeast section of the county (Election Districts 4, 5, and 14) will contain 24,991 units, or 33 percent of all units in the county. The second largest area will be Westminster (Election District 7) with 17,261 units. The northeast (Election Districts 6 and 8) and northwest (Election Districts 1, 2, 3, 10, 11, and 12) will be close in size with 13,004 and 13,279 units, respectively. The smallest area in terms of units will be the southwest (Election Districts 9 and 13) with 7,615 units.

■ Agriculture

Historically, agriculture has been the largest industry in Carroll County. However, the acreage devoted to farming has steadily declined. In 1960, 244,805 acres were in farms. By 2007, this acreage had decreased to 141,934 acres. The number of farms in Carroll County has been declining since 1910 when there were 3,884 farms. The 2,035 farms in 1960 declined to 1,148 in 2007, a 44 percent decrease in 47 years. One noted increase is the average size of farms going from 110.5 acres in 1960 to 124 acres in 2007.

While the nature of farming may change in the future, the industry will not survive if land is developed for other uses. Recognizing the importance of land for agriculture to remain a viable industry, Carroll County began participating in an agricultural land preservation program in 1980. Through 2009, 54,858 acres of agricultural land have been preserved

through a deed of permanent easement, 2,023 acres of which were donated through land trusts and 2,937 of which were preserved through the Carroll County Rural Legacy Program. By the end of 2010, 60,000+ acres will be under easement. The remaining 40,000 acres needed to reach the 100,000-acre goal can be protected in annual increments of 4,500 acres, assuming commitments to MALPF, Rural Legacy, and local program funding continue.

■ Schools

Growth in the number of students enrolled in Carroll County Public Schools reflects the overall growth in population in the County. In 1883, there were 113 schools in Carroll County (mostly one-room schoolhouses) with an enrollment of 6,150 pupils. By 1960, the public school system had grown to 10,661 students housed in 18 buildings. In September 2009, Carroll County Public Schools had an enrollment of 27,665 students in 42 facilities. The 42 facilities consisted of 23 elementary schools, 9 middle schools, 8 high schools, and 2 schools that provide specialized services.

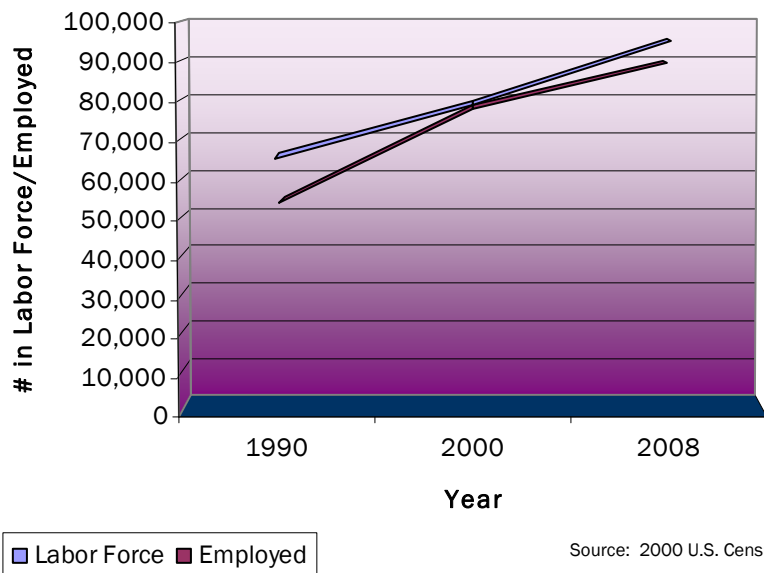
Current enrollment projections are available in the Carroll County Public Schools Educational Facilities Master Plan, prepared and approved annually by the Carroll County Board of Education.

■ Employment

In 1960, Carroll's labor force was 20,300. With population growth, the labor force has also grown, reaching 95,650 in 2008. The 2008 labor force included 3,881 unemployed persons. Carroll's 2008 average unemployment rate was 4.1 percent, one of the lowest in the state.

In 1960, almost 30 percent of the labor force was employed in manufacturing. By 2000, manufacturing employed only 10 percent of the labor force. The primary industry of employed persons in 2000 was educational, health, and social services.

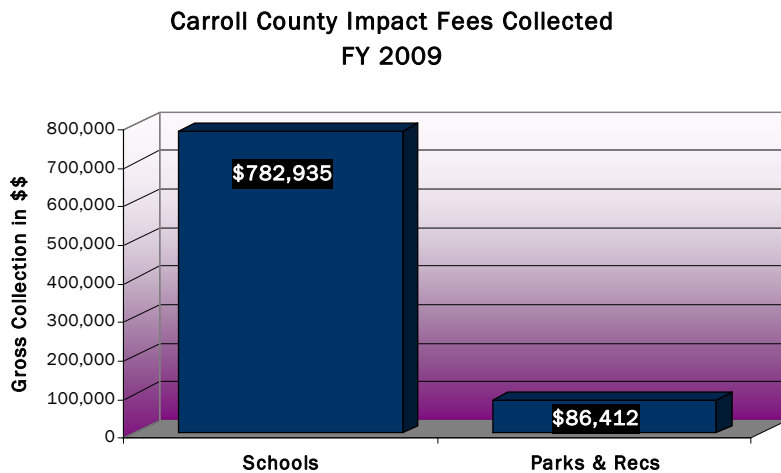
Carroll County Labor Force vs. Jobs
1990 to 2008



In 2000, an estimated 34,804 county residents in the workforce worked in the county, while 42,788 (MDP) Carroll residents left the county for employment elsewhere, including those who worked out of state.

In 1969, there were an estimated 27,414 jobs (full and part-time) in Carroll County. Employment in the county grew to 53,109 jobs in 1990 and an estimated 76,308 jobs in 2005 (U.S. Census, MDP, U.S. Bureau of Economic Analysis (BEA)). Employment in the county is projected to reach 90,300 jobs (BMC Round 7C projections) (full and part-time) by 2030.

■ County Services Financing



Source: Carroll County, FY 2009

typical existing house does not provide enough in taxes to cover the associated costs of services. New single-family homes may cover their associated costs, as new construction has trended toward larger, more expensive homes.

County services are financed through the use of property taxes, income taxes, state and federal funds, license and permit fees, and other sources. For every dollar collected from the typical residential development, more than one dollar is expended on services. By contrast, for every dollar collected from commercial/industrial development and agricultural land, less than one dollar is expended on services. The

Carroll County has imposed an impact fee on new development for schools since 1976. Initially, the fee was used to acquire school sites. In 1989, the fee was changed to apply to construction costs as well. The impact fee for schools was last changed in 2003. Since then, school impact fees for new residential units were \$3,599 for mobile homes, \$6,836 for single-family detached units, \$7,610 for single-family attached units, and \$2,787 for each multi-family unit. Impact fees for schools are collected at the building permit stage. An impact fee for parks has been collected since 1989.

According to the 2000 Census, the median value of all owner-occupied units in the county was \$162,500. The trend has been toward tax revenues generated by new construction being well above those generated by the average existing single-family dwelling.

■ Transportation

The transportation system serving Carroll County and its residents and businesses consists of a network of trails, roads, railways, private airfields, and a regional public airport. Aside from a few notable exceptions, such as the Hampstead Bypass, the countywide transportation network we know today has remained virtually unchanged since MD 140, the original Westminster Bypass, was built in 1952.

The first major transportation system to serve Carroll Countians was a railway built in 1831 as part of the Baltimore and Ohio (B & O) railroad. The B & O was extended to Sykesville as part of a connection to the Washington, D.C. area. A second railway system, the Western Maryland Railroad, originally chartered in 1852 as the “Baltimore, Carroll, and Frederick Railroad Company,” was built to Westminster in 1861, Union Bridge in 1862, and Detour in 1868. Today, the Maryland Midland Railroad operates a freight service along the original Western Maryland Railroad rights-of-way.

The expansion of the runway at the Carroll County Regional Airport in the 1990s to 5,100 linear feet is among the more notable recent expansions of Carroll’s transportation network. While the expansion allows small planes and corporate jets to utilize this public facility today, it operated as a small private facility with two turf landing strips until 1976, when Carroll County acquired the airport. In the late 1970s, the first paved runway was constructed along with the main hangar/administration building and runway lighting. The “Jack B. Poage Field,” as the airport also is known, is one of eight airports/airfields currently operating in Carroll. In the fall of 2010, expansion is again under consideration as the airport remains an important transportation and economic development tool for Central Maryland.

In 1962, with the adoption of the original countywide Major Street Plan, Carroll County began the process of planning for the long-term traffic needs of its citizens and businesses. A principal focus of the 1962 Major Street Plan was the construction of bypass roads around several of Carroll’s incorporated towns, particularly those whose Main Streets were State highways. These bypasses, in conjunction with local collector road construction, were expected to divert heavy traffic away from the historic towns and create economic development opportunities for the County. The vision set forth by the 1962 Major Street Plan has remained the focus of Carroll’s transportation planning efforts ever since.

Today, as a result of the decentralization of the Baltimore metropolitan area and the construction of the Northwest Expressway (I-795), Carroll County’s traffic volumes continue to escalate. The Northwest Expressway, in particular, has accelerated the need for improvements to the State roadway system. In 2008, the most current traffic data available, the State Highway Administration reports that MD 140 in the Westminster area is accommodating roughly 56,833 vehicles per day. Traffic along MD 140 near the Baltimore County line decreases to approximately 41,056 vehicles per day. Other congested corridors in the county include MD 26 in the Eldersburg area (29,482 vehicles per day), MD 30 in the Hampstead/Manchester area (20,921 vehicles per day), and MD 97 North (27,652 vehicles per day). These steadily increasing traffic volumes continue to indicate a need for capacity improvements along Carroll’s more congested State road corridors.

Chapter 3: Planning Process

The Pathways Planning Process

The Board of Carroll County Commissioners initiated a process to address some key issues facing the County. The process identified six “pathways,” each representing a key issue around which the Plan would focus. The Pathways were:

- Directing & Designing Growth;
- Taking Care of Business;
- Connecting with Our Heritage;
- Housing the Workforce;
- Networking Transportation; and,
- Sustaining our Natural Systems.

■ The Process

Extensive community participation in the planning process was an important part of the Pathways Plan effort. The initial community outreach centered around visioning activities and opportunities for the public to provide input on shaping the future. These activities provided the foundation for a draft Carroll County Comprehensive Plan, entitled *Pathways to Carroll's Future Landscape*, or the Pathways Plan for short.

Small group discussions were tailored for three types of participants – members of individual communities, elected and appointed officials, and business and development community representatives. Members of Carroll's individual communities met in groups called Grassroots Gatherings. Elected and appointed officials agreed to use the Council of Governments as their forum for participation. It was called Municipal Matters. The Perennial Partnerships groups represented Carroll's business, professional, and development community. All group discussions followed the same agenda and format.

Additional insight into the issues related to the Pathways was gained through two studies conducted by an outside consulting firm. An Economic Development Land and Employment Needs Study (EDLENS) was commissioned to provide the County with information necessary to make plan recommendations that would lead to the creation of a sustainable tax base and resident employment opportunities. Also commissioned was a transportation study that yielded recommendations for improvements to the county's transportation network. The results of both of these studies were considered during the development of the Pathways Plan recommendations.

■ Initial Community Outreach Opportunities

In June of 2005, a Regional Planning Conference kicked off the planning process. The conference featured Ed McMahon and Thomas Hylton as key speakers. Nearly 175 people registered for this half-day conference.

By August of 2005, a website (www.carrollpathways.org), dedicated solely to the Pathways Plan and process, was online and ready to offer information and participation activities. During the planning process, the website offered downloadable materials, online surveys, a community meeting calendar, and results of the various meetings and events. Information was quick and easy to access, and allowed the participation of those who were unable to attend meetings.

In fall 2005, over 200 participants attended two sets of community outreach meetings. Twenty-three Grassroots Gatherings, four Perennial Partnerships, and the Council of Governments were introduced to the process, shared their special places, and heard background information on the county related to each pathway.

The Cultivating Concepts Conference in January 2006 featured expert speakers on several topics pertinent to the key pathways. Close to 150 people gathered for this day and a half conference, which ended with a Visual Preference Survey. Staff hosted a youth planning charrette during the conference. This hands-on exercise engaged kids in mapping activities, and allowed them to share their vision of an ideal community.

The Visual Preference Survey was available on the Pathways Plan website. Over 600 participants ranked individual images in several categories based on how they felt a pattern or design of development in Carroll County should look in the future.

A third set of Community Outreach meetings in the spring of 2006 addressed potential concepts for future directions. An additional 100 people were new to the Grassroots Gatherings meetings. In May of 2006, nearly 80 people joined staff for final participation in an event called Map It Out! Small groups directed future residential growth by placing Legos® on a countywide map.

A fourth set of community outreach meetings, held in March 2007, provided participants with the preliminary broad concepts identified to help the community move in the key directions identified by earlier phases of input.

■ Information Opportunities

Throughout the initial planning process, an abundance of materials and mediums kept participants abreast of progress.

Newsletters were available for interested citizens who wanted updates on the progress of the planning process. Meeting dates, participation opportunities results, and a description of key planning legislation were also published.

Topic Papers, posted on the website, provided readers with brief descriptions of ideas and topics new to participants and that could impact the plan's recommendations.

Other opportunities for community input included: presentations to civic groups, displays at community events, quick reference contact information cards, and materials available at public locations.

■ Pathways Plan Review Process

A preliminary plan document was presented in April of 2009. The initial draft considered the key directions identified through the Community Outreach process and the feedback that was provided through the meetings. The Carroll County Planning Commission released the draft for public and State agency review on May 11, 2009. Eight community workshops were held during the 60-day period. These workshops were intended to help stakeholders gain an understanding of the proposals so they could provide informed comments for the public hearing process.

The County Planning Commission held a series of public meetings on June 11, 15, and 23, 2009, and a public hearing on July 14, 2009. Attendance at the three meetings combined exceeded 1,000 people. Following the public hearing, the Planning Commission held thirteen work sessions to discuss and revise the plan recommendations.

At its October 20, 2009, work session, the Planning Commission voted to set aside the Pathways Plan. Given the extent of recommendations that would have a fiscal impact on landowners and the County, and in light of the current economic climate, there was reason to reconsider the plan as a whole. Through the public review process, it was made clear that many people were uncomfortable with the magnitude of changes being proposed for land use and zoning in the county. As a result, the Planning Commission directed staff to review, update, and revise the 2000 Master Plan.

Review Process for the Update to the 2000 Master Plan

Following the decision of the Planning Commission to set aside the Pathways Plan, staff made the requested updates to the 2000 Master Plan. A staff draft of this plan was presented to the Planning Commission at its December 15, 2009, meeting.

A series of work sessions followed between January and May 2010, during which the Planning Commission reviewed the staff draft and made modifications to it. These work sessions were open to the public. The final draft of the plan was released for the State-mandated 60-day review on June 16, 2010.

The Planning Commission hosted several public information meetings, which were held on July 14, 19, and 21, 2010. In response to feedback on previous workshops, these open-house-style workshops were formatted to allow individuals to talk directly with Planning Commission members and to have individual questions answered.

A public hearing was held on August 19, 2010. The Planning Commission subsequently held work sessions to review comments and determine resulting document revisions needed. These work sessions occurred on September 8, 13, and 21, 2010. These work sessions were also open to the public and video recorded.

The plan was approved by the Planning Commission on October 19, 2010, and adopted by the Board of County Commissioners on [REDACTED].

Chapter 4: Vision Statement & Goals

The Vision

Through this planning process, the community and County officials faced a number of choices to make. They chose to pursue the achievement of the Vision and goals outlined in this chapter. The choice was also made to implement a set of recommendations and policies that will bring the County closer to achieving this Vision and goals.

A “Vision Statement” defines a community’s preferred future. It is broad and somewhat idealistic, but it is attainable.

Carroll County’s vision for its future is as follows:

Carroll County preserves its unique rural agricultural heritage, protects its environmental resources, and promotes a balanced approach to new growth and economic opportunities consistent with the character of its communities. County amenities, infrastructure, and facilities provide a high quality of life that helps ensure Carroll continues to be a great place to live, work, and play.

The Goals

To promote the public health, safety, and welfare, Carroll County will manage growth by achieving the following goals (in no particular order of priority):

■ Goal 1

Pursue policies and Community Investment Plan expenditures that facilitate growth in the designated growth areas, thereby protecting and conserving agricultural and environmental resource areas, preserving open space, and providing public facilities and services efficiently and cost effectively.

■ Goal 2

Preserve 100,000 acres of agricultural land for the production of agricultural products and promotion of related agribusiness.

A “goal” identifies what a community intends to accomplish. A goal should be broad, not identifying specific activities. It is oriented to achieving the Vision.

■ **Goal 3**

Preserve 80 percent of undeveloped land in the Priority Preservation Area.

■ **Goal 4**

Protect, maintain, and restore, where practical, the environmental resources and natural ecosystems in the County by promoting land use practices that are in balance with, and minimize the effects on, the natural environment.

■ **Goal 5**

Promote a healthy economy and additional employment opportunities by: supporting the retention and expansion of existing businesses including agribusiness through sensible land use policies; providing land appropriately located and zoned for a variety of types and intensities of new economic development activities; and, maintaining a balance between economic development and population growth through diversified industrial expansion that offers job opportunities and steady employment for skilled workers.

■ **Goal 6**

Ensure adequate and appropriate Community Investment Plan projects and operating budgets to implement the Master Plan and provide public facilities and services.

■ **Goal 7**

Provide a safe and functional transportation system which implements the land use plan while promoting access and mobility for people and goods through a network of roads, rail, transit, and non-motorized opportunities.

■ **Goal 8**

Promote development design that is in harmony with the surrounding built and natural environments, encourages community interaction, and, in rural areas, preserves the county's rural character.

■ **Goal 9**

Preserve the county's historic, cultural, scenic, and architectural heritage.

■ **Goal 10**

Provide for a wide range of housing types, density, and affordability that is well maintained and will meet the needs of the entire community.

■ **Goal 11**

Provide a coordinated and comprehensive system of public and private parks, recreational facilities and programs, and open space that will meet the active and passive recreational needs of all citizens of the county and enhance community design, identity, and vitality.

■ **Goal 12**

Provide community educational opportunities, facilities, and resources, particularly libraries and schools, to meet the needs of a diverse population.

■ **Goal 13**

Ensure communication and coordination between the County and the municipalities on projects and issues of mutual concern. Promote interjurisdictional cooperation in planning and land use decisions.

■ **Goal 14**

Encourage the involvement of the community in implementing the Master Plan.

■ **Goal 15**

Increase by .5 percent per year the amount of growth within Priority Funding Areas (PFAs) and decrease by .5 percent per year the amount of growth outside PFAs, for a total of a 3 percent shift over a six-year period.

The remainder of the plan is divided into chapters based on topic. Each chapter identifies the related goals and describes the significance of that topic to Carroll County and the Master Plan. This “Significance” explains why the choices—through the policies and recommendations—were made. The “Challenges” facing the County regarding these issues are also described. Policies and recommendations related to implementing and achieving each goal are outlined in the applicable chapter for its topic(s). Potential fiscal impacts to County Government are included at the end of each chapter.

Chapter 5: Agriculture

Goal

Preserve 100,000 acres of agricultural land for the production of agricultural products and promotion of related agribusiness.

The Significance to Carroll County

The preservation of agricultural land and the continuation of farming and agribusiness uses has traditionally been a major priority in Carroll County. Approximately 141,934 acres, or 49.3 percent of the land area of the county, is currently being used for agriculture. The majority of the active farms in the county are on lands currently zoned Agricultural or Conservation. The agricultural goal is directed at preserving the land used for agriculture. Maintenance of a large agricultural land base will ensure that farming can continue into the future.

With a market value of all products sold of \$87.4 million dollars, according to the 2007 Census of Agriculture, agriculture continues to be an important industry in Carroll County. Of the major grain crops produced in Maryland, Carroll ranks seventh in corn, second in forage, ninth in soybeans, third in corn for silage, and eighth in wheat. The county is ranked third in dairy, third in cattle and calves, third in hogs and pigs, sixth in the number of horses, ponies, mules, burros and donkeys, and twelfth in poultry and eggs. Approximately 1,148 people are principal operators of county farms in either a full-time or part-time capacity with an undisclosed amount of workers employed by the principal operators. Additional jobs are created and revenues generated in the agribusiness sector which supports the farming industry.

Preserving farmland provides many additional benefits to the citizens of Carroll County over and above any economic gains. Environmental and water quality are preserved through careful stewardship by county farmers. The rural working landscape provides open space and unparalleled views across the countryside. The overall “quality of life” experienced in Carroll County is enhanced through preserving agricultural lands and the agricultural heritage. Preservation also reduces the future need for provision of services to these areas, thereby reducing the cost of providing services.

The Challenge to Carroll County

Agricultural lands in Carroll County were converted to other uses at a rate of 1,825 acres per year between 1997 and 2007, according to the 2007 Census of Agriculture. Some of this farmland already had been planned for residential and industrial/commercial uses through comprehensive plans and zoning. Approximately 77 percent of the County's growth occurs in its DGAs each year, and oftentimes the land used for this growth is converted from agricultural uses.

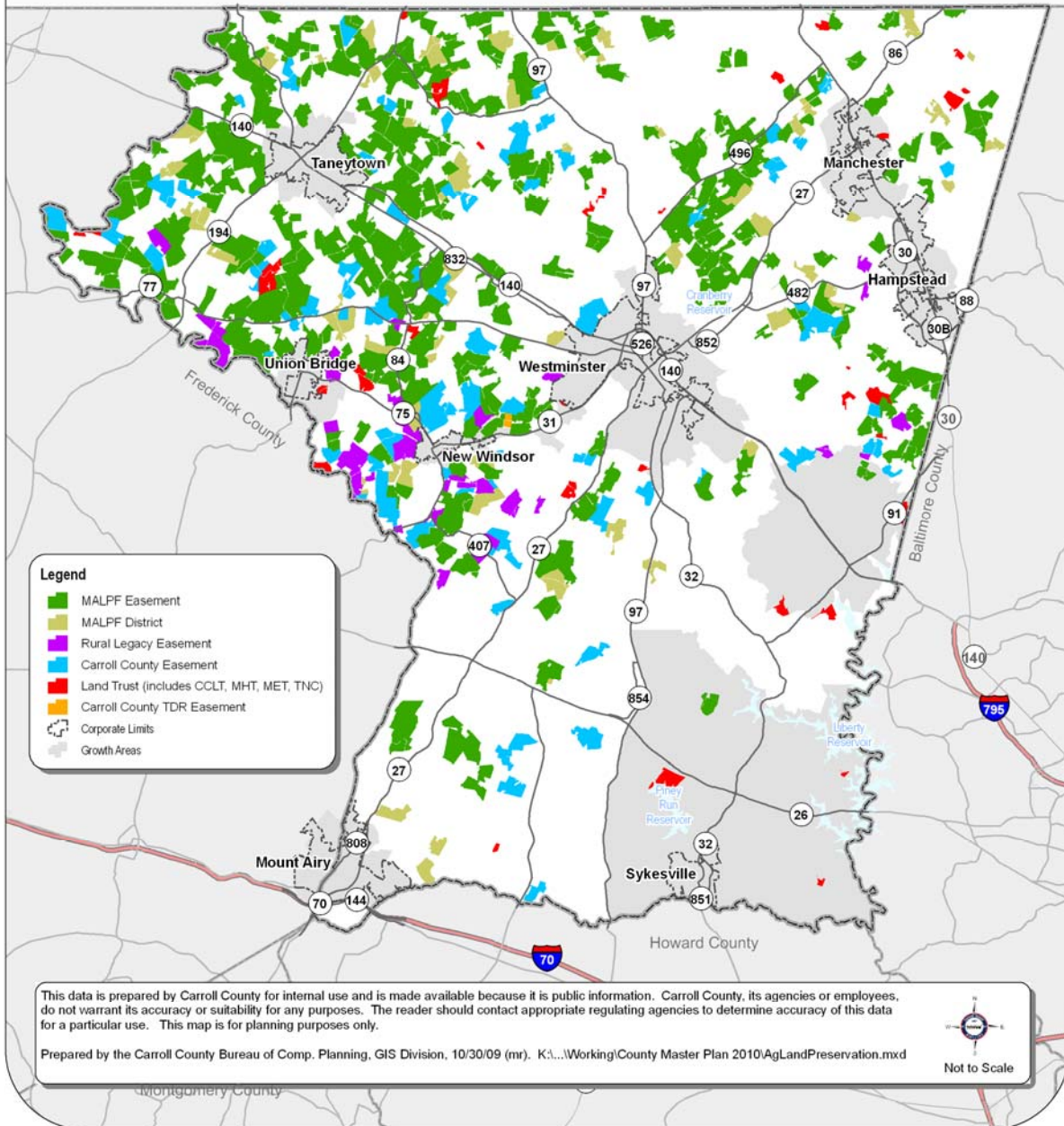
Carroll County has been actively working to preserve agricultural land since the Maryland Agricultural Land Preservation Foundation (MALPF) was developed in 1979. As of July of 2009, a total of 54,858 acres, as seen on the "Agricultural Land Preservation & Donated Conservation Easements" map, were permanently preserved with purchased easements prohibiting future development, an average of 1,829 acres per year. Based on recent funding levels and easement values, taking into account future land value escalation, it would take approximately 25 years to permanently preserve 100,000 acres at the previous rate of preservation. Development trend analysis predicts that buildout based on land use designations will be reached in 2060.

In 2000, the Carroll County Master Plan established a target of acquiring permanent preservation easements on 3,750 acres annually to achieve the plan goal of preserving 100,000 for agricultural use by the year 2020. Over the last nine years, Carroll County has been able to acquire a total of 21,100 additional acres under easement. This average annual acquisition of 2,344 acres under easement falls 1,406 acres per year short of the target.

Additional acreage may be available for preservation in "remaining portions," that portion of a farm remaining after all residential lot rights are exhausted. As of the end of 2008, roughly 13,656 acres were in remaining portions. Preservation through remaining portions is not a permanent preservation. Rezoning of the property could allow additional residential development rights again. Large-lot residential development will also have increased throughout the District. Historically in the county, as the density of non-agricultural uses in an area increases, animal intensive agriculture operations and major investments in agriculture have been reduced. Conflicts between the farmer and non-farm neighbors increase, and the confidence in the permanence of farming decreases.

Agricultural Land Preservation & Donated Conservation Easements

Carroll County Master Plan



Note: This map can also be viewed at:

<http://ccgovernment.carr.org/ccg/compplan/masterplan2010/default.asp>

Meeting this target requires more aggressive and creative methods for land preservation to increase the number of acres preserved annually. After two years of research and program development by staff and after verification by an independent financial advisor and bond counsel, the first Leveraged Installment Purchase Agreements (IPAs) were acquired in 2009. This new program implements recommendations from the 2000 Master Plan regarding easement acceleration and the use of IPAs. The IPA represents an opportunity to enhance the land preservation options for the landowners. At the same time, it affords the County a means to meet the overall goal of ensuring sufficient lands to support an active agricultural economy in a shorter time (10 years rather than 25 years) and at significantly lower costs. Landowners are paid over time, rather than as a lump sum, offering tax-exempt interest payments for twenty years. The program also provides potential tax advantages to property owners while permitting the County to purchase easements at times when lump sum offers would not be funded.

The Choice: Policies & Recommendations

In 1996, the County increased the funding dedicated to preservation of agricultural land. In addition, since 2004, the County has aggressively funded land preservation in excess of \$7-9 million per year. The rationale for the decision is that a more aggressive program up front is necessary to prevent the loss of major agricultural areas currently at risk of changing to a more residential character. At any time, there is a certain portion of landowners who want or need to receive equity from their farmland. By expanding the options for preserving the land, it is hoped that less land will be converted to other uses.

The first Leveraged IPAs were acquired in 2009. This new program implements recommendations from the 2000 Master Plan regarding easement acceleration and the use of IPAs. The IPA represents an opportunity to enhance the land preservation options for the landowners. At the same time, it enables the County to meet the overall goal of ensuring sufficient lands to support an active agricultural economy in a shorter time and at significantly lower costs.

An **installment purchase agreement (IPA)** is an innovative payment plan that “spreads out payments so that landowners receive semi-annual, tax-exempt interest over a term of years (typically 20 to 30). The principal is due at the end of the contract term. Landowners also can sell or securitize IPA contracts at any point to realize the outstanding principal.

Source: American Farmland Trust at <http://www.farmlandinfo.org/documents/27752/tafs-ipa.pdf>

Policies

- The permanent preservation of at least 100,000 acres of agricultural land will be accomplished primarily through agricultural land preservation easement programs.
- Funding for Agricultural Land Preservation will be a priority in Carroll County to uphold the County’s goals and policies and reinforce its commitment to preserving the county’s rural character.
- Non-traditional agricultural pursuits will be actively supported in recognition of the important role they play in the agricultural community.

Recommendations

- A. Continue program funding to allow easement acquisition.
- B. Promote the value of preserving agricultural land for economic, environmental, and quality of life benefits through support for programs like the University of Maryland Extension in Carroll County.
- C. Review, and update if necessary, the principal and conditional uses and permitted lot sizes and lot yield in the Agricultural and Conservation Zoning Districts to ensure uses are appropriate and the lot sizes preserve the option for agriculture use.
- D. Explore additional methods to preserve agricultural land, such as, but not limited to, tax incentives, abatements, and Preservation Incentive Lots (PIL).
- E. After the *Finksburg Corridor Plan* is adopted, expand the Upper Patapsco Rural Legacy Area to extend eligibility for the program to properties formerly within the Finksburg Community Planning Area.
- F. Revise Chapter 103, Development and Subdivision of Land, to offer a residential lot in exchange for a permanent preservation easement to owners of remaining portions outside DGAs.

Fiscal Impact to the County

Preserving agricultural land has a positive fiscal impact on the County. The land that is preserved reduces the cost and need to extend facilities and services to those areas in the future. Although it may be less than the cost to extend and provide facilities and services to these areas, there is a cost to preserve this land.

The current Agricultural Land Preservation Program is funded through a combination of County General Funds, the County share of the Agricultural Transfer Tax, and General Obligation Bonds. The County utilizes State funds through the MALPF and the Rural Legacy Program. The following revenue table cites funding from the Carroll County FY 2010 capital budget, the MALPF FY 2009-2010 allocation report, and the State of Maryland Rural Legacy allocation for FY 2010:

Ag Transfer Tax	\$0
County General Fund	\$14,444,557
County Bonds	\$1,299,373
State (Rural Legacy)	\$1,550,023
State (MALPF)	\$2,046,195
Total	\$19,340,148

According to data from the Carroll County Agricultural Land Preservation Program, the \$19.3 million dollars currently funded would acquire easements on approximately 8,958 acres per year, at an average cost of \$2,159 per acre. These funds represent a combination of State-funded easement programs, such as MALPF and Rural Legacy, as well as the County's innovative IPA program. The IPA program recently was revised and expanded to take full

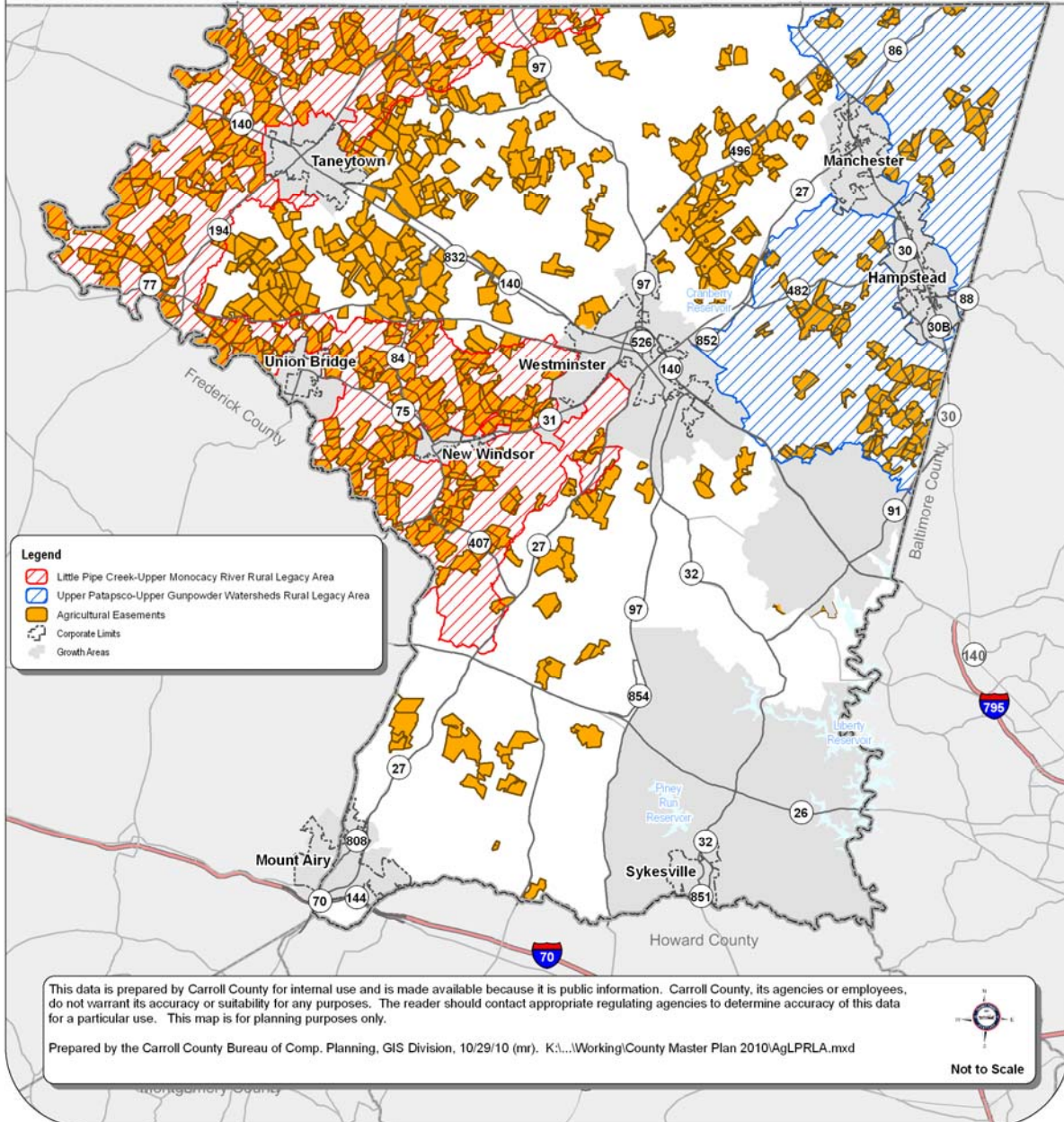
advantage of the use of zero coupon bonds to exponentially leverage program funding. The current funding level represents a 100 percent increase in funding from last fiscal year, and reflects the County's commitment to attain the 100,000-acre goal.

In addition to the considerable increase in County funding for preservation easements, Rural Legacy funding was recently increased. This increase resulted from successful efforts by County staff calling for changes to the State's methodology used to award grant funds. MALPF's funding has fluctuated in recent years. Currently, there are no plans to offer an easement acquisition program in 2010. Status of funding for future years is uncertain and unknown.

The ability to sustain the preservation of at least 4,500 acres per year over the next ten years depends in part on the willingness of the State to continue funding the Rural Legacy and MALPF programs. Sustainability also depends on the willingness of the Board of County Commissioners to continue funding the Agricultural Land Preservation Program. The "Agricultural Easements and Rural Legacy Areas" map shows the location of agricultural easements and the areas designated as Rural Legacy areas.

Agricultural Easements and Rural Legacy Areas

Carroll County Master Plan



Note: This map can also be viewed at:

<http://ccgovernment.carr.org/ccg/compplan/masterplan2010/default.asp>

2010 Master Plan: Carroll County Challenges & Choices

Projected Costs to Reach Goal of 100,000 Acres of Preserved Farmland

Fiscal Year	IPA Principal	IPA Interest	Total IPA Cost	Cash Settlements	Total Annual Cost	Acreage	Per Acre Cost
2010	\$13,394,421	\$973,786	\$14,368,207	\$1,299,373	\$15,667,580	8,721	\$1,797
2011	\$11,446,883	\$2,779,769	\$14,226,653	\$1,333,334	\$15,559,987	6,923	\$2,247
2012	\$9,782,445	\$4,323,159	\$14,105,604	\$1,333,334	\$15,438,938	5,503	\$2,806
2013	\$8,360,098	\$5,642,137	\$14,002,235	\$1,333,334	\$15,335,569	4,383	\$3,499
2014	\$7,144,509	\$6,769,335	\$13,913,844	\$1,333,334	\$15,247,178	3,499	\$4,357
2015	\$6,105,682	\$7,732,635	\$13,838,317	\$1,333,334	\$15,171,651	2,801	\$5,416
2016		\$8,176,523	\$8,176,523		\$8,176,523		
2017		\$8,176,523	\$8,176,523		\$8,176,523		
2018		\$8,176,523	\$8,176,523		\$8,176,523		
2019		\$8,176,523	\$8,176,523		\$8,176,523		
2020		\$8,176,523	\$8,176,523		\$8,176,523		
2021		\$8,176,523	\$8,176,523		\$8,176,523		
2022		\$8,176,523	\$8,176,523		\$8,176,523		
2023		\$8,176,523	\$8,176,523		\$8,176,523		
2024		\$8,176,523	\$8,176,523		\$8,176,523		
2025		\$8,176,523	\$8,176,523		\$8,176,523		
2026		\$8,176,523	\$8,176,523		\$8,176,523		
2027		\$8,176,523	\$8,176,523		\$8,176,523		
2028		\$8,176,523	\$8,176,523		\$8,176,523		
2029		\$8,176,523	\$8,176,523		\$8,176,523		
2030		\$6,228,952	\$6,228,952		\$6,228,952		
2031		\$4,564,556	\$4,564,556		\$4,564,556		
2032		\$3,142,172	\$3,142,172		\$3,142,172		
2033		\$1,926,600	\$1,926,600		\$1,926,600		
2034		\$887,776	\$887,776		\$887,776		
PDR	\$56,234,038	\$159,442,203	\$215,676,241	\$7,966,043	\$223,642,284	31,831	\$7,026
Remainders*						14,016	
County Costs	\$56,234,038	\$159,442,203	\$215,676,241	\$7,966,043	\$223,642,284	45,847	\$4,878
State Costs**				\$16,500,000			
Total Costs	\$56,234,038	\$159,442,203	\$215,676,241	\$24,466,043	\$240,142,284	45,847	\$5,238

Source: Carroll County Department of Planning, November 2009 (JE)

*Placing Remainders Under Easement Can Save the County Approximately \$98,477,574.37

**Acreage and Per Acre Cost Included in PDR; Projected Annual Cost is \$2,750,000.00

Chapter 6: Community Involvement

Goal

Encourage the involvement of the community in implementing the Master Plan.

The Significance to Carroll County

Carroll County has a long tradition of community involvement in the preparation of community and general plans. The eight municipalities work in collaboration with the County to achieve the overall visions for Carroll County. Many hours of research, thought, and discussion go into the development of each plan. It is very important that opportunities are available for the public to be involved in the planning process. This includes open meetings, work sessions, access to information and materials, and the public review process. The plan development is only the first step in achieving a community's vision. A comprehensive plan is only as effective as the community commitment to implementation.

The Challenge to Carroll County

Over the last 40 years, the population of Carroll County has more than doubled. While the more rural pre-1960 Carroll County was oriented inwards toward the county seat in Westminster, the residents moving into the county post 1960 have often maintained their ties to their previous communities in the Baltimore and Washington areas, commuting out of the county to work, shop, and recreate. One result is low levels of involvement by residents in the planning process. Often, the first time they actively participate in the process is when specific proposals are made that have a personal impact.

Community involvement and support during the development of the comprehensive plan has been accomplished in prior processes through a multitude of informational and participation opportunities and mechanisms. As available participation mechanisms continue to evolve and expand, particularly opportunities presented through new technologies, these opportunities are often incorporated into the involvement process. Maintaining community enthusiasm and understanding the countywide emphasis in the plan will be more difficult to achieve during the implementation phase.

The Choice: Policies & Recommendations

Policies

- Citizen participation will be incorporated into the work programs for updating all comprehensive plans.

Recommendations

- A. Continue to improve citizen participation in the planning process as a whole.
- B. Publish and distribute a “Planning” newsletter to the general public on a periodic basis to provide community awareness on planning topics and update on the progress of planning projects.
- C. Develop educational material and presentations relating to comprehensive planning and other general planning issues that can be available for community organizations and interested citizens.
- D. Provide speakers to civic and service organizations, such as schools, service groups, etc., to talk about Master Plan issues.
- E. Involve citizens in and around the Designated Growth Areas in developing and updating the community comprehensive plans.
- F. Work closely with the Office of Public Information and the Department of Technology Services to ensure information is effectively distributed through press releases, internet, e-Gov Delivery, e-mail, and other options, such as social networking sites (i.e., Facebook, Twitter).
- G. Notify local organizations and corporations by mail of planning notices, hearings, Technical Review Committee (TRC) meetings, Planning Commission meetings, and Board of Zoning Appeals (BZA) meetings where possible.
- H. Notify the community early in the master planning process, and continuing throughout the process, as to proposed changes that are likely to affect individual property owners.

Fiscal Impact to the County

This goal and its implementation recommendations will have limited budgeting impacts on the County. Writing newsletters, preparing presentations, and attending public meetings is a role currently filled by County staff. Additional costs would be incurred for printing and mailings.

In some instances, project- or topic-specific websites have been created to help facilitate information availability and public participation. If this website resides somewhere other than on the County’s server, website hosting and maintenance fees may apply.

Consultant costs may be incurred where specialized or technical assessments are needed or when the County does not have in-house resources available to meet project needs or timeframes.

Chapter 7: Employment/Economic Development

Goal

Promote a healthy economy and additional employment opportunities by: supporting the retention and expansion of existing businesses including agribusiness through sensible land use policies; providing land appropriately located and zoned for a variety of types and intensities of new economic development activities; and maintaining a balance between economic development and population growth through diversified industrial and office expansion that offers job opportunities, family-supporting wages, and steady employment for skilled workers.

The Significance to Carroll County

A healthy economy and ample employment opportunities are essential to maintaining a high quality of life in the county. Not only does a healthy economy promote the expansion and retention of existing businesses, it also encourages new businesses to consider locating in Carroll County. This, in turn, provides county residents with increased job opportunities and more buying power to support local businesses. Of equal importance is the effect a healthy economy has on the provision and cost of services to both county residents and businesses.

Currently, residential development contributes the greatest dollar amount to the County's revenue. It is followed by commercial/industrial development, which is then followed by agriculture. However, for every dollar contributed by typical residential development, more than one dollar is expended by the County for services, especially schools. Conversely, for every dollar contributed to County revenue by commercial/industrial development, less than one dollar is expended on services the County provides for that development. Likewise, agriculture contributes more revenue than the County expends on services. The typical existing house does not provide enough in taxes to cover the associated costs of services.

It should be remembered, however, that each type of development has other impacts associated with it that are not accounted for in this evaluation. These impacts include levels of traffic congestion and impacts on air quality, levels of environmental protection or mitigation, and compatibility with other types of development, among others.

The health and growth of the economy has a direct correlation to the number of jobs that exist in the county. The county has a strong tradition of cottage industries and small businesses, many of which have centered around the agricultural and manufacturing sectors. However, between 1990 and 2000, the services and trade sectors have increased by 10 percent in terms of the number of jobs they provide. Jobs in the manufacturing sector, on the other hand, have decreased by almost 23 percent. This trend is expected to

continue as the county's demographics and the types of industries attracted to the county change. Excepting the Board of Education, which is the county's largest employer, the next largest employer employs 1,824 people. Employers with greater than 800 employees are Carroll County Hospital Center (1,824), Random House (900), and the Springfield Hospital Center (833). Of the remaining top 25 employers (Carroll County Government excluded), the average number of employees is 271.

As of 2008, there were 57,082 jobs in Carroll County, an increase of 7,020 jobs since 2002. (It should be noted that the 57,082 jobs reported above represents non-agricultural wage and salary employment only. This number would increase significantly with inclusion of the agricultural sector, the military (including the National Guard) and some measure of the self-employed (proprietors)). The result is that a majority of county residents must commute longer distances by having to travel out of the county to work. In fact, Carroll County has the highest median travel time to work of all the surrounding counties in the region. Apart from the negative effects long commutes can have on the emotional and physical well-being of people, they also create greater traffic congestion, which leads to poor air quality and greater service demands on the automobile.

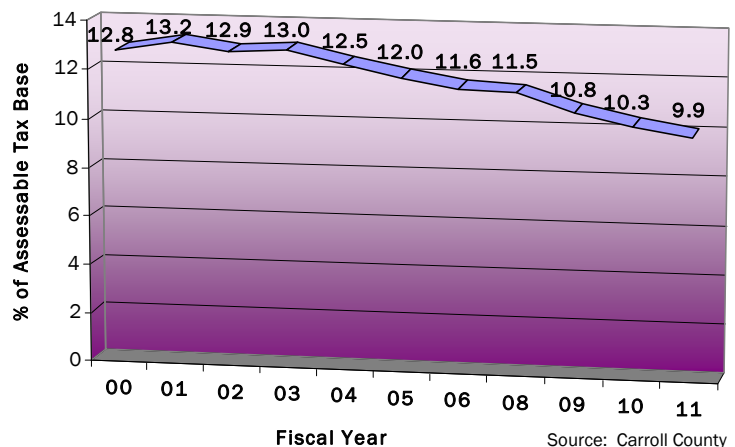
The Challenge to Carroll County

As residential development continues to increase, the County is faced with the task of encouraging existing business expansion and attracting new business and industry to the county to provide jobs and additional tax revenue. As mentioned earlier, because of the high costs that are associated with residential development and the relatively low costs attributed to commercial/industrial development, it is imperative that there be an adequate non-residential tax base in the county.

Currently, commercial and industrial assessable base. This falls far short of what the County needs. Industrial development accounts for falls short of what the County needs. Residential growth without substantial value of residential growth, the rate is to keep pace with that residential development increase to a higher percentage of the commercial and industrial development.

Attracting industrial and business use the minimal amount of interstate high speed Railway does provide opportunities for railroad systems. As a result, the County most ideal land possible in terms of location, suitability for development, the provision of services, and access. This requires knowledge of the types of industries that are and will be attracted to the county, as well as their infrastructure and other service needs.

Carroll County Commercial/Industrial Tax Base
% of Total Base FY 00 to FY 10



A comprehensive assessment of the county's employment land and projected employment needs was conducted by Parsons-Brinkerhoff (PB) in 2007. The study, known as the *Economic Development Land and Employment Needs Study (EDLENS)*, evaluated trends in existing commercial and employment land development, both in Carroll County and the region. Analysis included factors that could hinder successful economic development for the County. Trends in the region, and in business in general, contributed to projections for the number of jobs that Carroll County could expect to create in the next 20-25 years.

Based on the emerging economic opportunities identified by the study, PB concluded that jobs in Carroll County could increase from about 80,000 today to 120,000 by 2030. However, this would only be possible if the County takes action to set aside and zone appropriate land for commercial and industrial development, and makes the investment necessary to serve these areas with water and sewer service and adequate roadways. The study indicated that approximately 4,600 acres of land zoned for commercial and industrial uses would be needed to accommodate this number of jobs.

The study went on to assess how well-positioned the County was to meet the projected demand for employment land. It was determined that the areas most in demand for the location of employment uses were the southern tier of the county, the MD 140 corridor between Finksburg and Westminster, and the MD 30 corridor between Hampstead and Manchester. These priority corridors became the focus of the study's recommendations. The study noted that 90 percent of the parcels currently zoned commercial or industrial in the county are less than 5 acres in size. Furthermore, much of the industrially-zoned land is not located within the priority corridors.

Based on the analysis of land currently zoned for economic development, the study developed criteria for evaluating the suitability of additional land within the priority areas of the county for employment uses. These criteria included:

- key sites identified in stakeholder interviews
- key sites designated in Municipal Comprehensive Plans
- parcels within 1 mile of a major highway
- parcels greater than 25 acres
- parcels that are now vacant
- property in use but "underdeveloped" (defined as the land values assessed higher than the value of the land's improvements)
- not subject to Agricultural easement
- proximity to higher income areas

Over 10,000 acres within the priority corridors were identified as potential sites for economic development. Parcels were clustered together in some cases and clusters were ranked based on how well they met the criteria listed above. "A" ranked clusters were considered the most desirable, followed by "B" ranked clusters, and "C" ranked clusters.

Most of the potential employment land identified in the study is not currently planned to be served with public water or sewer, an essential component of successful economic development. PB estimated that making the necessary improvements to provide water and sewer service to these areas would cost an estimated \$99-123 million and \$54 million, respectively. This is exclusive of the cost to construct Union Mills and Gillis Falls reservoirs, which would be the sources of some of the water.

The information and recommendations contained in *EDLENS* are considered in the land use and economic development recommendations contained in this plan.

Efforts also have been made to enhance the county's gateways to improve the first impression that visitors, as well as potential employers and residents, get when they cross the County line. Two new gateway monument signs, erected in fall 2009, welcome people to Carroll County in Finksburg and Eldersburg. Additionally, in May 2008 a local Gateway Renovation Tax Credit was enacted to encourage redevelopment of properties within the MD 140 corridor between the Baltimore County line and Sandymount Road. Property tax credits of 50-75 percent are available for a period of 5 years, depending upon the improvements made.

Employed Persons by Industry (16 Years & Older) 2008

Industry	#	%
Ag/Forestry/Fishing/ Mining/Related Services	1,874	2.2%
Construction	9,667	11.3%
Manufacturing	5,005	5.8%
Transportation and warehousing	2,067	2.4%
Information	920	1.1%
Wholesale Trade	3,016	3.5%
Retail Trade	10,837	12.6%
Finance/Insurance/Real Estate	7,626	8.9%
Arts, entertainment, and recreation	2,037	2.4%
Professional and technical services	10,939	12.7%
Educational/Health/Social Services	17,328	20.2%
Public Administration	9,060	10.5%
Other	5,502	6.4%
Total	85,878	100.0%

Prepared by Maryland Department of Planning, from U.S. BEA Table CA-25N, May 2010.

To provide employment for the residents of the county, it is essential that the types of jobs created match the skills of those who live here and are expected to move here in the future. The 2000 Census shows that many of those areas which are the fastest growing in the County are also those areas whose residents have the highest levels of education, highest household incomes, and longest commuting times. They also tend to be employed in "white collar" professions. Since these statistics increased from the 1990 Census, it can be surmised that the newer residents attracted to the rapidly growing parts of the county generally have these characteristics as well. It is not known if this trend will continue in the

future. Unless the County is able to attract businesses and industries that employ people with the skills and income demands of the county's current and future residents, it will only exacerbate the commuting situation. Residents of neighboring counties and Pennsylvania would be attracted to the current types of jobs, using County roads to reach them and taking their income revenues with them, while county residents continue to commute to jobs elsewhere.

The Choice: Policies & Recommendations

Commercial and industrial uses represented 10 percent of the County's assessable tax base in FY 2010. Maintaining this percentage will require an increase in industrial and commercial uses. Taxes paid by additional commercial and industrial development will help offset the cost of providing services to residential development.

In the fall of 2009, there were about 429 acres of land still available to be developed for commercial and business uses in the county, including the municipalities and their DGAs. Roughly 360 of these acres were located within a DGA, with about 65 acres falling outside the DGAs. As commercial development is an important part of the economic base for the County, an adequate supply of commercial land is important to economic development and to the life and health of the county's communities. Planning literature suggests that 5 percent of the total land area is an appropriate amount for commercial uses in municipalities such as those found in Carroll County. The most important factors are location, proximity to water and sewer facilities, accessibility to transportation networks, and the physical capacity of the site to support development.

The following table shows the 2009 acreage of existing and planned commercial and industrial development in the Designated Growth Areas (DGAs). Already developed land is estimated as Existing acreage. Areas that are designated for future commercial or industrial development on the adopted comprehensive plans are indicated as Planned acreage. Some areas with a commercial or industrial land use designation are already zoned consistent with the land use designation in the plan; others will be rezoned upon annexation into the municipality associated with the DGA. The table provides the percentage of the entire DGA that is represented by Existing or by Planned commercial and industrial, as well as by the combination of Existing (Developed) and Planned. Commercial and industrial acreage exceeds the desired 5 percent of total DGA land area for all but three of the DGAs (Finksburg, Freedom, and Manchester).

Existing and Planned Commercial and Industrial Acreage in Designated Growth Areas July 2010

DGA	Existing (Developed)				Planned				Total Comm. & Ind. AC	Comm. & Ind. as % of Total	Total DGA AC
	Comm. AC	Ind. AC	Total Existing	% of Total DGA ACs	Comm. AC	Ind. AC	Total Planned	% of Total DGA ACs			
Finksburg	159	193	352	3.60%	29	10	39	0.40%	391	6.08%	9,771
Freedom/Sykesville	446	102	548	1.98%	35	566	601	2.17%	1,149	17.87%	27,649
Hampstead	187	233	420	12.27%	25	312	337	9.85%	757	11.78%	3,422
Manchester	49	3	52	1.49%	62	8	70	2.01%	122	1.90%	3,481
Mount Airy	172	7	179	4.87%	34	126	160	4.36%	339	5.27%	3,673
New Windsor	19	47	66	6.88%	4	132	136	14.17%	202	3.14%	960
Taneytown	120	158	278	8.37%	118	481	599	18.04%	877	13.64%	3,320
Union Bridge	32	367	399	24.30%	10	265	275	16.75%	674	10.49%	1,642
Westminster	897	395	1,292	11.91%	47	578	625	5.76%	1,917	29.82%	10,852
Inside DGAs	2,081	1,505	3,586	–	364	2,478	2,842	–	6,428	–	64,770
Outside DGAs	844	1,154	1,998	–	69	210	279	–	2,277	–	–
TOTALS	2,925	2,659	5,584	–	433	2,688	3,121	–	8,705	–	–

Note: Developed acreage was determined using aerial photographs. The planned commercial and industrial acreage was based on the land use designations adopted in each community comprehensive plan as shown on the land use designation map as of the end of 2009, plus the changes adopted in the Hampstead Community Comprehensive Plan in July 2010. The land use designation map on Page 95 of this plan document shows the land use designations adopted by each community for unincorporated land within the Designated Growth Areas. The adopted plans for each community can be found on the Carroll County Planning Department website and/or on the individual municipal website for which a community comprehensive plan applies.

Policies

- The development review process for industrial and commercial development will be predictable, consistent, and evenly applied to make Carroll County more attractive to existing and potential businesses.
- The Carroll County Planning Commission and the Departments of Economic Development and Planning will coordinate to: (1) ensure land use policies support the Master Plan and economic development goals; and, (2) ensure that land use decisions and economic development initiatives proceed in a coordinated manner.
- Housing opportunities should be available for the employees of the county's businesses and industries, both existing and potential, so that people who work in the county may also live in the county.
- The County will actively attract businesses and industry that are clean and unobtrusive to surrounding properties, that provide primarily high-paid jobs requiring highly-skilled workers, and that are willing to construct buildings and structures that are aesthetically pleasing and contribute significantly to the County's tax base.

Recommendations

- A. Ensure the provision of appropriately-located industrial and office land, preferably within the DGAs, where adequate infrastructure is existing or planned, and where natural resources can be adequately protected.
- B. Evaluate existing industrially and commercially zoned lands to determine if they are viable for industrial, office, or commercial uses.
- C. Identify suitable areas to be zoned for employment.
- D. Revise the text of the Employment Campus Zoning District to provide for comprehensively planned employment centers *that* combine research and development, office, flex-space, and other light and limited industrial uses, *while* also providing higher standards of development and a more flexible approach to design and development.
- E. Create new zoning districts that would facilitate new businesses and economic growth.
- F. Seek new and creative funding sources to help finance infrastructure projects such as fiber optics and broadband internet access to support business in the county.
- G. Protect and enhance Main Street viability through business expansion/retention.
- H. Identify areas and parcels of land to be targeted for redevelopment, and review/revise land use designations and regulations as needed to facilitate redevelopment.
- I. Facilitate the expansion of existing businesses through the periodic comprehensive review of the zoning code and zoning maps during community comprehensive plan updates.
- J. Explore the creation of new business and office zoning classifications that would be highly compatible with residential uses to serve as transition or buffer zones between residential areas and more intensive business or industrial zoning.
- K. Improve access to industrially zoned land.
- L. Continue to work closely with the Town of Sykesville and the Warfield Advisory Committee to identify an acceptable development scheme for the Warfield Complex.
- M. Recognize the importance of the Carroll County Regional Airport in economic development plans and marketing of economic development sites in Carroll County.

- N. Adopt a Boulevard Zoning District to improve access and to achieve the desired uses and building design for infill and redevelopment along appropriate major State highway corridors in the county.
- O. Encourage large-scale commercial and employment developments to locate where infrastructure already exists or is planned.
- P. In Rural Villages, encourage small neighborhood commercial development that is consistent with local character and that revitalizes historic properties.
- Q. Review and modify the business and industrial zones to promote new business activity, and take out the principal permitted and conditional uses that are inconsistent with the purpose of the zone.
- R. Evaluate the addition of development criteria or standards for specific uses.
- S. Create a Mixed-Use Zone where residential and business uses are permitted, providing for more varied opportunities for commercial development and opportunities for local employees to live near their work.
- T. Encourage the municipalities to review permitted uses and other requirements in their business zones.
- U. Continue to facilitate commercial development to be consistent with the character and needs of each particular community.
- V. Improve the visual image of the county's gateways through the use of the Gateway Tax Credit and other appropriate tools to make the county more attractive for business and tourism.

Fiscal Impact to the County

Increasing the commercial and industrial (C/I) tax base would have a positive fiscal impact to the County. Currently, the C/I tax base is equal to 10 percent of the total tax base in the county. An increase in this ratio could decrease the County's reliance on residential taxpayers to cover the costs of operating the services the County provides. If the County were to try to increase this ratio to 12 percent, and assuming the tax base of all other property remains flat, the County would need to add \$450 million to the C/I tax base. It is estimated this would require the development of 1,000 acres of property. Development of this size would result in approximately 9,000 new jobs in the county. Any up-front costs incurred to attract this level of economic development, such as building roads and providing water and sewer, would reduce the potential fiscal benefits.

Chapter 8: Environmental Resources

Goal

Protect, maintain, and restore, where practical, the environmental resources and natural ecosystems in the county by promoting land use practices that are in balance with, and minimize the effects on, the natural environment.

The Significance to Carroll County

The impacts of development on environmental resources can vary greatly depending on the location, magnitude, type, and design of the development. Nearly every modification to the natural landscape, whether it be farming, building, or any other activity, has an effect on the quality of environmental resources.

■ Environmental Resources Definitions

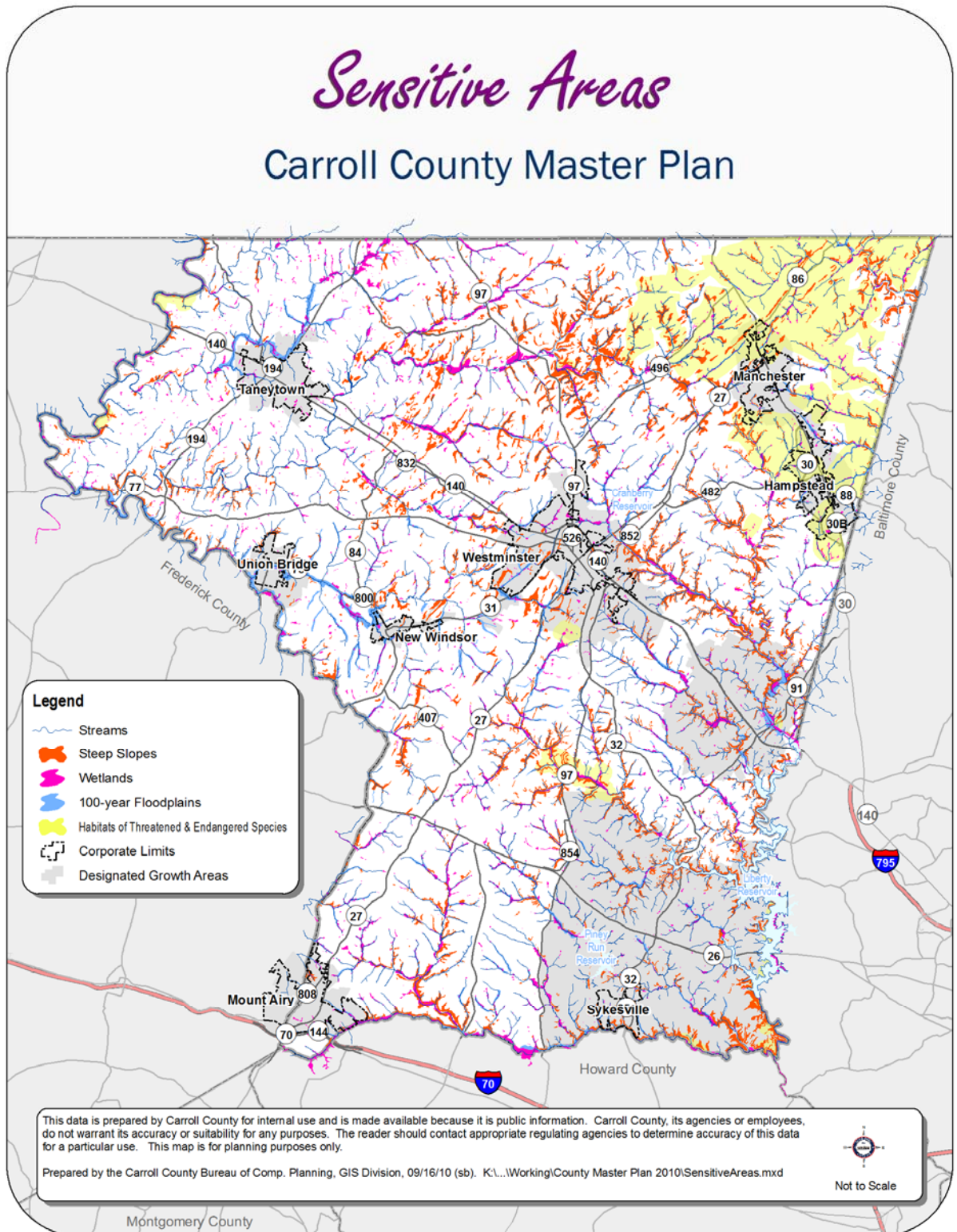
The Planning Act of 1992 does not specify the extent or degree of protection to be accorded to each environmental resource. Therefore, the definitions developed for each environmental resource identify this level of protection. To adequately provide consistent protection, the best course of action suggests adoption of uniform definitions among the County and the municipalities. This chapter includes definitions both for the "sensitive areas" required to be protected under the Planning Act as well as the additional environmental resources the jurisdictions are addressing.

"Sensitive Areas" Definitions

The environmental resources, called "sensitive areas" in Article 66B of the Annotated Code of Maryland, which are required to be protected under the Planning Act are streams, stream buffers, steep slopes, 100-year floodplains, habitats of threatened and endangered species, wetlands and their buffers, and agricultural and forest lands intended for resource protection or conservation and other areas in need of special protection. They are defined as follows:

- "Stream" means part of a watercourse, either naturally or artificially created, that contains intermittent or perennial base flow of groundwater origin. Ditches that convey surface runoff exclusively from storm events are not included in this definition.

- "Stream buffer" is the undisturbed zone extending from the banks of a stream. Stream buffers are applied countywide, regardless of whether they are located within another Water Resource Management Area (e.g., Surface Watershed Area). All stream buffers shall be a minimum of 50 feet wide from each stream bank. The existing conditions of the site shall determine the ultimate stream buffer width. Land features such as wetlands and slopes greater than 25 percent do not count toward the calculation of the stream buffer width. The average stream valley slope shall be calculated to determine the stream buffer width for each area along the stream; it shall be measured at regular intervals along the stream. The average stream valley slope shall be measured from the edge of the stream bank to a point 100 feet from the edge of the stream bank (measured perpendicular to the stream). The stream buffer is calculated by adding two feet to the minimum stream buffer width (50 feet) for each one percent of the adjacent stream valley slope.
- "Steep slopes" are defined as areas with slopes greater than 25 percent.
- The "100-year floodplain" is that area which, after ultimate development of its watershed based on current zoning, would be inundated by water runoff from the 100-year storm.
- "Habitats of threatened and endangered species" are areas which, due to their physical or biological features, provide important elements for the maintenance, expansion, and long-term survival of threatened and endangered species listed in COMAR 08.03.08. This area may include breeding, feeding, resting, migratory, or overwintering areas. Physical or biological features include, but are not limited to, structure and composition of the vegetation; faunal community; soils, water chemistry and quality; and geologic, hydrologic, and microclimatic factors.
- "Wetlands" (defined under COMAR, Title 08.05.04.01) are generally areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly know as hydrophytic vegetation.
- "Agricultural land" means land used for all methods of production and management of livestock, crops, trees and other vegetation, as well as aquaculture. This includes the related activities of tillage, fertilization, pest control, and harvesting as well as the feeding, housing, training and maintaining of animals such as cows, sheep, goats, hogs, horses, and poultry. (Source: based on agricultural land definition in Maryland Environmental Trust Model Easement <http://www.dnr.state.md.us/met/resources.asp>)
- "Forest land" is a biological community dominated by trees and other woody plants covering a land area of 10,000 square feet or greater. This area must have a tree density of at least 100 living trees per acre with at least 50% of those trees having a 2-inch or greater diameter at 4.5 feet above the ground. A forest may include duff, leaf litter, understory, and forest areas that have been cut but not cleared. Forest

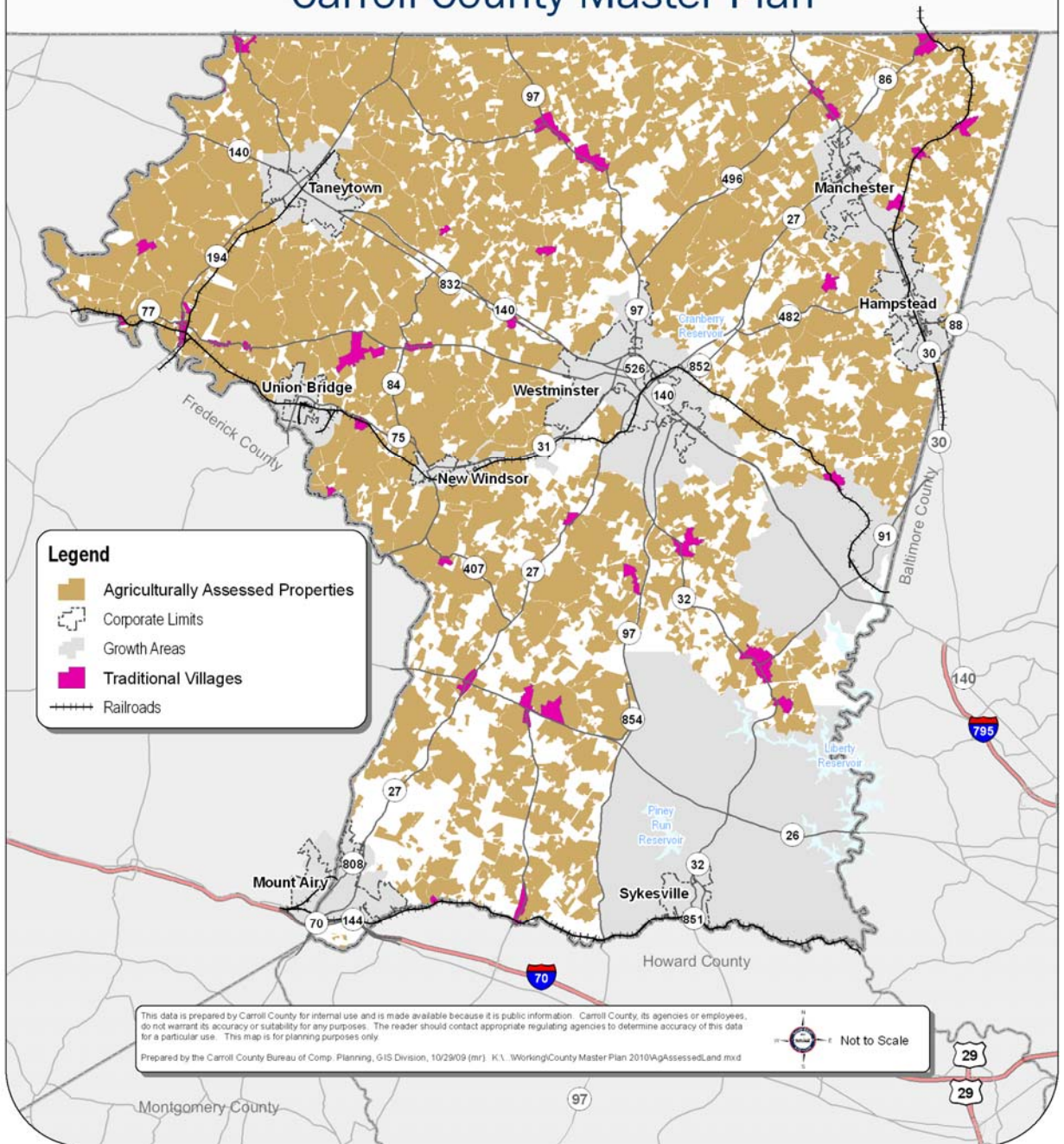


Note: This map can also be viewed at:

<http://ccgovernment.carr.org/ccg/compplan/masterplan2010/default.asp>

Lands in Agricultural Use

Carroll County Master Plan



Note: This map can also be viewed at:

<http://ccgovernment.carr.org/ccg/compplan/masterplan2010/default.asp>

does not include orchards or Christmas tree plantations. (Source: Carroll County Maryland Code of Public Local Laws and Ordinances, 115-1 Definitions)

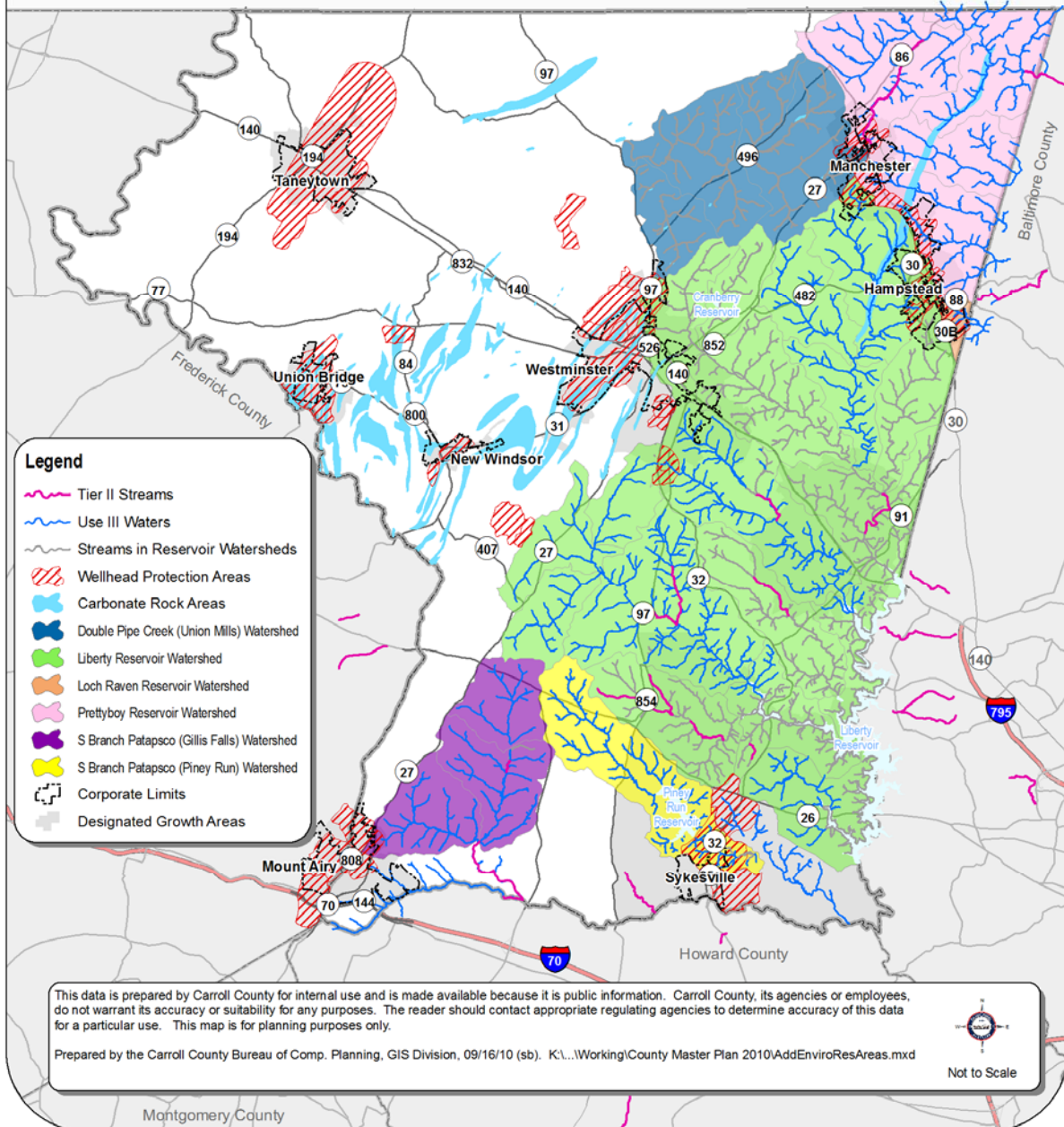
Additional Environmental Resources

The County and towns have identified additional environmental resource areas which they feel are also worthy of protection under the Environmental Resources Element. These resources include wellhead protection areas, carbonate rock areas, reservoir watersheds, Use III waters, and Tier II waters.

- "Wellhead Protection Areas" are the areas recharging existing public supply wells. They include wellhead and springhead regions which contribute groundwater to an identified water supply source. These areas are based on capture zones as estimated from available field testing data, hydrologic flow equations, and groundwater availability estimates, in combination with hydrogeological characterization. In some cases the areas are limited to a theoretical maximum zone from which a source could reasonably be assumed to draw. The shape of the area is modified approximately within the context of the hydrogeologic framework.
- "Carbonate rock areas" are areas which are currently known or suspected to be underlain by carbonate rock, as defined in the Water Resource Management Manual for Carroll County. This includes the Wakefield Marble and Silver Run Limestone geologic units, as well as unnamed calcareous zones within schist and phyllite areas.
- "Reservoir watersheds" are areas which drain into an existing or proposed water supply reservoir. The existing and planned water supply reservoirs for which the watershed falls completely or partially within Carroll County include Prettyboy Reservoir, Loch Raven Reservoir, Liberty Reservoir, Piney Run Reservoir, Gillis Falls Reservoir, and Union Mills Reservoir.
- "Use III waters" (defined under COMAR, Title 26.08.02) are protected for the propagation of natural trout populations. These waters are governed by more stringent dissolved oxygen, chlorine, and temperature standards than other waters.
- "Tier II waters" (defined under COMAR 26.08.02.04-1) are high quality waters. Where water quality is better than the minimum requirements specified by the water quality standards in the Clean Water Act, these waters are listed by the Maryland Department of Environment as Tier II waters.

Additional Environmental Resources

Carroll County Master Plan



Note: This map can also be viewed at:

<http://ccgovernment.carr.org/ccg/compplan/masterplan2010/default.asp>

■ Environmental Resources Descriptions

Streams

Carroll County is located in the Piedmont region of north-central Maryland. Parr's Ridge diagonally divides the county into two major drainage basins. Streams to the north and west drain into the Monocacy River and eventually the Potomac River. Streams to the south and east flow into the Patapsco and Gunpowder Rivers towards the Chesapeake Bay. These two major drainage basins contain many miles of streams in Carroll County. Their uses range from recreational, such as fishing and canoeing, to agricultural, such as irrigation and watering of cattle. These streams eventually feed into the Chesapeake Bay and contribute to its water quality and ecological health.

Healthy streams contain a diversity of characteristics, including slow-moving runs, deep pools, gravel riffles, bends, and vegetative cover. These features have a direct effect on the stream's ability to manage rainfall events, including the level and consistency of flows. These features are also essential to the overall water quality of a stream. Stream water needs to contain sufficient dissolved oxygen and provide suitable temperatures in order to serve as habitat for plants and animals. Sediment runoff with the resultant turbidity problems needs to be minimized.

Changes in ground cover and the intensity of use of the land have the greatest effect on the quality of streams. Increases in the amount of impervious surfaces and a decrease in vegetation result in altered and inconsistent levels of flow. High flows may cause flooding and erosion of banks. High flows may also cause stream beds to widen as mud and sand deposits fill the channel as the bank erodes away. Low flows may cause parts of stream beds to dry up for periods of time.

Stream Buffers

Stream buffers are the naturally vegetated areas on either side of the stream which stabilize the stream banks and improve water quality. Vegetation removes pollutants by filtering sediment and slowing the flow of runoff so that nutrients and other pollutants can be used or broken down by plants or other biological activities taking place within the soil or forest floor. Buffers often include areas of floodplain and/or wetlands and can be either forested or non-forested meadow. Many of Carroll County's streams are part of watershed areas for existing and proposed reservoirs. Therefore, maintaining and/or improving the quality of this water is critical. The riparian vegetation and other features of natural buffers have been removed from many streams through clearing, cultivating, filling, or mowing to the edge of the stream. In addition, livestock have damaged or destroyed riparian vegetation of streams flowing through pastures. Homeowners often remove vegetation, add fill dirt, and plant and mow grass up to the stream's edge.

Stream buffers protect the biologic and hydrologic integrity of the stream system. They minimize runoff and groundwater pollution by filtering pollutants through the soil and root zone.

Undisturbed buffers protect wetland and upland plants as well as provide a corridor for food and cover to a variety of animals. Wetlands and floodplains within a stream buffer slow storm flows and dissipate flood water energy, allowing more of the water to percolate into the ground. The result is decreased flood damage and replenished groundwater aquifers. Without naturally vegetated buffers, more runoff and pollutants reach the stream carrying greater levels of sediment. Riparian vegetation increases soil stability and provides shade that cools stream waters. Interception of rainfall by trees and shrubs helps to maintain more consistent stream flows by reducing the amount of stormwater runoff before it begins.

Forested buffers are ideal for many reasons. The deep root systems hold the soil and reduce erosion from high stormwater flows. Trees also provide a wind break to reduce wind erosion. The forest floor filters water percolating into groundwater reservoirs and also absorbs air pollutants. Trees and shrubs prevent some of the adverse impacts to sensitive areas caused by rainfall by intercepting some of the rainfall before it reaches the ground. Evapotranspiration allows some of this intercepted water to evaporate while some of the water is utilized by the trees during photosynthesis. These woodlands also serve to provide visual and noise buffers between various land uses. Woodlands also provide excellent habitat for wildlife.

Carroll County has approximately 1,380 miles of streams within its borders.

100-Year Floodplains

The land adjacent to Carroll County streams, which conveys floodwaters for storms with an estimated one percent chance of occurrence in any given year, are referred to as 100-year floodplains. When a property is developed, the floodplain limits are determined based on flood levels at a watershed buildout condition. This method is more accurate than using the Federal Emergency Management Agency (FEMA) maps.

Historically, floodplains have been protected to guard against injury to people and to prevent destruction of property. However, protection of floodplains brings other benefits too. Floodplains moderate and store floodwaters, absorb wave energies, and reduce erosion and sedimentation. Risks to adjoining and downstream communities are also minimized. They also contribute to the improvement of water quality and quantity, which may have a positive effect on drinking water supplies. Activity within a watershed or floodplain, such as development, change in runoff patterns, or filling, can cause alterations or expansions of the floodplain. Local and downstream areas may then be subject to flooding not previously experienced.

Habitat of Threatened and Endangered Species

In Maryland, over 200 plant and animal species have been extirpated, meaning that they have gone extinct, over the past 350 years. Habitat destruction and degradation threatens to extirpate at least another 413 native Maryland species. The key to protecting threatened and endangered species is protecting the habitat in which they occur. Habitat for the plant and animal species listed by the Maryland Department of Natural Resources (DNR) as threatened, endangered, or in need of conservation have been identified in Carroll County and are shown in the accompanying table titled “2007 and Historical Threatened, Endangered, and Extirpated Species of Carroll County, Maryland.” Several species on this list are identified by DNR as “in need of conservation.”

There are many reasons for protecting this habitat. We now know that chemicals derived from plants have major pharmaceutical uses. Agriculture depends on the development of new varieties of crops which fend off pests and diseases. In addition, it is the responsibility of the present generation to

2007 and Historical Threatened, Endangered, and Extirpated Species Of Carroll County, Maryland		
Scientific Name	Common Name	Maryland Status
Animals		
Ammodramus henslowii	Henslow's sparrow	Threatened
Regulus satrapa	Golden-crowned kinglet	
Alasmidonta varicosa	Brook floater	Endangered
Elliptio producta	Atlantic spike	In Need of Conservation
Glyptemys muhlenbergii	Bog turtle	Threatened
Lanius ludovicianus	Loggerhead shrike	Endangered
Myotis sodalis	Indiana bat	Endangered
Strophitus undulatus	Creeper	In Need of Conservation
Thryomanes bewickii altus	Bewick's wren	Endangered
Speyeria idalia	Regal fritillary	Extirpated
Plants		
Asclepias rubra	Red milkweed	Endangered
Carex buxbaumii	Buxbaum's sedge	Threatened
Carex conoidea	Field sedge	Endangered
Carex pellita	Woolly sedge	Threatened
Carex meadii	Mead's sedge	Endangered
Carex sparganioides	Burr-reed sedge	
Carex trichocarpa	Hairy-fruited Sedge	
Castilleja coccinea	Indian paintbrush	Endangered
Elatine minima	Small waterwort	Endangered
Euphorbia purpurea	Darlington's spurge	Endangered
Fraxinus profunda	Pumpkin ash	
Galium trifidum	Small bedstraw	
Geum aleppicum	Yellow avens	Endangered
Krigia dandelion	Potato dandelion	Endangered
Lonicera canadensis	Canada honeysuckle	Endangered
Lupinus perennis	Wild lupine	Threatened
Lythrum alatum	Winged loosestrife	Endangered
Matteuccia struthiopteris	Ostrich fern	
Platanthera peramoena	Purple fringeless orchid	
Pycnanthemum verticillatum	Whorled mountain-mint	Endangered
Ribes americanum	Wild black currant	Extirpated
Sanguisorba canadensis	Canada burnet	Threatened
Schoenoplectus smithii	Smith's clubrush	Extirpated
Scleria reticularis	Reticulated nutrush	
Sphenopholis pensylvanica	Swamp-oats	Threatened
Talinum teretifolium	Fameflower	Threatened
Trichophorum planifolium	Bashful bulrush	
Vitis cinerea	Graybark	

Source: Maryland Natural Heritage Program, Department of Natural Resources, December 13, 2007

preserve species for the benefit of future generations. Every plant and animal species plays a special role in the effective and efficient function of the biota in which it lives as well as the ecosystem as a whole. Loss of one species will result in loss of additional species which depend on each other for survival and upset the balance of the food chain. This imbalance may also cause proliferation of less desirable species.

Steep Slopes

The rolling terrain of Carroll County presents an abundance of steep slopes. These slopes contribute to the beauty which makes Carroll County especially scenic. These slopes are a challenge to developers both in building design and subdivisions as well as protecting the immediate and adjacent areas during construction.

Slopes provide a medium for the movement of soil and pollutants when land disturbance occurs. Therefore, there are multiple reasons for protecting steep slopes. Preservation of slopes adjacent to waterways is especially important due to its potential impact on water quality and aquatic habitat. Once disturbed, stabilization of steep slopes is often difficult resulting in increased erosion and delivery of sediment to streams.

Clearing and grading land results in increased runoff, which accelerates erosion and, therefore, the runoff transports more sediment to streams. Increased sediment in streams may create channel bars, contributing to erosion of stream banks, as well as making the channel wider and more shallow. Increased runoff and sedimentation also results in decreased water quality. Nutrients in the soil sediments are carried downstream. Upslope soils are impoverished, while turbidity, sedimentation, and aggravated eutrophication is occurring in the receiving waterways. Sediment also contains heavy metals, pesticides, and other pollutants. Aquatic vegetation is destroyed by scour, burial, and turbidity caused by increased sediments. The destruction of vegetation decreases photosynthetic activity, thereby reducing oxygen levels for aquatic life. Many aquatic species are sensitive to impacts from sedimentation. The inhalation of silt particles results in gill membrane inflammation and then death. In addition to the increased potential for landslides, steep slopes that are altered contain less efficient organisms and less efficient vegetation.

Wetlands

Wetlands are often associated geographically and biologically with streams and floodplains. As Carroll County boasts a large number of streams, many non-tidal wetland areas are found in the county. These wetlands, and their function, are threatened by the adverse impacts from development. A large wetland in the Alesia area has been identified as a wetland of State concern and is being evaluated for the presence of threatened and endangered species. A larger buffer might be required in this area.

Wetlands serve an important function in maintaining quality and quantity of water supplies. In wetlands, inorganic nutrients are converted to organic materials and stored in the hydrophytic vegetation. Stems, leaves, and roots slow the flow of runoff entering the wetland area thereby allowing sediment to settle out and be deposited in the wetlands prior

to the runoff reaching stream waters. Wetlands also have a positive impact on the quantity of water, functioning as natural stormwater management facilities. They absorb and retain water, slowly discharging it into the streams. Therefore, stream flows are maintained at a more consistent level during dry periods, as well as during periods of flooding. Wetland areas provide essential habitats to a wide variety of flora and fauna, including migrating waterfowl and certain hydrophytic plants found only in wetland areas.

Destruction of wetlands from adjacent development results in higher, faster, and more sediment laden runoff entering the stream. When adequate buffers are not provided, the ability of wetlands to filter pollutants and manage stormwater flows is reduced. Increased levels of sediments and nutrients entering streams are transported to lakes, rivers, and the Chesapeake Bay where eutrophication (over enrichment) occurs. Eutrophic conditions in lakes, slower moving rivers, and the Bay are identified by algae blooms, lower dissolved oxygen levels, and reduced clarity. Taste and odor problems also occur in eutrophic water supply reservoirs resulting in increased treatment costs. Reduction in the stormwater management function of wetlands can cause downstream flooding, movement of stream channels, or changes in stream geometry. These alterations result in property damage and an increase in movement and deposition of sediment to less desirable areas. Wetlands also serve to reduce turbidity. Increased stream turbidity, which is particles suspended in water, reduces the amount of sunlight reaching aquatic plants. Therefore, when the function of wetlands is impaired, or they are destroyed, aquatic plants in the stream are adversely impacted.

Agricultural Land

The 2007 Agriculture Census states that Carroll County has an estimated 141,934 acres in agricultural production. Historically, the county has seen a decline in dairy operations; Carroll is currently ranked third in the state. Today, small grains and vegetables seem to be more marketable for both corporate and independent farmers in the area. The most common crops produced throughout the area are corn, soybeans, wheat, green beans, peas, and barley. Hay production, particularly alfalfa, is also on the rise due to better profit margins and the increasing number of horse farms and horse boarding facilities throughout the county and surrounding areas. A number of beef herds also exist throughout the county, but they tend to be small in size.

Soil and water quality can be profoundly affected by agricultural practices. Farmers throughout the region have made significant contributions to maintaining a high quality of soil and water conservation through participation in state and federal cost-share programs that encourage the implementation of soil and water conservation practices. Up to 87.5 percent of these cost-share expenses can be covered by the State and federal government, with the remaining difference being paid by the farmers themselves. Carroll County consistently ranks among the leaders in the state for the implementation of agricultural best management practices (BMPs).

Clearly, protecting land throughout the county will not only protect the economic returns that can be realized from the land, but will also protect the tremendous investment that has already been made in maintaining the viability of farming here for future generations.

Forest Land

Healthy, managed forests contribute to the quality of water produced in a watershed. Trees take up great amounts of water through their roots and evaporate it into the air. This usage and retention of water reduces flooding. Forest soils act as high reservoirs for groundwater, releasing it slowly. Even during periods of low rainfall, the forest floor acts as a natural sponge because of the large soil pore spaces, thus keeping soils or contaminants from entering streams. When soil filled water reaches the forest, water is quickly absorbed, and the soil particles are deposited there. This effective infiltration system reduces overland flow leaving little chance of erosion.

In 1634, the state was nearly 95 percent forested. Forests acted as a protector for the fragile soil. Erosion was not a problem. As the colonists settled throughout the region, forests were cleared for cropland and the wood used for houses, lumber, and firewood. As more people moved into the area, more forest land was lost. More homes were built, more land was converted for crops, and more unprotected soil was exposed. This conversion was most dramatic in the central part of the state with its well-drained, rolling hills.

Today, the state is about 41 percent forested overall, with areas in Central Maryland averaging less than 30 percent (Carroll County is roughly 25%). Competition for forest land for conversion to farming, development, and highways is increasing. Water quality has declined with loss of forest land.

Forest cover is fairly evenly distributed throughout the county, with larger forest stands existing primarily in the north central and eastern parts of the county. The county has an estimated 81,769 acres of forested land.

Wellhead Protection Areas

The availability of an adequate supply and good quality water source is a major concern in Carroll County. Land use activities can impact, both positively and negatively, the quantity and quality of water supplies within surface watersheds and groundwater recharge areas. Six of the county's eight municipalities depend solely on groundwater for their water supply needs. This implies that a large percentage of the current population and an even larger proportion of the projected growth of the county will rely on a resource which is essentially "out of sight." The underground area which supplies water to individual municipal wells often ranges from tens to hundreds of acres. The need to protect and preserve the quality and quantity of water entering these subsurface reservoirs is critical to the economic viability and stability of the growth areas.

While the overall groundwater quality and quantity in Carroll County is good, isolated and potentially significant incidents of contamination have occurred in Taneytown, Westminster,

and Hampstead. Contamination of aquifers can also limit the useful area for future exploration and expansion of a water supply.

A wellhead protection area is the surface and subsurface area surrounding a water well or wellfield, supplying a public water system, through which contaminants are reasonably likely to move toward and reach such water well or wellfield. Groundwater can become contaminated by numerous substances, such as pesticides, fertilizers, chemicals, and waste materials. The degree of contamination depends on soil characteristics, contaminant characteristics, groundwater flow, and other factors. Once contaminated, aquifers are difficult and expensive to clean up. Drilling new wells may not be feasible as contaminants may spread over large areas of an aquifer. It is through the protection of these wellhead areas that a community can ensure the continued use of a life-sustaining resource.

Carbonate Rock Areas

The carbonate rock areas of Carroll County include the Wakefield Marble and Silver Run Limestone geologic units, as well as calcareous zones found in schist, phyllite, and metavolcanic rock areas, as shown in the Phase II Report, *Carroll County Water Resources Study* (Volume 1, R.E. Wright Associates, Inc, May 1988). The carbonate rocks constitute the primary supply aquifers for the Towns of Union Bridge and New Windsor, as well as the Westminster Wakefield Valley satellite system. The carbonate rocks form the most productive and environmentally-sensitive aquifers in Carroll County. The carbonate minerals in this aquifer are readily soluble in groundwater, and joints and fractures may be greatly enlarged to form cavities. Carbonate rocks in Carroll County are frequently bounded by, and interbedded with, schist, phyllite, or metavolcanic rocks. Aquifer transmissivity and storativity in the carbonate rock aquifers is generally fairly high in this area. The variable transmissivity, the presence of plugged and open solution channels, frequent boundary conditions, and complex geologic structure make the hydrology of carbonate rocks extremely complex and frequently unpredictable. The carbonate rock aquifer is very susceptible to contamination, since the presence of voids in the subsurface does not allow adequate filtering of contaminants. In addition, the high transmissivity allows the rapid spread of contaminants throughout the highly conductive flow paths in these types of aquifers.

Due to the solution-prone nature of the aquifer materials, sinkholes are a common feature of this terrain and provide a direct conduit into the groundwater system through which contaminants may travel. Sinkholes have and will occur naturally, although studies have shown that the majority of sinkholes formed today are triggered as a result of human activities. Many factors may influence the rate of sinkhole development, which includes water table fluctuations, concentrated infiltration, and vibration. Sinkhole development begins deep in the subsurface in solution channels and fractures in the carbonate rocks. As these channels are enlarged by dissolution and the remaining insoluble materials are compacted or flushed out, voids are created. This may begin a "stoping" effect in the overlying soils as soil particles continuously move downward. Temporary soil bridges are formed in the solutioned areas between unweathered rock pinnacles, which then collapse as the void area moves upward. Depending upon the rate of downward soil movement, this may be evident on the surface as a slow subsidence or sudden collapse.

Reservoir Watersheds

A watershed is all land area that drains to an identified stream. Reservoir watersheds, therefore, include all of the streams and adjacent land areas that drain to the identified reservoir. Piney Run and Liberty Reservoirs are located in the Patapsco River Basin and were created by impounding the stream or river. Cranberry Reservoir is considered an off-line reservoir and is fed by pumping the water from the West Branch Patapsco River into the reservoir. Two additional reservoir sites have been identified to accommodate future water supply needs. These sites are Union Mills Reservoir, on the Big Pipe Creek, and Gillis Falls Reservoir, on Gillis Falls near Mount Airy. Portions of eastern Carroll County also drain to the Loch Raven and Prettyboy Reservoirs located in Baltimore County.

Lakes are evaluated and classified according to their "trophic" condition. This condition identifies the level of nutrient enrichment which will impact the usability of water for drinking and recreational purposes. Loch Raven, Prettyboy, and Liberty Reservoirs are in varying stages of eutrophication, or over enrichment. Recent studies have shown that Piney Run is classified as "Mestrophic," meaning that nutrient inputs are balanced with needs for plant growth. Currently, Liberty Reservoir serves the Freedom District of Carroll County as well as a portion of the Baltimore Metropolitan area.

The water quality of the reservoir affects the treatment needs for use as a water supply. Land use activities and the implementation of BMPs to minimize the flow of pollutants to streams feeding reservoirs determine the overall water quality of the reservoir. Protection of wooded areas, stream buffers, and wetlands will help to maintain high quality water. Implementation of BMPs on agricultural land, water quality improvements in stormwater management, and proper lawn care by homeowners will also provide positive effects on water quality.

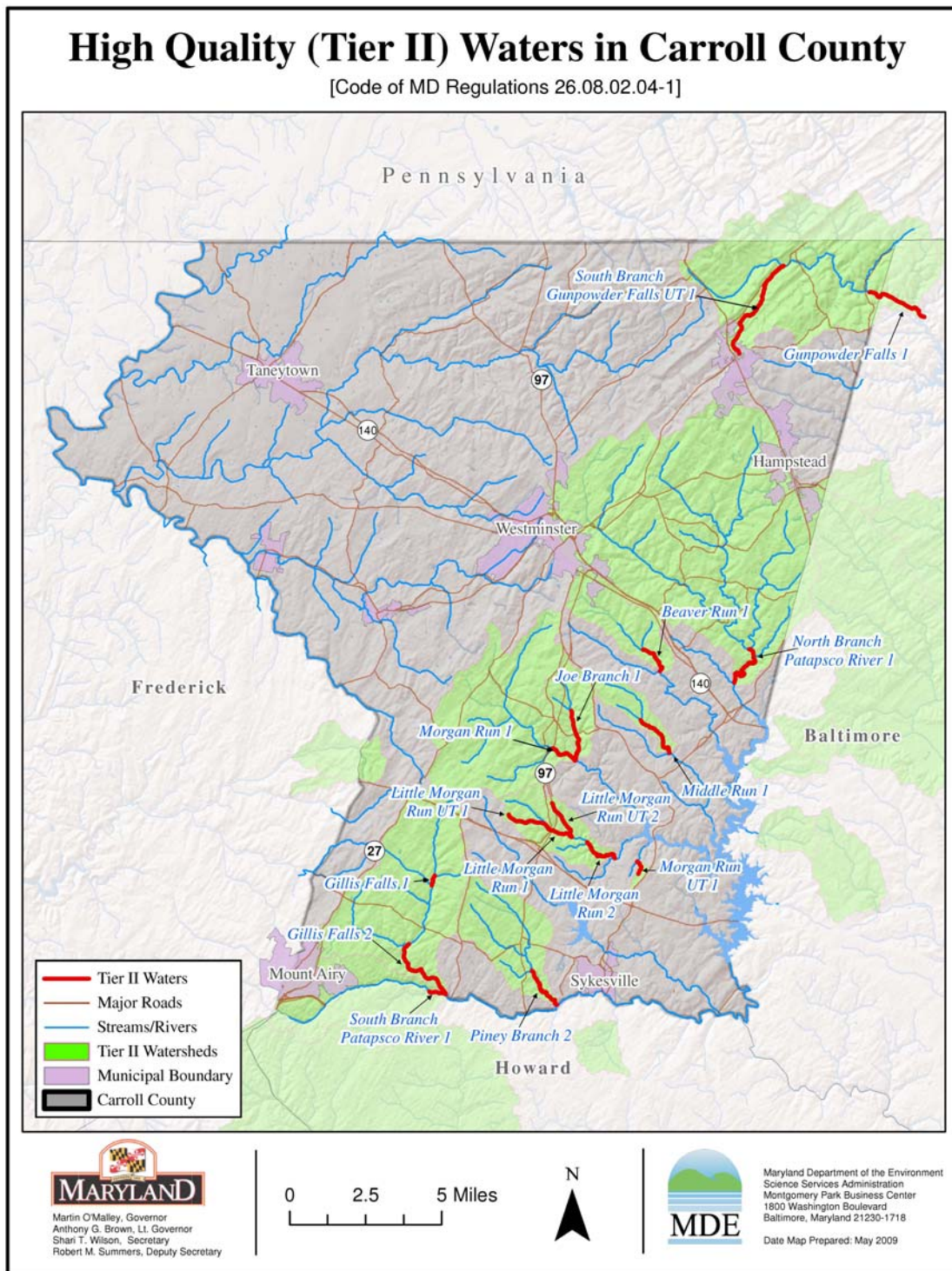
Use III Waters

Carroll County has several waterways which have been identified as Use III waters. These streams, which are protected for the high-quality water needed for the natural propagation of trout, include all of the following streams and their tributaries: Gunpowder Falls, Morgan Run, Beaver Run, Snowden's Run, Stillwater Creek, East Branch Patapsco River, Carroll Highlands Run, Autumn Run, Piney Run, Gillis Falls, Aspen Run, and South Branch Patapsco River (above the confluence with Gillis Falls). The first nine of these streams are further classified as III-P, which means that they flow into a public water supply. Because of this, Use III-P streams are regulated even more strictly on toxics than other Use III waters. The remaining streams in the county are Use IV or Use I waters, which are recreational trout waters. Fishing is an important recreational use of these streams. The presence and health of fish can be an important indicator of water quality.

Tier II Waters

"Tier II Waters" relate to Maryland's antidegradation policy, which follows the national model required by the US EPA. Tier II protects surface water that is better than the minimum requirements specified by the water quality standards. All of Maryland's current Tier II

waters were designated on the basis of biological indices of integrity. The MDE map titled “High Quality (Tier II Waters) in Carroll County,” which can be found on MDE’s website, shows the locations of the segments and their catchment areas (watersheds) that are located in part or in whole in Carroll County.



Note: This map can also be viewed by clicking on the High Quality Waters map at:

http://www.mde.state.md.us/programs/Water/QualityFinancing/SaterQualityFinanceHome/Pages/Water/hb1141/map_wq_carrollco.aspx

■ Other Influences

The Monocacy flows into the Potomac, which provides water to Washington D.C. There is also a small portion of Carroll County that drains to Hanover, Pennsylvania's water supply. What happens in Carroll County can potentially affect the water systems of all of the surrounding jurisdictions.

Problems with the condition of the reservoirs led to the signing of a Reservoir Agreement in 1979. In 1984, a strengthened Reservoir Watershed Management Agreement was established by signatory agencies, including Baltimore City, Baltimore County, Carroll County, Baltimore County Soil Conservation District, Carroll Soil Conservation District, Maryland Department of Agriculture, Maryland Department of the Environment, and the Baltimore Metropolitan Council. That agreement provided a sound framework for improving the quality of waters feeding into the reservoirs. The Agreement created the cooperative Reservoir Watershed Protection Program, where oversight and guidance is provided by the Reservoir Watershed Protection Subcommittee and implementation is coordinated by the Reservoir Technical Group of water quality staff from participating organizations. In 1990, six years after the Agreement was signed, the signatories comprehensively reviewed progress in implementing the 1984 Action Strategy, reaffirmed the Agreement, and accepted an updated 1990 Action Strategy. The Reservoir Watershed Protection Agreement was re-signed in 2004, and was followed in 2005 with a revised Action Strategies for Reservoir Watersheds.

In 2004, seven environmental ordinances were either adopted or updated. Among them, the Water Resource Management Ordinance was an unmandated action adopted by the Board of County Commissioners to enhance the protection of water quality and quantity in Carroll County. This ordinance is one of the few of its kind in the State of Maryland. Even though not all of the municipalities have formally adopted the ordinance, reviews of municipal development plans are still performed by County staff and comments/recommendations are forwarded to the respective municipal planning commission. Additional new ordinances were Floodplain Management and Environmental Management of Storm Sewer Systems. Revised ordinances included Forest Conservation, Stormwater Management, Grading/Sediment Control, and Landscaping.

In addition, the County and municipalities, along with the local Health Department, created the Carroll County Water Resource Coordination Council (WRCC). This group was formed in 2007 by a joint resolution signed by all parties. The WRCC meets monthly to discuss and address water resource management issues of mutual interest. The group oversaw the consultant work and drafting of the collaborative effort to develop a joint Water Resources Element (WRE).

In 2010, a Sustainability Committee, composed of over 30 members, including representatives from local businesses, educational institutions, County departments, local non-profit organizations, and citizen groups, worked on drafting a plan to identify tools and

strategies Carroll County could use to improve the ability of the County to meet its needs and continue to do so in the future.

The Challenge to Carroll County

In 1998, the Chesapeake Bay and many of its tidal tributaries were added to the list of impaired waters (known as the 303(d) list), thus requiring the development of a TMDL to comply with the Clean Water Act. In a standard regulatory approach, Total Maximum Daily Loads, or TMDLs, would need to be completed for the Chesapeake Bay and its tributaries by 2010. TMDLs require a very specific implementation plan, with “reasonable assurances” (e.g. enforceable permit limits) that load allocations will be achieved.

Chesapeake Bay Program partners have agreed to develop and carry out a cooperative approach to remove water quality impairments by 2010, embodied in Maryland’s Tributary Strategy. This cooperative approach will allow the states and the District of Columbia more flexibility on how to reduce pollutant loads.

In June of 2000, the State of Maryland signed *Chesapeake 2000* (C2K), a new Agreement for restoration of the Chesapeake Bay. Maryland, together with Virginia, Pennsylvania, the District of Columbia, the U.S. Environmental Protection Agency, and the Chesapeake Bay Commission, pledged to achieve over 100 specific actions designed to restore the health of the Bay and its living resources by 2010. The actions, along with revised goals, were incorporated into Maryland’s Tributary Strategies Statewide Implementation Plan (2006).

Water quality standards were not met, and the result is the development of a Bay-wide TMDL. The TMDL, which will actually be a combination of numerous subwatershed TMDLs, is being developed by EPA with an adoption date of December 2010. The TMDL will be composed of individual Watershed Implementation Plans (WIPs) developed by the Bay states. Additional specific WIPs by smaller watersheds and by county will be adopted by November 2011. These more specific WIPs will be required to be incorporated and implemented via local planning and decision-making processes.

Maryland’s **303(d) list** has been a report of a jurisdiction’s (i.e., State, territory or authorized tribe’s) impaired surface waters. An impairment is identified when water quality monitoring data suggest that a waterbody (river, lake, estuary or ocean) does not meet or is not expected to meet water quality standards. When a waterbody is listed, the cause (pollutant) and the priority of the impairment are identified. Waters scheduled for total maximum daily load (TMDL) development in the next two years are also identified in the list.
Source: MDE Website

TMDL stands for “**Total Maximum Daily Load.**” A load refers to the amount of all types of pollutants found in a body of water coming from all sources.

Simply put, the TMDL is the highest amount of a pollutant that a body of water can accept from all sources and still meet water quality standards. A body of water is tested and assigned a TMDL value. In Maryland, nitrogen and phosphorous are the most common pollutants.

State and Federal requirements to meet water quality standards using TMDL limits are resulting in revised land use and environmental requirements for the future.

TMDL requirements are intended to correct the existing conditions that add pollutants to a body of water. New regulations for meeting TMDLs also mean planning to prevent activities that may add pollutants in the future.

On April 20, 2007, Governor O'Malley signed the Regional Greenhouse Gas Initiative (RGGI), in which Maryland became the tenth state to join the Northeast regional climate change and energy efficiency program. RGGI is the first cap-and-trade program to control carbon dioxide emissions in the United States. The program is aimed primarily at reducing carbon dioxide pollution through a mandatory emissions cap on the electric generating sector, coupled with a market-based trading program to achieve the lowest possible compliance costs through energy efficiency. Maryland's participation in RGGI will reduce carbon dioxide (CO₂) emissions from the state's electrical generators by roughly 10 percent from current levels by 2019 by the most cost-effective means. (Source: April 20, 2007 Press Release – Office of the Governor)

Governor O'Malley also signed on April 20, 2007, an Executive Order (01.07.07 Climate Change) that establishes a Climate Change Commission. The Commission is charged with developing an action plan to address the drivers and causes of climate change, prepare for the likely consequences and impacts of climate change to Maryland, and establish firm benchmarks and timetables for implementing the action plan.

Also passed in Maryland in 2007 was HB 786, known as the Stormwater Management Act of 2007. Stormwater runoff is a major cause of disrupted shoreline and Bay overnutrification. HB 786 requires stormwater management practices to mimic natural water runoff and minimize land development impact on water resources. The stricter standard reduces pollution runoff to the Bay from impervious surfaces such as pavement, roofs, and structures.

Trends in the implementation of the water appropriation and permitting processes have raised challenges as well. Local governments are finding it difficult to secure enough water from sources within their control, either through ownership or incorporation, to meet existing or projected demands. Finding ways to address water recharge areas during the development process has also resulted in additional steps and timeframes for moving forward with planned growth.

Possibly the most difficult challenge the County faces in environmental protection is influencing individuals to alter their behavior to have a positive influence on the environment. Certain actions, such as Best Management Practices (BMPs) on farms, voluntary stream buffer planting, reduction of personal auto use, and wise lawn care, are difficult to mandate. Yet these actions sometimes can be the most effective for protecting our natural resources. The County has a role in facilitating this change in behavior. Providing alternative transportation options and crafting regulations that encourage the creation of communities that protect the natural features of the site and are not wholly dependent upon the automobile as a means of transportation are ways in which the County can directly influence the protection of natural resources. As more people move into the county, more of the county's natural resources will be stressed. Determining ways to influence personal choices that conserve energy, reduce pollution, and protect the quantity and quality of our water supplies will be the greatest challenge we face in the coming years.

Almost half of the county's land area, that which is east of the Parr's Ridge, falls within a reservoir watershed for drinking water. That same area is the location of the County's largest Designated Growth Areas, the Freedom and Westminster Growth Areas. The Hampstead, Manchester, and Finksburg Growth Areas are also within this watershed. The land use decisions that are made in these areas are impacted by and have an impact on the Reservoir Management Agreement and the watershed it covers.

The Choice: Policies & Recommendations

Policies

- Public and private land development, redevelopment, and use will comply with federal, state, and local environmental regulations.
- The County encourages and supports energy conservation, sustainable practices, and innovative/creative design in meeting environmental goals.
- The restoration and reforestation of stream buffers will be supported.

Recommendations

- A. Cluster development to protect environmental resources.
 - Encourage clustering through reasonable zoning mechanisms.
 - Maximize the amount of protected land in each cluster subdivision.
- B. Limit the impact of new development on recharge rates of community supply wells to allow for the maximum recharge possible so that optimum water supply and use of the wells is available by incorporating water recharge credits into easement agreements.
- C. Encourage the creation/retention of wildlife corridors, stream buffer restoration, and protection of unique ecosystems in the county on properties subject to development review.
- D. Plant trees in stream buffers, where feasible, when reforestation/afforestation is required to protect riparian habitat and enhance water quality.
- E. Develop incentives that preserve or help create forested riparian buffers to further protect water quality and riparian habitats.
- F. Evaluate impacts to sensitive watersheds and recharge areas for community water supplies when determining new development patterns.
- G. Develop guidelines to locate public facilities in a way that minimizes impacts to natural resources.
- H. Work with the municipalities that have not adopted the County's Water Resource Management ordinance to adopt the same or similar protections for municipal water resources.
- I. Develop and adopt a countywide Green Infrastructure Plan to link the needs for green and gray (roads, sewer facilities, etc.,) infrastructure in a more effective, economical, and livable network than would otherwise occur and to plan, before development occurs, the location of both types of infrastructure to be where they are most needed and most appropriate.
- J. Revise the appropriate code chapters, practices, and manuals to incorporate, "as appropriate," the recommendations in the Builders for the Bay report that have not yet been implemented.

- K. Review and revise the Conservation Zoning District to make it more consistent with the stated intent (i.e., protection of environmentally sensitive areas).
- L. Continue to support and maintain the Reservoir Watershed Protection Agreement.
- M. Develop a Carroll County Sustainability Plan to assist public and private entities in meeting energy conservation goals and more efficient development practices.
- N. In all zoning districts, consider the possibility of removing environmentally sensitive areas prior to calculating density, lot yield, or buildable area/lot coverage.

Fiscal Impact to the County

While some modification of existing regulations will occur as a result of implementing the environmental recommendations in this chapter, the significant financial impact on the County budget is expected to result from the completion by US EPA of the Chesapeake Bay TMDL and the resulting associated requirements. Substantial costs would be associated with the incorporation of many of these requirements into the County's NPDES permit when it is renewed.

Chapter 9: Facilities & Services

Goals

Ensure adequate and appropriate Community Investment Plan projects and operating budgets to implement the Master Plan and provide needed public facilities and services.

Provide community educational opportunities, facilities, and resources, particularly libraries and schools, to meet the needs of a diverse population.

The Significance to Carroll County

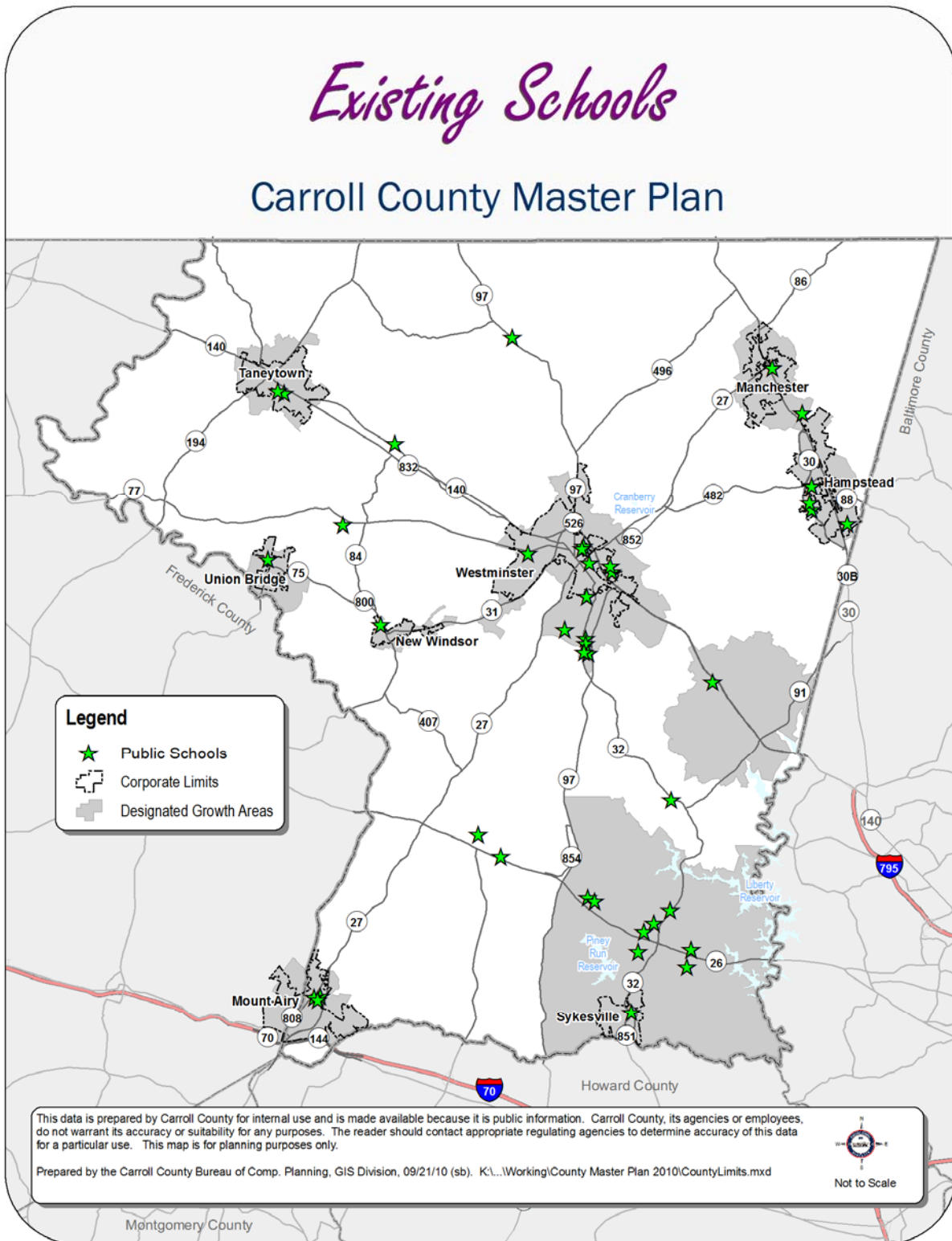
Providing public facilities and services for the safety, health, and welfare of its citizens is a primary function of local government. Public roads, water and sewer systems, schools, community colleges, libraries, parks and recreational sites, and public buildings are all facilities provided by government. Police protection, public education, infrastructure maintenance, emergency response, recreational programs, and snow removal are some of the services provided. Providing and maintaining these facilities and services at the levels the public desires and demands is essential to a healthy community and a high quality of life.

Systemwide, there are 27,732 total students in the school system, which has an overall capacity of 30,766. Most areas in the county are under capacity, with a few over capacity. As of November 2009, enrollment at 9 of the 42 public schools in Carroll County exceeded 100 percent capacity. Relocatable classrooms, 125 throughout the county, were initially constructed in response to the capacity issues at specific schools. The Board of Commissioners addressed these overcapacity issues through the construction of several new schools and additions. As a result, the need for relocatables is now more for programmatic reasons rather than capacity reasons.

An impact fee for schools and parks has been assessed on new residential development since 1989. The County Commissioners have forward-funded new schools in advance of State participation in order to provide needed classrooms. A portion of the piggyback tax is used to provide additional funds for needed school facilities.

The Carroll County Board of Education annually prepares an *Educational Facilities Master Plan*, which analyzes and identifies school systems' projected facility needs. These needs include: additional square footage required for increasing student enrollment, state-rated capacity changes for elementary schools, instructional program changes, and the capital renewal of the physical plant assets. The current plan can be viewed at

<http://www.carrollk12.org/admin/schoolfacilities/masterplan/default.asp>. Future schools sites are not identified. The “Existing Schools” map identifies locations of current schools.



Note: This map can also be viewed at:

<http://ccgovernment.carr.org/ccg/compplan/masterplan2010/default.asp>

While the County provides and maintains roadway facilities, many of its 1,609 roads (totaling 973 miles) and 139 bridges are developer-financed subdivision roads. The County long has had a policy of requiring developers to pay for or provide the facilities their developments will require, including roads. This has not always resulted in cohesive, connected roadway networks. The major roadways in the County are State roads, over which the County has very little control but on which the most congestion occurs.

The County has an adopted *Master Plan for Water & Sewerage* which identifies and projects facility needs as well as timing for improvements. Under State law, development cannot proceed unless water and sewer capacity is available in water and sewer service areas. This plan, which requires Maryland Department of the Environment (MDE) approval, is a tool to implement the Carroll County Master Plan; it is not an element of the comprehensive plan document itself.

Carroll County owns and operates the Hampstead Wastewater Treatment Plant, the Sykesville-Freedom public water system, and two landfills. Maryland Environmental Service (MES) operates the Sykesville-Freedom Wastewater Treatment plant, which serves the Freedom DGA. The capacity of each of these systems is a definable amount which is allocated as new users are added to the system. The water and sewer systems are self-funding systems paid for through a separate “enterprise” fund.

The County’s Solid Waste Management Plan is similar to the *Master Plan for Water & Sewerage*. It also implements the comprehensive plan, requires State approval, and must be updated every three years.

Several other facilities and services are partially or fully funded by the County, including six libraries, a community college, two nature centers, Hashawha Environmental Center, the Carroll County Cooperative Extension Service, senior centers, and the Farm Museum.

The Challenge to Carroll County

Every community desires and expects to have facilities and services provided at a certain level, but there is a cost associated with each level of service. Carroll County’s Master Plan was originally adopted to better direct the growth and development that was projected. Some of the development that has occurred has been consistent with the Plan. However, other areas have developed in a manner inconsistent with plan goals and visions. This inconsistent growth pattern has created spots stressed by excess demand even when overall facilities and infrastructure systems are adequate to meet community needs.

Whether population increase is due to net natural increase or immigration, all public facilities and services provided by local government are impacted by population growth. While impact fees can be charged to new growth to ensure that the current level of service for a facility is maintained, an increase in the level of service would result in a cost to both existing and new development.

The surging growth rate that the County began experiencing in the 1970s increased again in the 1980s and throughout the 1990s. Many of Carroll County's facilities and infrastructure systems were significantly stressed attempting to meet increased demands. The search for solutions resulted in a series of code and policy revisions governing the subdivision and development of land. These were aimed at ensuring that all manner of needed infrastructure, facilities, and services were reviewed and confirmed as sufficient to meet demands of the added development. This process evolved over several years as various testing standards and methodologies were considered. Ultimately, the Carroll County Code of Public Local Laws and Ordinances was revised three separate times; the most recent revision dates to 2004. The most significant changes related to planning and development were made to the following chapters:

- ▶ Chapter 71, Adequate Public Facilities and Concurrency Management
- ▶ Chapter 97, Construction Codes
- ▶ Chapter 103, Development and Subdivision of Land
- ▶ Chapter 105, Storm Sewer Systems
- ▶ Chapter 112, Floodplain Management
- ▶ Chapter 121, Grading, Erosion, and Sediment Control
- ▶ Chapter 134, Landscape Enhancement of Development
- ▶ Chapter 191, Stormwater Management
- ▶ Chapter 218, Water Resource Management
- ▶ Chapter 223, Zoning

In terms of facilities, Chapter 71 now requires the Planning Commission "to ensure that proposed or planned residential growth proceeds at a rate that will not unduly strain public facilities, including schools, roads, water and sewer facilities, and police, fire, and emergency medical services." Further the code "establishes minimum adequacy standards or thresholds for these facilities and services and mandates that the cumulative impacts of proposed or planned residential growth, within the incorporated municipalities and the County, be considered in testing for adequacy under these standards." The revisions established a reporting system that provides ongoing monitoring of the function and success of the code in meeting its purpose. Further, the adopted code mandates an annual report and re-assessment of the ordinance and standards. This establishes a regular program for ongoing revisions to ensure that the most effective standards, implementation rules, and submittal requirements are being incorporated on an as-needed basis. This also permits the County to maintain a single regulatory document while eliminating redundant or contradictory standards or requirements.

Steady residential growth in Carroll County since the 1970s has consistently placed additional demands on public school facilities. In the past, students have not always been evenly distributed within the County or within the grade levels. The areas of the County that had experienced the most rapid growth generally had schools at or over capacity. In the

summer of 2010, with Concurrency Management in place, only one school – Mount Airy Middle School - was considered inadequate.

Other portions of the county may find that simultaneous municipal projects may cause localized inadequacies, even though the system-wide student population remains within Carroll County Public Schools' (CCPS) projections. CCPS projections anticipate a pupil population of 27,665 for the year 2010-11 school year. As the population of the county ages and the birth rate declines, the growth in the school age population is expected to level off. November 6, 2009 CCPS projections anticipate a grand total student population of 26,712 students for the 2019-20 academic year.

Safety is a concern among Carroll County citizens. An increase in level of service for police would result in an increased cost to existing development as well as that portion borne by new development. Recent discussions and work by a specially convened task force have focused on the benefits, risks, and costs of consolidating law enforcement services in the county.

The volunteer emergency services system has been able to keep up with the demands created by a growing population. However, the recruitment of new volunteers is increasingly difficult, partially as a result of increasing training requirements. Volunteers often cannot respond during certain times of the day. Currently, fire and rescue companies across the county utilize paid fire and EMS personnel on an as-needed basis to cover times when volunteers are not generally available. The challenge to the County in the future is to determine how to continue to provide a high level of emergency services at a reasonable cost.

The Choice: Policies & Recommendations

Policies

- The Carroll County Planning Commission's recommendations on the CIP will consider the annual concurrency report and be based on the goals, policies, and recommendations of the adopted Master Plan.
- The County will give funding priority to the public facilities included in Chapter 71 of the Carroll County Code of Public Local Laws and Ordinances entitled "Adequate Public Facilities and Concurrency Management."
- Public educational facilities will be encouraged to be located within the DGAs, municipalities, and/or planned public water and sewer service areas to make them accessible to the populations they serve and to encourage the creation of mixed-use, pedestrian-oriented communities.
- Access controls and corridor preservation studies/provisions along major and minor arterials, as defined in the Carroll County functional classification system, will be implemented to maintain a high level of service and to promote the movement of freight and people. This includes use-in-common accesses near property or lot lines, cross easements, access to minor rather than major roads, and implementation of

parallel frontage roads. These and other techniques can be utilized to minimize and concentrate access points to the maximum extent feasible.

- Needed improvements will be a funding priority in the Carroll County Community Investment Plan budget, especially for critical roadway segments, local street extensions, and intersections.

Recommendations

- A. Work closely with the incorporated municipalities to encourage a coordinated reporting and analysis when considering new development plans and annexations.
- B. Evaluate the proposed CIP for consistency with the adopted Code of Public Local Laws and Ordinances and the Master Plan.
- C. Coordinate interjurisdictional CIP projects, such as roads, water and sewer, etc., to ensure they occur concurrently.
- D. Re-evaluate the fiscal cost of new development on the CIP to determine if the impact fee should be adjusted and/or new fees added to reflect the actual cost of facilities and services.
- E. Design new schools, with the ability to be expanded in the future, to accommodate additional pupil population in areas where a complete new facility is not necessary.
- F. Give CIP review priority to expanding existing schools where core facilities and site conditions allow it.
- G. Coordinate closely with the Board of Education and the local municipalities as appropriate, in determining where and when new schools are built (including identifying and preserving future school sites), ensuring consistency with the goals and policies of the Master Plan, and timely funding.
- H. Support the Board of Education to ensure implementation of redistricting of schools as a method of accommodating pupils when overpopulation is evident in any specific school district.
- I. Explore other ways to fund or reduce school construction costs.
- J. Evaluate new revenue sources, such as special taxing districts, to fund police, fire, and emergency medical services.
- K. Continue to support the volunteer-based organizations as the basic provider of emergency services.
- L. Periodically review and update all relevant emergency services plans including the Hazard Mitigation Plan and the Emergency Services Master Plan. The police element of this plan would address all existing and future agencies providing police services in the county.
- M. Develop potential mitigation methods that will reduce vehicle trips generated, such as additional Park and Ride lots, trail systems, etc.
- N. Forward build planned roads, which are currently primarily developer funded, to avoid fragmented infrastructure development.
- O. Investigate a greater role and responsibility for construction of State arterial and collector roads with the Community Investment Plan funding in partnership with the State.
- P. Investigate a transportation improvement fund to permit needed transportation improvements on a timelier basis. This fund could be from an excise tax on new construction, with proper State implementation legislation.

- Q. Maintain and/or improve the level of service along State arterial roads with corridor preservation and other measures. This will ensure safety and promote the efficient movement of goods for “on-time demand” and “just-in-time” deliveries. Studies will be conducted to review future needed rights-of-way to enhance access to interstate highways, especially I-70 and I-795.
- R. Investigate alternative ways to fund State Highway construction costs.
- S. Develop and implement policies to encourage the conservation of water and wastewater resources, thereby preserving as much water and sewer capacity as possible and reducing the cost of providing additional capacity.
- T. Seek to incorporate innovative and cost-effective design into water and sewer systems to make the most efficient use of capacity.
- U. Use the *Water Resources Element* and the *Carroll County Master Plan for Water & Sewerage* to plan for projected needs and facilities.
- V. Investigate funding sources, such as loans and grants, and other funding mechanisms to address special problems in small communities and to make assistance with these problems more affordable.

Fiscal Impact to the County

If levels of service are increased, in most instances, additional revenue sources will be needed to fund the increase for the existing population of the County.

Operating costs for public safety and corrections are projected to increase with population and employment growth. Revenues from new growth are sufficient to cover these increases. An increase from the existing service level will require an increase in revenue currently dedicated to police and emergency medical services. An increase in the sworn police officers from the current target of 1.3 police officers per 1,000 population to 1.4 police officers will result in an increased cost of approximately \$1,400,000 to serve the existing population. This represents about \$0.0078 on the property tax rate. New development will pay its own way through the tax rate. As police service is not a one-time cost, it is considered an operating cost and cannot be funded through impact fees. Currently, the County spends approximately \$3.7 million annually for paid emergency medical services at 13 of the 14 local fire companies.

Per the Concurrency Management Program, development projects are deemed to have inadequate roadways if a Traffic Impact Study indicates a level of service E or F. The existing policy of having developers build planned major streets and mitigate impacts on existing County roadways should help the County to meet the goal without significant additional costs to the County. The recommendation to fund roads and to participate in building state highways would require an undetermined amount of additional revenues.

During the decade of 1990-2000, and through the housing boom of the early 2000s, Carroll County saw significant residential growth throughout the county. With this influx of new residents, the school system saw a 30 percent increase in enrollment from 21,033 in FY 90

to 27,239 in FY 00. As the enrollment began to reach capacity in several parts of the county, it became clear that more schools were needed. The Board of County Commissioners began an aggressive Community Investment Plan (CIP) of constructing schools. This approach led to the construction of 10 schools at a cost of \$250 million. The following list includes projects that addressed this need:

- Oklahoma Road Middle was built to alleviate capacity concerns in the South Carroll area (1998)
- Linton Springs Elementary was built to alleviate capacity concerns in the South Carroll area (1998)
- Elmer Wolfe Elementary was built to alleviate capacity concerns in the South Carroll area (1998)
- Cranberry Station Elementary was built to alleviate capacity concerns in the Westminster area (1999)
- Shiloh Middle was built to alleviate capacity concerns in the North Carroll area (2000)
- Century High was built to alleviate capacity concerns in the South Carroll area (2001)
- Winters Mill High was built to alleviate capacity concerns in the Westminster area (2002)
- Parr's Ridge Elementary was built to alleviate capacity concerns in the South Carroll area (2005)
- Ebb Valley Elementary was built to alleviate capacity concerns in the North Carroll area (2008)
- Manchester Valley High was built to alleviate capacity concerns in the North Carroll area (2009)

As school construction continued into the early 2000s, enrollment flattened out. The rate of growth was 3 percent from FY 00 to FY 09, down significantly from the prior decade. Actual enrollment increased from 27,239 to 27,902. Projections for the next decade show a decrease in enrollment of 34 students, dropping down to 27,868. By the end of the FY 10-15 CIP, the County will have addressed school capacity issues. The last two projects to address overcrowding are included in the FY 10 CIP. An addition and modernization for Mount Airy Middle School is planned along with design funding for a new elementary school in the southeastern part of the county with the balance of the funding to be outside the six-year plan.

Education, including public schools, libraries, and the community college, continues to be the highest funding priority. At \$195 million, well over half of the FY 10 Operating Budget is dedicated to education. Though the Board of Education, Community College, and Public Libraries receive funding from both the County and the State, the State does not provide any additional funding when a new facility is opened.

In addition to capacity projects, the County continues to make progress in building additions to the elementary schools to accommodate the State requirement for full-day kindergarten. This effort is expected to continue over the course of the next decade. The County is also

continuing its efforts to maintain existing facilities with funding every year for roofs, HVAC systems, and paving.

Improvements to the Sykesville-Freedom public water and wastewater systems and the Hampstead wastewater system are funded through an Enterprise fund. The users of the system totally support the installation and operation of the system through various methods, such as front-foot assessment fees, user rates, and area connection fees. No general tax revenues support these systems. Because there is no fiscal impact to the County's operating or capital improvement budget, the cost to the County for these services is not further addressed here.

Chapter 10: Heart of the Civil War Heritage Areas

The “Heart of the Civil War Heritage Area” (HCWHA), along with its management plan, was certified by the Maryland Heritage Areas Authority in July 2006 as the eleventh heritage area in the state certified through Maryland's Heritage Preservation and Tourism Areas Program. The heritage area includes significant portions of Carroll, Frederick, and Washington counties that contain Civil War battlefields and other sites related to the conflict. In Carroll County, these sites primarily relate to supply efforts and troop movements through the area prior to and after the Battle of Gettysburg. The County’s portion of the heritage area includes the corridors (defined as 500 feet from the centerline) of most of the major roadways. On October 5, 2006, the Board of County Commissioners passed Resolution No. 680-06 amending the master plan to incorporate those portions of the *Heart of the Civil War Heritage Area Management Plan* that apply to the unincorporated portions of the county. That plan is incorporated by reference into this update of the master plan as well. Each of Carroll’s municipalities has adopted the management plan, also incorporating it into their respective comprehensive plans.

Certification enables Carroll County businesses and organizations to use State grants, loans, and tax incentives to undertake projects that support the heritage area's goals and capitalize on the area's significant Civil War-related history. Additionally, Target Investment Zones (TIZs) have been identified as part of this process. TIZs are areas towards which substantial amounts of funding are to be directed as a result of their having concentrations of heritage resources and visitor services. In Carroll County, three activated and/or potential TIZs have been identified: Taneytown, Westminster, and Sykesville. Properties within activated TIZs are eligible for additional grants and loans for capital projects and economic development projects, as well as state income tax credits for the rehabilitation of certified heritage structures. Other jurisdictions may be deemed eligible if they choose to apply for TIZ certification.

Chapter 11: Heritage

Goal

Preserve the county's historic, cultural, scenic, and architectural heritage.

The Significance to Carroll County

Historic resources and natural attractions give a community its identity. These resources provide a sense of who we are, where we came from, and where we may be going. Preservation of these important assets helps us to understand the present as a product of the past and as a modifier of the future. Protecting these buildings and landscapes conserves tangible and visible links with a community's past, preserves places that are important parts of a community's identity, and retains important resources that may provide historical information about how an area was settled, developed, or declined.

Currently, at least 1,678 historic sites in Carroll County are included on the Maryland Inventory of Historic Properties (MIHP). The inventory is a listing of historic properties, historic districts, sites, objects and structures, scenic resources, archeological, and natural attractions. As the MIHP is an archive of historic and cultural resources, it has no regulatory duty or authority. It is estimated that fewer than half of the historic sites that had existed in the county have been inventoried; it is unknown how many resources have been demolished or lost.

As of July 2009, 56 resources in the county are included on the National Register of Historic Places. These include individual listings and 13 multiple property historic districts. In total, 2,514 individual properties in Carroll County are included on the National Register of Historic Places. The districts include: Lineboro, Linwood, McKinstry's Mill, Mount Airy, New Windsor, Sykesville, Taneytown, Union Bridge, Union Mills Homestead, Uniontown, Warfield, McDaniel College, and Westminster. Four locally-zoned historic districts exist in the county: Sykesville, Uniontown, Warfield, and Westminster. Additionally, 35 unincorporated traditional settlements in Carroll are recognized as Rural Villages as defined in the Rural Villages Element. In many cases, the historic character of the community was a factor considered in the designation.

Of the four locally-zoned historic districts, only one lies within the unincorporated area of the County: Uniontown. This district also is the only place where the Heritage and accompanying Historic District Overlay zones exist in the county. The application of these zoning districts to Uniontown means that the historic district is governed by a strict set of development standards and design guidelines. The appointed members of the Carroll County Historic Preservation Commission have approval authority over all Historic District Overlay work

permits. It is their responsibility to ensure that exterior changes visible from a public road, including construction, alteration, reconstruction, moving, and demolition of sites and structures located within the Historic District Overlay, be done in conformance with the Secretary of the Interior's Standard for Rehabilitation. These requirements are in addition to those of the underlying zoning district. The Historic Preservation Commission also reviews and makes recommendations on petitions for designation of historic sites, structures, and districts. Applications for zoning changes, conditional use requests, variances, and site or subdivision development plans that affect designated historic sites, structures, or districts are reviewed by the Historic Preservation Commission as well.

One major boost to local efforts is the recent designation of Maryland's "Heart of the Civil War Heritage Area." The "Heart of the Civil War Heritage Area" (HCWHA), along with its management plan, was certified by the Maryland Heritage Areas Authority in July 2006 as the eleventh heritage area in the state certified through Maryland's Heritage Preservation and Tourism Areas Program. The heritage area includes significant portions of Carroll, Frederick, and Washington counties that contain Civil War battlefields and other sites related to the conflict. In Carroll County, these sites primarily relate to supply efforts and troop movements through the area prior to and after the Battle of Gettysburg. The County's portion of the heritage area includes the corridors (defined as 500 feet from the centerline) of most of the major roadways. All of the incorporated municipalities contain at least one of these routes and, therefore, lie partially within the heritage area. On October 5, 2006, the Board of County Commissioners passed a resolution amending the master plan to incorporate the Heart of the Civil War Heritage Area Management Plan. That plan is incorporated by reference into this update of the master plan as well.

Certification enables Carroll County businesses and organizations to use State grants, loans, and tax incentives to undertake projects that support the heritage area's goals and capitalize on the area's significant Civil War-related history. Since the heritage area's inception, thousands of dollars in matching grants have been awarded to Carroll County towns and heritage organizations to help fund projects ranging from downtown streetscape enhancements to walking tour brochures.

Additionally, Target Investment Zones (TIZs) have been identified as part of this process. TIZs are areas towards which substantial amounts of funding are to be directed as a result of their having concentrations of heritage resources and visitor services. In Carroll County, three activated and/or potential TIZs have been identified: Taneytown, Westminster, and Sykesville. Properties within activated TIZs are eligible for additional grants and loans for capital projects and economic development projects, as well as state income tax credits for the rehabilitation of certified heritage structures. Other jurisdictions may be deemed eligible if they choose to apply for TIZ certification.

As a partner in the Heart of the Civil War Heritage Area, Carroll County also was invited to be a partner in the "Journey Through Hallowed Ground" National Heritage Area. In 2007, the Board of Commissioners of Carroll County approved a resolution supporting the creation of this National Heritage Area stretching 180 miles from Gettysburg, Pennsylvania to Monticello, Virginia. The "Journey Through Hallowed Ground" National Heritage Area (JTHG)

was designated on May 8, 2008, becoming the 38th National Heritage Area in the country. The historic corridor encompasses sites of national significance associated with the Revolutionary War, the War of 1812, presidential history, the Civil War, as well as Native-American and African-American heritage. These sites are found amidst the remarkable beauty of the Mid-Atlantic piedmont. The JTHG National Heritage Area's goals are to increase national and local awareness of the significance of this area, to foster stewardship of its resources, and to enhance tourism and education in the region for the economic benefit of its residents.

Carroll County is included in another existing heritage tourism effort, the Civil War Trails program on the "Gettysburg: Invasion and Retreat" Civil War Trail. The Civil War Trails effort, begun in Virginia over a decade ago, is a coordinated interstate network of sites, landmarks, battlefields, and relevant cultural destinations that are organized around each significant Civil War battle or campaign. This has enabled a wide range of history enthusiasts, re-enactors, genealogists, and general tourists to re-trace the footsteps of troops and understand the impacts on the local community of this turbulent period of history. This arm of the heritage tourism effort has proven particularly compelling to visitors and, as a result, particularly successful to the partner communities. This initiative seeks to bring heritage tourists into the places where history happened. The interconnected routes typically permit travelers to follow either an exclusive themed route or to connect with sections of different routes within a smaller geographic area. The success of these efforts relies on coordinated promotion and cross-marketing of the available resources and opportunities in each location for each program.

Carroll County and its municipalities are also included on Scenic Byways designated by the State of Maryland. Carroll County destinations are included on four Maryland Scenic Byway routes: the "Historic National Road Byway," the "Old Main Streets Byway," the "Mason and Dixon Byway," and the "Falls Road Byway." This effort follows a similar model and implementation strategy as the Civil War Trails program. The Byways initiative seeks to bring visitors to experience the authentic character of the many small towns, crossroad communities, unique local sites, and undisturbed scenic vistas and landscapes that remain today.

The Challenge to Carroll County

Because of the county's relatively late start in suburban development and growth, many of the county's historic and scenic resources have survived. However, as the county continues to grow, it is important that efforts to inventory and protect its historic and scenic resources continue so that they can be preserved. Approximately half of the historic sites in the county have been inventoried over the last 37 years, over three-quarters of which were inventoried prior to 1990. Many of the sites inventoried to date were done by the State Highway Administration during the initial phases of several bypass projects in the county. With few such projects anticipated in the near future, the task to inventory the remaining sites will fall solely on the County.

Creating an inventory of the county's historic and cultural sites is crucial to understanding the resources that are here. But once the sites have been surveyed, there is no way of knowing if they later get demolished or substantially altered to the point that they lose their historical value. We are left with a record of our past, but no tangible evidence of it. A study of the 1,678 sites inventoried would provide information on how many remain today. However, there are not resources available to do the necessary study. Given the fact that the county has doubled in size since the inventory began, no doubt many have been lost. Over the next 20 years, the county's population is expected to increase by nearly 20 percent, which will place historic and cultural resources in even greater threat of irreparable destruction. As development occurs, it alters our scenic, historic, and cultural landscapes as well. The Historic Preservation Commission is charged with reviewing building permits, proposed regulations, and development plans for the Historic District. This provides some mechanism for overseeing development in this area. However, the County currently has no mechanism for ensuring that development outside of the Historic District occurs in harmony with or enhances these resources.

A great challenge facing Carroll County in the coming years will be to document its heritage resources as quickly as possible. This will aid in the formulation of well-informed decisions on what needs to be protected and will assist in the development of appropriate mechanisms to adequately preserve them. However, it will require that both the public and private sectors work together to achieve the goal. Gaining private sector support for heritage preservation poses another significant challenge. Promoting awareness of the benefits that can be derived from heritage preservation among businesses and private property owners means high levels of outreach and communication. It also means crafting preservation mechanisms that will serve all interested parties equally well and will not be viewed as obstacles to economic development or excessive restrictions on private property rights.

The Choice: Policies & Recommendations

Recommendations

- A. Regularly update and maintain Maryland Inventory for Historic Properties for Carroll County.
- B. Institute a regular program to survey, document, map, and complete updates to the county's historic resources inventory.
- C. Work with appropriate groups and agencies, such as the Historic Preservation Commission, to review specific development plans impacting historic structures, and to stimulate use of existing Federal and State tax credits and other economic incentives for rehabilitating, adapting and reusing historic properties.
- D. Renew the County's program of nominating eligible properties and districts to the National Register of Historic Places.
- E. Coordinate with the Agricultural Land Preservation Program to inventory and document historic agricultural buildings as part of the process of inclusion into the easement programs.

- F. Ensure that County-owned historic properties are preserved where feasible, and are maintained in a way that retains historic character and sets a leadership example for the community.
- G. Develop and adopt a community heritage plan that identifies measures to preserve, rehabilitate, and/or incorporate historic resources into redevelopment or new development.
- H. Adopt a Community Heritage Plan for the county to take advantage of the tourism value of its historic and cultural sites.
- I. Assist the Tourism Bureau in the location of sites for visitor's information centers to ensure that appropriate sites can be located.
- J. Implement the management plan for the Heart of the Civil War Heritage Area (see Chapter 10 for reference to this plan).

Fiscal Impact to the County

Many additional studies, regulations, amendments, and plans required under the goal and recommendations can be prepared by existing personnel. Some may require contractual services for specialized skills/knowledge.

Chapter 12: Housing

Goal

Provide for a wide range of housing types, density, and affordability that is well maintained and will meet the needs of the entire community.

The Significance to Carroll County

Shelter is a primary need in every community. As Carroll County continues to develop and grow in population, the housing stock must keep pace with demand or the increased demand will drive up housing prices. But keeping up with demand is not the only concern. To support a larger resident population and economic growth, adequate housing must be provided that meets the needs of a diverse population in terms of differing income levels, preferences for single- and multi-family arrangements, and options to purchase or rent.

In 2004, Carroll County commissioned a housing study to assess housing needs in the county. The *Carroll County Housing Study* was completed in February 2005 by Innovative Housing Institute Millennium Real Estate Advisors, Inc. and identified several trends in the county. Although several changes have occurred in the real estate market since 2004, this study is the most recent source of data available at the time of this 2010 Master Plan update.

New housing construction is improving the overall quality of the county's housing stock. However, as growth has continued to occur, the housing supply has not kept pace with the growth in the number of households, and many lower-priced rental units have been demolished or converted to other uses. Housing prices and rents have consequently increased while vacancy levels have declined. This has reduced housing choices for households with low and moderate incomes and forced many households to pay a larger portion of their income for adequate housing. According to the 2000 Census, 1 out of 3 renters paid more than 30 percent of their income towards housing, while 1 out of 4 homeowners paid more than 30 percent towards housing. Thirty percent is considered to be the maximum portion of a household's income that should be directed towards housing.

Many of the new residents moving into the county are employed in higher-salary positions elsewhere in the Baltimore or Washington metropolitan areas. They find housing in Carroll County affordable and attractive by metropolitan standards. The median household income for county residents in 2004 was \$62,500. In other words, 50 percent of the county's households had annual incomes in excess of \$62,500, and 50 percent had annual incomes below \$62,500. With a 2004 median sold price in the county of \$274,900, the median

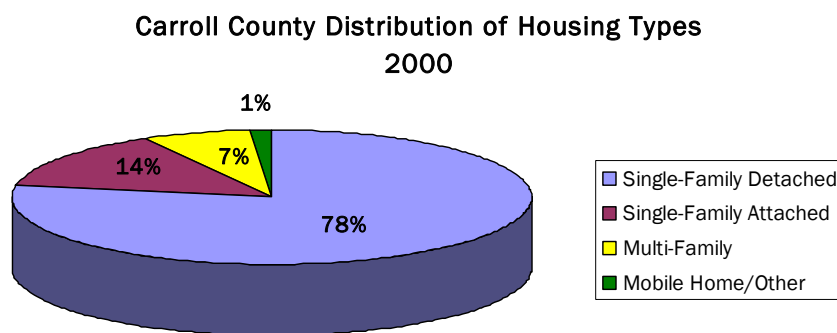
household incomes would need to be \$82,470 in order to compare favorably to the affordability of living in Carroll County.

Long-time residents and newcomers who are either employed in the growing number of lower-paying service jobs in the county or are retired are now finding it increasingly difficult to afford housing in sound condition. The average weekly wages offered by Carroll County employers is \$658, or slightly more than \$36,500 a year. Much of the new residential development that is occurring in Carroll County is priced beyond the reach of these workers, many of whom are classified as moderate-income families. The average price of a sold home in the county was \$364,703 in 2007. Additionally, the county's low vacancy rate of 3 percent for existing homes serves to elevate the cost of renting or purchasing homes in the county.

The retention of existing businesses and industries and attraction of new businesses and industries to the county requires that a wide range of housing types be available for workers living in or moving into the community. Providing a variety of housing options allows the labor force needed to support existing and future businesses to live in the county. It also enables lending institutions to reinvest in the community and offer low and moderate income households the chance to enter the housing market through attractive, affordable loans. Housing variety allows renters, first-time homebuyers, and "trade-up" homebuyers to secure housing which meets their needs as their lifestyle and financial status change throughout life.

The Challenge to Carroll County

Currently, the County's Subdivision Regulations and Zoning Ordinance contain few opportunities for diversity in housing, particularly multi-family housing or a mixture of residential and other types of land uses within a development. Only two zones in the county – the R-10,000 and the R-7,500 zones – allow for multi-family or planned unit development (PUD) housing. At this time, very little acreage in either zone exists for future development. Only about 9,200 additional units can be developed at a relatively high density in the county and municipalities, of which only 5,500 could be developed as multi-family. Additionally, few incentives exist in the County to promote the provision of moderately-priced housing.



Source: 2000 U.S. Census

According to 2000 Census data, 78 percent of the county's housing units were single-family, and 14 percent were townhouses (single-family attached). The Housing Study reported that the vacancy rate for multi-family units (defined as five or more dwelling units per

structure) had increased from 6 percent in 1990 to 7 percent in 2000. The multi-family vacancy rate for Carroll County as a whole was 8.7 percent in 2000. With new rental construction at historically low levels and little incentive for builders, Carroll's overall housing demographic is unlikely to change in the near future.

While the County may take on the responsibility of providing opportunities for affordable and moderately-priced dwelling units through zoning and other regulations, the County must also be able to afford to provide facilities and services to these homes. The typical existing house does not provide enough in taxes to cover the associated costs of services, chief among which are schools. Yet, pressure is mounting from residents demanding that levels of service be maintained or even increased and that service level deficiencies be corrected. The challenge, then, is to balance the cost of providing services and the need to provide varied housing opportunities, even if some households do not "pay their way".

The Choice: Policies & Recommendations

Recommendations

- A. Encourage mixed-use planned developments which encourage mixed business, commercial, residential, and recreational uses, accessible to all segments of the population in the DGAs.
- B. Update the County's Subdivision Regulations and Zoning Ordinance to promote housing opportunities.
- C. Use federal and State rehabilitation tax incentives to encourage the improvement of the County's historic housing stock.

Fiscal Impact to the County

While it may be necessary to provide opportunities for varied housing types, there is a cost associated with doing so. The typical existing house does not provide enough in taxes to cover the associated costs of services. New single-family homes may cover their associated costs, but new more affordable homes are not likely to cover their associated costs. Providing additional housing at this more affordable level will not alleviate the imbalance in costs of services provided versus taxes paid.

Chapter 13: Interjurisdictional Cooperation

Goal

Ensure communication and coordination between the County and the municipalities on projects and issues of mutual concern. Promote interjurisdictional cooperation in planning and land use decisions.

The Significance to Carroll County

Carroll County is a non-charter county with eight incorporated municipalities within its borders. Each municipality has its own mayor, council, and planning commission, along with the authority to enact its own laws separate and apart from those the County adopts.

Since the 1978 changes to the Agricultural Zoning District, the County Commissioners and each municipality have annually entered into an agreement to share funds and coordinate planning and other governmental functions. The Town/County Agreements are formal documents enumerating the types of services the County provides to the municipalities. The agreements are tailored to the needs of the municipality and vary in complexity, depending on whether the municipality has in-house planning staff. Historically, County services have ranged from simple liaison (i.e. notifying the town of all future developments within one mile of its boundaries) to more extensive staffing for planning and development matters. The latter includes reviewing development plans and advising the appropriate municipal boards and commissions on the best course of action as well as preparing comprehensive plans and zoning and subdivision ordinances. The Agreement provides for cooperative referral by each jurisdiction to the other for review of subdivision plans, comprehensive plans or comprehensive plan amendments, annexation petitions, and rezoning petitions.

Through the town/county agreements, the implementation of State and local laws are established between the County and municipalities by ordinance. The agreements allow for a cooperative environment under which coordinated, efficient implementation of regulations and protection measures can take place. In most cases, the County provides staff and other resources to manage, implement, and enforce measures needed to ensure compliance with applicable regulations and protection measures.

The regulations which provide for the protection and management of natural resources and the role assumed by the County and municipalities can be seen in the table titled “Review, Inspection, and Bonding: Assignment of Responsibilities.” This table identifies the entity responsible for the key steps in the implementation of resource management. This arrangement between the County and its municipalities for the most part allows for consistent and uniform application of resource management regulations.

2010 Master Plan: Carroll County Challenges & Choices

In addition to the resource management regulations found in the “Review, Inspection, and Bonding: Assignment of Responsibilities” table, the County and each municipality also each have Adequate Public Facilities laws in place. This table indicates activities and responsibilities associated with a proposed development – subdivision or site plan – and which jurisdiction implements those items.

Review, Inspection, and Bonding: Assignment of Responsibilities

Resource Management Ordinance and Activity	Hampstead	Manchester	Mount Airy	New Windsor	Sykesville	Taneytown	Union Bridge	Westminster
Floodplain								
Review*	C/C	C/C	C/C	C/C	C/C	N/A	N/A	C/M
Bond	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Inspection	C	C	C	C	C	N/A	N/A	C
Easement	C	C	C	C	C	N/A	N/A	M
Grading								
Review*	C/C	C/C	C/C	C/C	C/C	C/C	C/C	C/C
Bond	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Inspection	C	C	C	C	C	C	C	C
Sediment Control								
Review*	SCD/S	SCD/S	SCD/S	SCD/S	SCD/S	SCD/S	SCD/S	SCD/S
Bond	C	C	M	C	M	M	M	C
Inspection	C	C	C	C	M/C	C	C	C
Stormwater Management								
Review*	C/C	C/C	C/C	C/C	C/C	M	M	C/M
Bond	C	C	M	M/C	M	M	M	M
Inspection	C	C	C	M/C	M/C	M	M	C
Easement	C	M	M	M	M	M	M	M
Landscape								
Review*	C	C/C	C/M	?	C/M	C/C	M	M
Bond	C	C	M	C	M	C	N/A	M
Inspection	C	C	M	C	M	C	N/A	M
Forest Conservation								
Review*	C/C	C/C	C/C	C/C	C/C	C/C	C/C	C/C
Bond	C	C	C	C	C	C	C	C
Inspection	C	C	C	C	C	C	C	C
Easement	C	C	C	C	C	C	C	C
Water Resources								
Review*	C/No Code	C/C	C/C	C/C	C/C	C/ No Code	N/A	C/ No Code
Bond	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Inspection	N/A	C	N/A	C	C	N/A	N/A	N/A
Easement	N/A	C	M	C	C	N/A	N/A	N/A
Environmental Site Delineation (ESD)								
Review*	N	Y	Y	Y	N	N	Y	N
Key:	C = County		M = Municipality		S = State		SCD = Carroll Soil Conservation District	

* Review performed by/whose code

Source: Carroll County Bureau of Resource Management, November 14, 2008

The cooperative relationship has worked well. It ensures the open exchange of information regarding plans and development proposals. As a result, many issues are resolved at the staff level, reducing the possibility of problems later in the process. The County Commissioners also distribute funds annually to the municipalities upon execution of the Agreement.

In addition, the County and municipalities, along with the local Health Department, created the Carroll County Water Resource Coordination Council (WRCC). This group was formed in 2007 by a joint resolution that was signed by all parties. The WRCC meets monthly to discuss and address water resource management issues of mutual interest. The group has been overseeing the collaborative process to develop a joint Water Resource Element (WRE).

As a member of the Baltimore Metropolitan Council (BMC), the County coordinates demographic, environmental, and transportation studies with Baltimore, Howard, Harford, and Anne Arundel Counties, as well as Baltimore City. There is currently no *formal* mechanism to coordinate planning with the Pennsylvania jurisdictions to the north or other adjoining jurisdictions that are not members of the BMC.

In 1984, a strengthened Reservoir Watershed Management Agreement was established by signatory agencies, including Baltimore City, Baltimore County, Carroll County, Baltimore County Soil Conservation District, Carroll Soil Conservation District, Maryland Department of Agriculture, Maryland Department of the Environment, and the Baltimore Metropolitan Council. That agreement provided a sound framework for improving the quality of waters feeding into the reservoirs. The Agreement created the cooperative Reservoir Watershed Protection Program, where oversight and guidance is provided by the Reservoir Watershed Protection Subcommittee and implementation is coordinated by the Reservoir Technical Group of water quality staff from participating organizations. In 1990, six years after the Agreement was signed, the signatories comprehensively reviewed progress in implementing the 1984 Action Strategy, reaffirmed the Agreement, and accepted an updated 1990 Action Strategy. The Reservoir Watershed Protection Agreement was resigned in 2004, and was followed in 2005 with a revised Action Strategies for Reservoir Watersheds.

The Challenge to Carroll County

Cooperation and communication between the different levels of government both within Carroll County and around it provide for a mechanism to address issues before they become problems. Initiatives for growth management detailed in this plan present additional needs for interjurisdictional cooperation.

Carroll's areas of major development, on the east and south, are adjacent to the agricultural zones of the metropolitan counties. Conversely, southern Pennsylvania's residential development is occurring adjacent to Carroll County's strong agricultural area in the north. It is only in the west that Frederick and Carroll's agricultural areas are compatible. Ways to mitigate the potential impacts from these competing land uses, as well as traffic and environmental concerns, are only some of the reasons to maintain regional communication and cooperation.

The Choice: Policies & Recommendations

Policies

- The County will continue to review municipal projects and will assist the municipalities, where feasible, in providing needed facilities through the CIP process.
- The County will remain an active member of the Baltimore Metropolitan Council to promote the interests of Carroll County residents on a regional level.
- The County Zoning Ordinance will maintain consistency with the County Master Plan and the respective community comprehensive plans.

Recommendations

Local Municipalities

- A. Revise the Town/County Agreements to tailor them to better meet the specific needs of each municipality and the County and to better achieve the comprehensive plans for each jurisdiction.
- B. Work with the municipalities to achieve consensus on countywide issues and decisions.
- C. Collaborate with each municipality to plan concurrently and compatibly.
- D. Coordinate interjurisdictional CIP projects, such as roads, water and sewer, etc., to ensure they occur concurrently.
- E. Hold meetings periodically between the County Planning Commission and each municipal Planning Commission to explore mutual planning issues.
- F. Continue to include cost-sharing provisions in the Town/County Agreement to assist municipalities in addressing growth related issues.
- G. Continue to provide planning staff support to the municipalities.
- H. Work with the municipalities on critical environmental issues, such as NPDES and the Bay TMDL (see Chapter 8: Environmental Resources and Chapter 20: Water Resources Element).

Other Jurisdictions

- A. Continue to participate in efforts to address regional issues and planning concerns.
- B. Meet with staff from other counties on a periodic basis to discuss mutual concerns.
- C. Continue to participate in the Reservoir Watershed Agreement.

Fiscal Impact to the County

This goal and implementation recommendations will have minimal fiscal impact on the County, rather it continues and expands the coordination role of staff.

Chapter 14: Land Use & Growth Management

Goals

Pursue policies and Community Investment Plan expenditures that facilitate growth in the designated growth areas, thereby protecting and conserving agricultural and environmental resource areas, preserving open space, and providing public facilities and services efficiently and cost effectively.

Promote development design that is in harmony with the surrounding built and natural environments, encourages community interaction, and, in rural areas, preserves the county's rural character.

Increase by .5 percent per year the amount of growth within Priority Funding Areas (PFAs) and decrease by .5 percent per year the amount of growth outside PFAs, for a total of a 3 percent shift over a six-year period.

The Significance to Carroll County

The growth in Carroll County has been guided by a master plan since 1964. The basic premise of the plan has been to direct development into and around the county's nine Designated Growth Areas (DGAs) while retaining the rural character and use of the surrounding land. Implementation of the premise was strengthened in 1978, when the allowable density in the Agricultural zone was decreased from one dwelling unit per acre to one dwelling unit per twenty acres.

Designated Growth Areas are the smaller geographic areas of the county where the majority of Carroll County's planned residential, commercial, and industrial development is currently concentrated and growth planned to occur. These areas generally are centered on a municipality, where historically higher density development has occurred in a more traditional town pattern, and where public water and sewer facilities and services are available. Community comprehensive plans focused on these areas are prepared and evaluate land uses at a more local scale. Carroll's eight municipalities are at the heart of the DGAs, with the exception of Sykesville, which lies along the southern edge of the Freedom area.

The land use designation map, entitled "Carroll County Master Plan" and included in this chapter, identifies the existing DGAs in the county, based on adopted plans as of December 2009. The DGAs include Freedom, Hampstead, Manchester, Mount Airy, New Windsor, Taneytown, Union Bridge, and Westminster. The Town of Sykesville resides within the Freedom Growth Area, but is not the focal point or center of the DGA. State law requires

that comprehensive plans be reviewed, and updated if needed, every six years. Therefore, these plans, and potentially their DGAs, change on a regular basis. The land use designation map, as well as other maps within this plan document, reflects the adopted plans as of December 2009. Proposals are not shown and are finalized through the official adoption process for the relevant individual comprehensive plan before being incorporated to this map.

The Finksburg area was considered to be a growth area at the time its current plan was adopted in 1981. This status and the boundary of the growth area (formerly referred to as the Community Planning Area) were based on the former 30-year water and sewer service areas to provide public water and sewer facilities to this area. However, these facilities are no longer planned, and development has occurred at a lower density than the other DGAs. The existing, more intense development in the Finksburg area is concentrated along the MD 140 corridor, from the Liberty Reservoir to slightly west of MD 91.

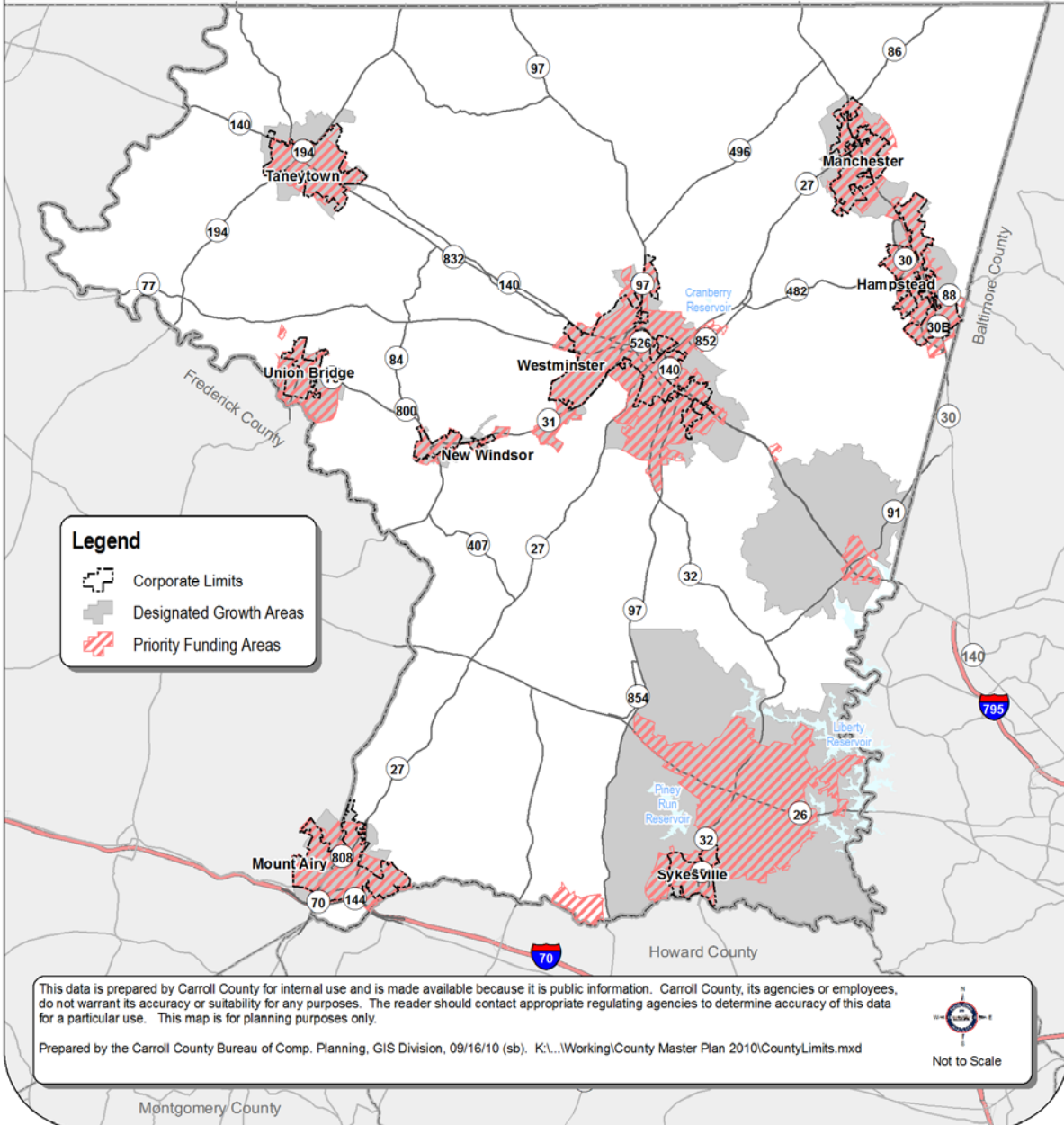
The approach to land use that has been guiding development in the county for the past 45 years provides for the efficient use of land for development and the effective provision of services. By concentrating growth, the delivery of facilities and services such as water and sewer, roads, schools, and natural gas, as well as police, fire and emergency services, is much easier and more cost effective. Community interaction is promoted when developments are well-designed and integrated with each other.

Concentrated growth also accommodates the same number of people on less land, allowing the land outside of the growth area to remain relatively rural. This rural land is composed of agricultural land, open space, and environmental resource lands, such as forests, streams, wetlands, and steep slopes. Currently, lots created in the Agricultural Zoning District are required to be designed at a minimum lot size of one acre and clustered to achieve the maximum possible amount of land remaining in cropland. This policy serves to preserve the rural working landscape as well as to maximize the land available for active farming.

Over the last several decades, the county's land use has been changing from an overwhelmingly rural county to a steadily urbanizing county. Between 1973 and 2009, 24,020 acres, or almost 7.2 percent of the county, was converted from agriculture/forests to another use. While most of this has been planned growth, a substantial amount also has been growth outside of the DGAs. As of 2009, the land area in Carroll County was composed of 73 percent agricultural and forest land and 19 percent residential land. Only 1 percent of the county's entire land area was used for commercial and industrial development, and the remaining land area was used for various other types of development or resources.

Corporate Limits, Designated Growth Areas, and Priority Funding Areas

Carroll County Master Plan

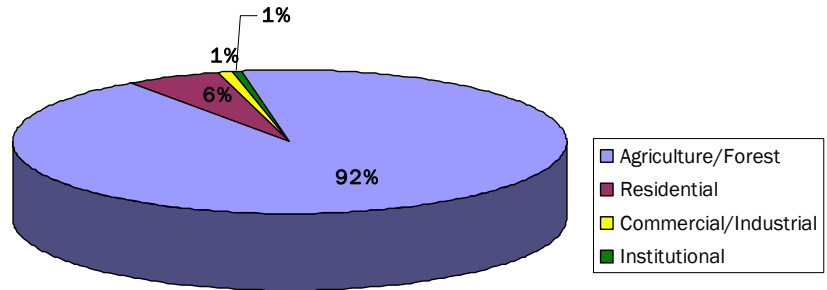


Note: This map can also be viewed at:

<http://ccgovernment.carr.org/ccg/compplan/masterplan2010/default.asp>

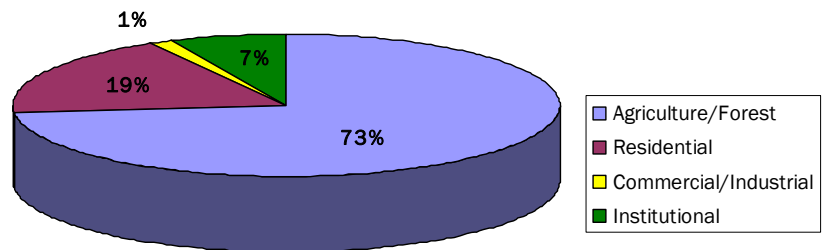
Since 1964, most of the growth in the county has occurred in the DGAs. Currently, about 63 percent of the total county population lives in one of the DGAs, which comprise approximately 21.8 percent of the total county land area. The population percentage in the DGAs has remained steady for the past seven years. Development regulations, which require preservation of natural stream buffers and provide for open space, serve to maintain the patterns of natural vegetation in these more developed areas and to protect environmental quality. Landscaping further blends these developments into the community.

Carroll County Distribution of Land Uses
1973



Source: Carroll County Bureau of Comprehensive Planning

Carroll County Distribution of Land Uses
2009



Source: Carroll County Bureau of Comprehensive Planning

In 2008, the amount of new growth locating within the DGAs was 77 percent. Benefits to directing the majority of new growth to the DGAs include reduced infrastructure costs, minimized sprawl, maintenance of the current population distribution, and consistency with the State's twelve visions.

The Challenge to Carroll County

Until now, much of the residential development in the county has occurred in the DGAs, where it was planned and where there was sufficient zoned land available for development. Outside of the DGAs, the 24,124 existing residential units would combine with the 13,165 estimated potential residential units to create 37,289 residential units outside of the DGAs at build-out based on current land use designations, with 61 percent of all residential units located in DGAs and 39 percent located outside DGAs.

**Existing and Planned Residential Units in Designated Growth Areas
2009**

Area	Existing Units	Planned Units	Totals	Total % In / % Out
Inside DGA	38,263	21,246	59,509	
Outside DGA	24,124	13,165	37,289	
Total	62,387	34,411	96,798	61/39

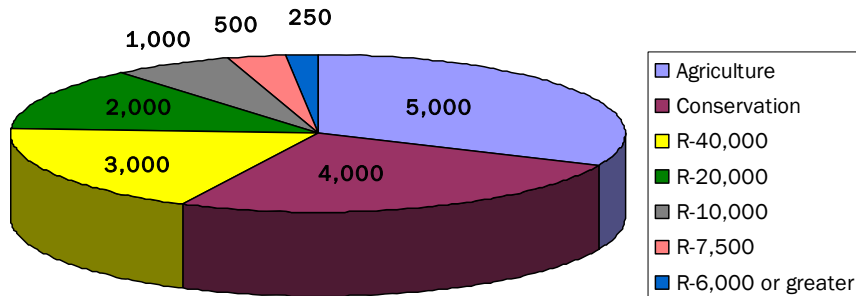
Source: Bureau of Comprehensive Planning, Bureau of Permits & Inspections, Dept. of Technology Services

Based on the acreage outside of the DGAs, this would result in a density of about 1 dwelling unit for every 9.5 acres. This density of housing units will be difficult to absorb while maintaining the quality of the rural landscape. As density in the agricultural areas increases, farmers find it more and more difficult to move equipment, protect livestock and crops from damage, and avoid nuisance complaints by non-farm neighbors.

Additionally, development outside of primary growth areas creates problems for the delivery of services. Rural roads often are not constructed to carry heavy volumes of traffic, causing congestion and hazardous driving conditions. When these roads are upgraded to accommodate new traffic, they lose their rural character. Furthermore, school bussing routes and the provision of emergency services must be expanded to serve more people over a greater area when growth is not concentrated.

The 2000 plan discussed the need to specifically plan to accommodate 200,000 people by 2020. It was meant to serve as a guide for providing zoning capacity, planning capital improvements, and other planning processes. However, in the past decade, new legislative requirements and policies have changed the factors that tend to have greater driving influence over each jurisdiction's comprehensive plans and planned land uses. The approximate buildout population, based on land use designations in unincorporated areas and zoning within the municipalities, is 218,677 people (including group quarters), which is roughly equal to 91,074 dwelling units (at an average household size of 2.34). Based on population projections developed for BMC, a population of 199,963 would be reached by 2025, 207,317 people by 2030, and 213,232 people by 2035.

**Carroll County Potential Residential Units
by Zoning District
2009**



Source: Carroll County Bureau of Comprehensive

Expanding the DGAs so that they continue absorbing the majority of the county's growth in a concentrated manner may be difficult. If the DGAs are to continue absorbing the majority of the growth, creative efforts will need to be investigated and undertaken aggressively, before all options are eliminated simply due to existing development. The Union Bridge, New Windsor, and expanded Taneytown DGAs are practically surrounded by Agricultural Land Preservation easements. Hampstead and Manchester, due to their location in the Baltimore Reservoir watersheds, have limited opportunities for sewerage disposal. Expansion of some of the water and sewer capacity would be required before the remaining DGAs could be enlarged, and water quantity and quality issues would need to be addressed.

As each of the DGAs are unique, with their own additional challenges and circumstances, the amount and location of additional growth that each DGA can accommodate will need to be reviewed at the time each individual area plan is updated. The additional growth and development that can be accepted and planned for will affect the measures and approaches with which the County and each municipality engage in to implement the Master Plan and the individual comprehensive plans for each DGA.

The Choice: Policies & Recommendations

Policies

- First priority for infrastructure improvements should be given to areas within the DGAs.
- Developer-financed road improvements will be required outside the DGAs.
- New and expanded development will be encouraged to cluster, limit strip development in particular, along major highways, and consolidate access points to major and minor collector roads.

Recommendations

- A. Continue to implement the concurrency management program to ensure that residential growth proceeds at a rate that will not unduly strain public facilities and services.
- B. Work with the municipalities to incorporate ways to achieve this goal when updating the community comprehensive plans.
- C. Periodically review the Carroll County Zoning Code to maintain compliance with the updated Carroll County Master Plan.
- D. Continue to develop an annual concurrency report that monitors development and details remaining capacities to adjust the rate of growth to match the County's ability to fund improvements.
- E. Based on legislative authority granted in 2004, forward build planned roads as funding is available to avoid fragmented infrastructure development and to foster the building of complete and cohesive communities.
- F. Locate new schools, libraries, other public services, and business development in the DGAs where they can most effectively and efficiently serve the largest number of people and to promote concentration of growth within the DGAs.
- G. Implement the Master Plan through formal town/county agreements that show support from the municipalities for concentrating growth in those towns that have the ability to

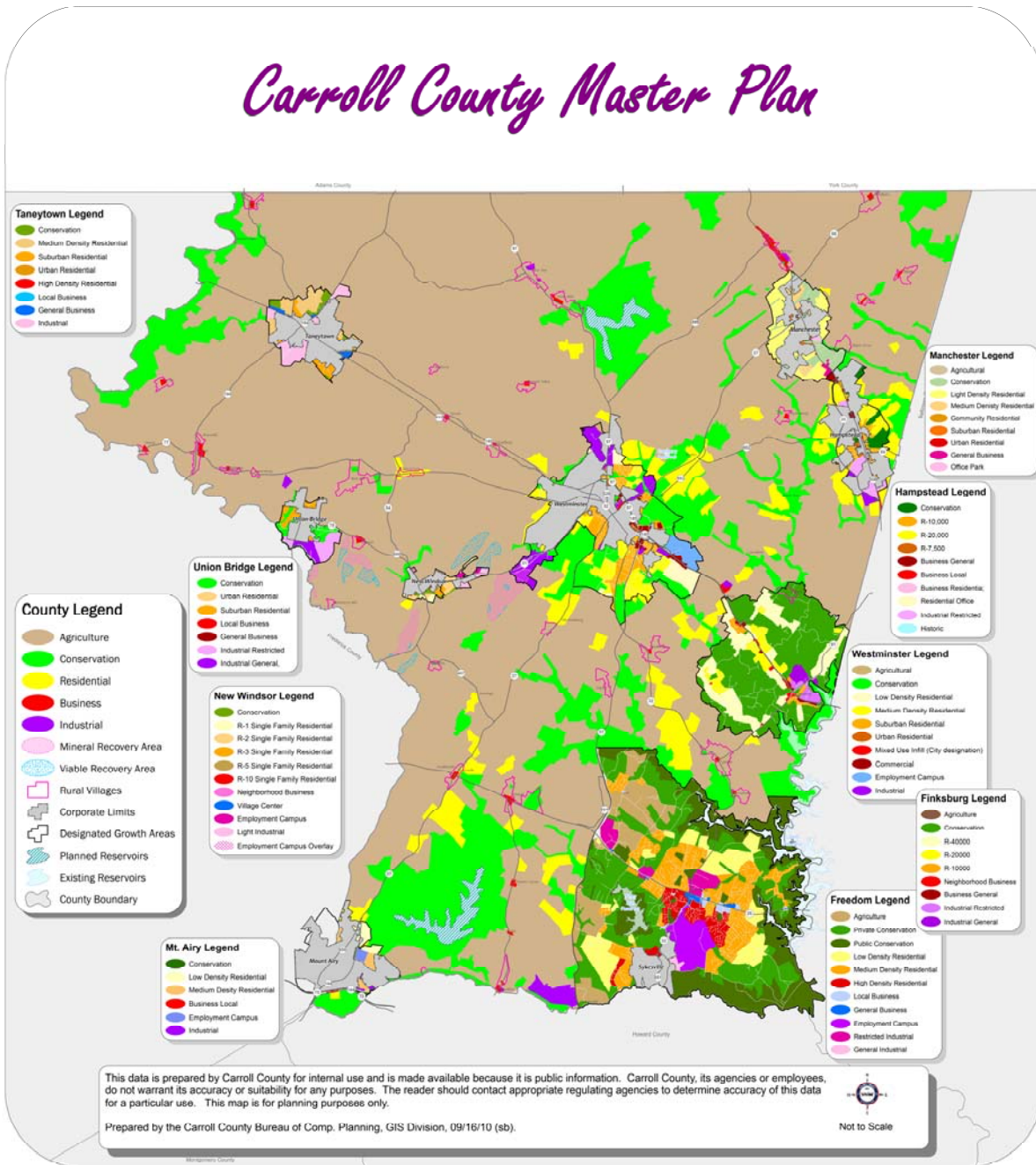
accommodate it and that provides additional support from the County to assist the towns in accomplishing this goal.

- H. Review and update areas zoned Conservation in the county, including the provisions of the District as specified in the Carroll County Zoning Code.
- I. Use the processes available during community comprehensive plans to encourage the creation of “greenbelts” around DGAs and minimize interconnections.
- J. Create a “mixed-use” zone for the County to provide additional opportunities for higher-density housing in the DGAs.
- K. Eliminate Finksburg’s status as a Community Planning Area, as indicated in the 1981 Finksburg plan, and identify measures to improve the MD 140 corridor through Finksburg, where the bulk of the existing development is more concentrated.
- L. Review residential, commercial, and industrial zoning and subdivision regulations and modify as necessary to ensure they are consistent with the goal.
- M. Review and update the uses permitted in each zoning district to ensure consistency with each zone’s purpose.
- N. Continue supporting Main Street programs and expand them to Rural Villages and the Freedom Growth Areas, where appropriate, to encourage development that is consistent with the character of the Main Street areas.
- O. Encourage land preservation around Rural Villages to protect the villages’ rural character.
- P. Consider design guidelines for new residential construction and rehabilitation to achieve consistency with existing development and compatibility with the natural environment, as well as improve the visual quality of new development.

Fiscal Impact to the County

The fiscal analysis distributed capital costs evenly throughout the time period by assigning a one-time cost per person, dwelling, or pupil. Therefore, decisions made to fund several schools through bonding may affect the short-term fiscal picture.

Several of the recommendations, while important from a planning standpoint, will have a budgetary impact to make the DGAs better able to accept growth. Forward funding major planned street connections is not currently a budgetary item. Additional revenue sources would have to be found to implement this recommendation. Some funding may be transferred from the amount currently used for upgrading rural roads if the policy is changed to require development in these areas to do road improvements.



Note: This map can also be viewed at:

<http://ccgovernment.carr.org/ccg/compplan/masterplan2010/default.asp>

Chapter 15: Mineral Resources

Article 66B of the Annotated Code of Maryland, Section 1.03, requires jurisdictions to develop a mineral resources element of their comprehensive plans. The legislation states that a comprehensive plan shall include:

“If current geological information is available, a mineral resources plan element that:

1. Identifies undeveloped land that should be kept in its undeveloped state until the land can be used to provide or assist in providing a continuous supply of minerals, as defined in § 15-801(i) of the Environment Article;
2. Identifies appropriate post-excavation uses for the land that are consistent with the county’s land planning process;
3. Incorporates land use policies and recommendations for regulations:
 - A. To balance mineral resource extraction with other land uses; and
 - B. To the extent feasible, to prevent the preemption of mineral resources extraction by other uses; and
4. Has been reviewed by the Department of the Environment to determine whether the proposed comprehensive plan is consistent with the programs and goals of the Department;...

(3) The mineral resources plan element required under paragraph (1)(ii) of this subsection shall be incorporated in:

- (i) Any new comprehensive plan adopted after July 1, 1986 for all or any part of a jurisdiction; and
- (ii) Any amendment or addition that is adopted after July 1, 1986 to a comprehensive plan that was in effect on July 1, 1985.”

The Board of County Commissioners adopted the Carroll County Mineral Resources Plan and implementation mechanisms on February 27, 1992, fulfilling this requirement.

The plan created/designated two Mineral Resource Recovery Areas – Viable Resource Area (VRA) and a Mineral Resource Overlay (MRO) in Chapter 223 of the Carroll County Code of Public Local Laws and Ordinances. In the VRA, potentially recoverable mineral resources have been identified and will be protected from preemptive development. In the MRO, land uses that preempt resource recovery are prohibited. These areas are indicated on the land use designation map (“Carroll County Master Plan”), and the plan element is incorporated by reference.

Chapter 16: Parks

Goal

Provide a coordinated and comprehensive system of public and private parks, recreational facilities and programs, and open space that will meet the active and passive recreational needs of all citizens of the County and enhance community design, identity, and vitality.

The Significance to Carroll County

Carroll County has approximately 11,760 acres of public lands which are used for recreation to serve its population of 174,650. These recreation areas range from scenic, natural places, such as Piney Run Park and the land around Liberty Reservoir, to high activity parks such as Taneytown Memorial Park. Included in these almost 12,000 acres are school sites whose playing fields are used by the entire community, reservoir areas that abound with hiking, fishing, and other recreational opportunities, state park lands in the county, and municipal parks. With all of these opportunities available, the county has an average of .067 acres of publicly-owned park land or open space per person (or 67 acres of park land per 1,000 people).

Many of the acres considered park land or open space are either existing or proposed school sites or existing or planned public water supply reservoirs, the acreage around which is protected to ensure good water quality. It is essential in areas that must rely upon surface water as their main water supply that reservoir sites be planned in advance of their need and that they be well-protected after their creation. Fortunately, this need has created the opportunity to develop low-impact recreational facilities, such as boating areas, hiking trails, picnic areas, and bridal paths on the land surrounding the reservoirs. A similar benefit has been derived from school properties which, by their nature, include playing fields and other recreational areas. The county's citizens often are able to benefit from and use these sites as part of a joint use agreement with the Board of Education.

"The Baltimore Region Bicycle, Pedestrian and Greenway Transportation Plan" was prepared by the Baltimore Metropolitan Council in 2001. This plan outlines the vision, goals, and action plan strategies for bicycle and pedestrian improvements and programs in the Baltimore region. The Plan names two potential pedestrian improvement zones in Carroll County. These zones are in Westminster (Center Street, Downtown Westminster to Westminster Town Center) and Taneytown (Frederick Street). The implementation of this plan will result in a network of on-road and off-road routes that support bicycling and walking for transportation and recreation purposes.

There are larger facilities with multiple ballfields in the county, as well as numerous fields and tot lots in smaller parks around the county. These recreational facilities provide additional benefits as well. These include benefits to the community such as safe and convenient play areas for children, aesthetically pleasing green space that relieves the harshness of the built environment, and healthful means of exercise for all citizens. Recreational areas function as local landmarks, imparting a sense of community identity through design, location, and the creation of places where neighbors can gather. The natural environment also benefits from many park areas, which provide plants with habitat and animals with food and shelter when left in a fairly natural state. The advantages in terms of water quality in and around the reservoir areas have already been mentioned but cannot be understated.

The Challenge to Carroll County

Despite the fact that the County's land holdings currently exceed the acres considered by the State to be adequate for recreation, it should not be assumed currently available park land will be adequate for the future. The need for recreational facilities and open space cannot be estimated simply on an acre-per-person basis. Rather, it must be addressed through a comprehensive and frequent review of the county's demographics and the types of facilities that these statistics and the local recreation councils indicate as needed. For example, it will not help to have over 500 miles of hiking trails if there are not enough baseball fields to serve the current and projected members of the Little League teams. Each community may have its own individual and specific needs that are not addressed through the mere provision of a certain number of acres.

In the future, as the face of the county changes, so will its needs for recreation areas and open space. The County should plan for and provide its citizens with a network of parks, recreation areas, and open space that serve the needs of the entire population to the greatest extent possible. This will require improvements and additions to the existing network. With the *2005 Land Preservation, Parks & Recreation Plan*, the County was certified under Natural Resources Article 85-905c(i)(ii) as qualifying to use more than 50 percent of its Program Open Space (POS) allocation for development projects. The County qualified because it exceeded the minimum acquisition goal for recreation land of 30 acres per 1,000 people.

The majority of funding for parks and recreation facilities comes from POS and impact fees. Given the many services for which residents would like to see a level of service increase, parks often suffer when competing against schools, police, and other similar services for limited funds.

The Choice: Policies & Recommendations

The current State goal for recreation land is to maintain a minimum of 30 acres per 1,000 residents. By supporting the State goal, the County will retain its eligibility for POS funds. As of 2009, the County had approximately 67 acres of parkland per 1,000 people. However, calculations used to meet State goals for recreation only account for one third of land classified as natural resource land (such as reservoir buffer lands). This means that under State guidelines, Carroll County has 47.32 acres per 1,000 people. Since the County currently exceeds the 30-acre State goal, there is room for flexibility to examine specific recreational needs not being met. The minimum acreage is not set higher to help prevent recreational facilities from competing with such higher priority facilities as schools and roads for improvements funding. Recreational opportunities are, however, recognized for their significant contribution to the quality of life in Carroll County.

Access to the recreational opportunities available to Carroll County citizens is mostly achieved via the automobile. One alternative to making recreation consumers drive to their destinations is the provision of a countywide trail system which would interconnect the recreational facilities present in the county, while also connecting towns, neighborhoods, shopping areas, and schools. This goal is included partially because the majority of the funding would likely not come from the General Fund. However, a reasonable and realistic milestone for yearly construction was chosen.

Policies

- The majority of additional park facilities will be funded through impact fees, POS funds, and other non-General Fund sources.
- The Planning Commission shall consider the location and development of recreational facilities and parks to be an integral part of community comprehensive plan updates.

Recommendations

- A. Locate designated open space contiguous to existing or proposed open space on adjoining development in order to establish scenic greenways, whenever possible.
- B. Ensure recreation development in reservoir watershed areas does not create conflicts with water quality protection.
- C. Encourage the creation of local land trusts for the purpose of accepting non-agricultural easements for recreation and open space and acquiring land for open space.
- D. Evaluate the existing impact fee structure for parks to see if the fee is adequate to cover the cost of park facility needs attributable to new development.
- E. As the Union Mills and Gillis Falls areas develop for recreational uses, maintain certain areas specifically for low-impact recreation to ensure that this type of recreation remains available, to reduce the cost of park development, and to help preserve some of the county's natural and wooded areas.
- F. Designate public and private recreation areas countywide that meet the projected needs of the local and county populations.
- G. Seek non-county (state/federal) funds for construction of greenway corridor trails.

- H. Explore the use of Program Open Space (POS) or other funds for fee simple or easement purchases of segments of identified greenway corridors.
- I. Give first priority to connection of parks and school facilities with greenway corridors to improve access and to enhance their use as alternative transportation facilities.

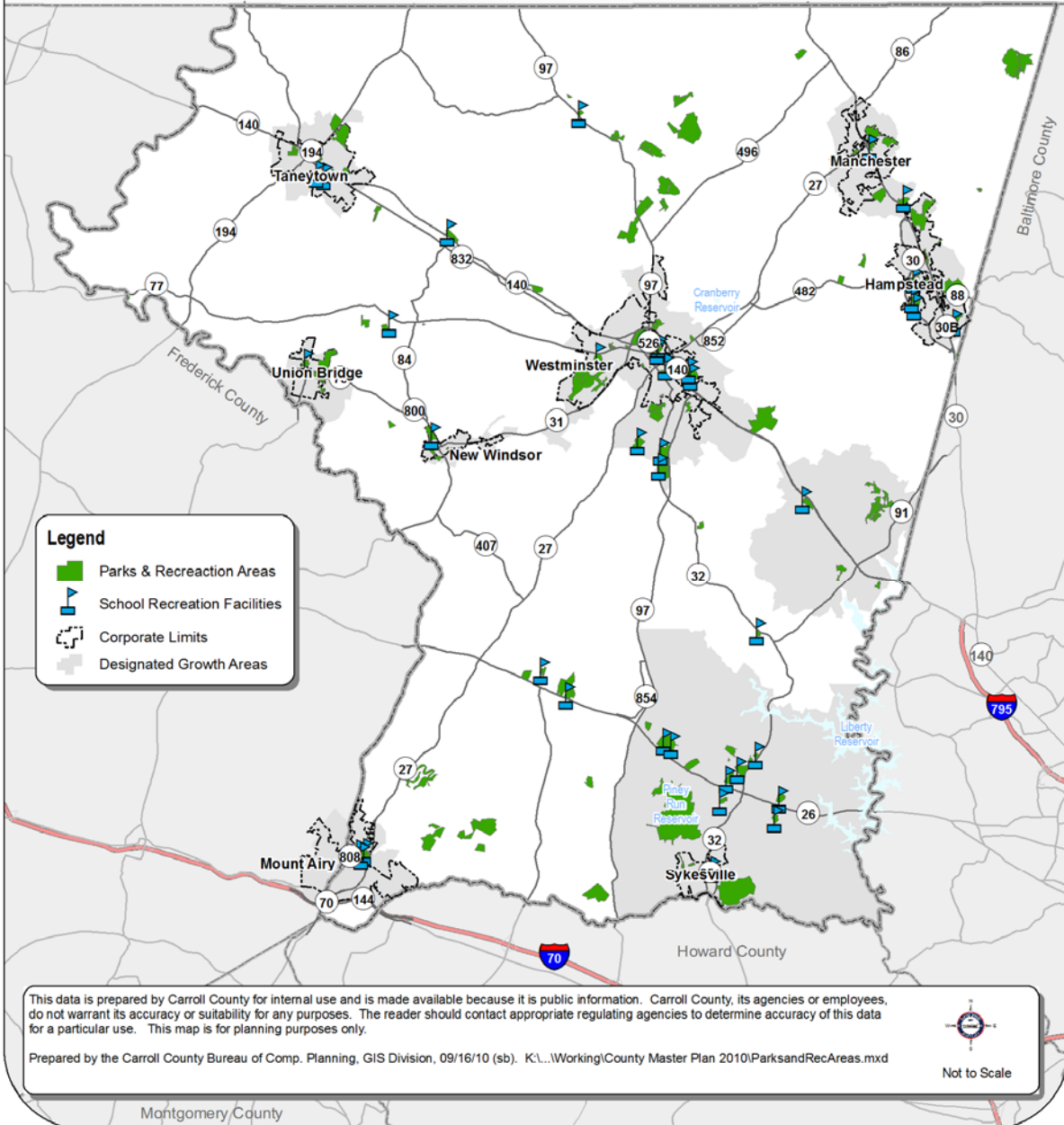
Fiscal Impact to the County

The impact fee collected for Parks (\$533 per single-family house in 2009) and POS funds (\$2,593,974 for 2008 and \$166,431 in 2009) accruing to the County from the State transfer tax should help to fund a portion of the future park needs in the county. The County currently has sufficient acreage to meet the 30 acres per thousand population until the year 2030, but as the recommendations recognize, additional park development will be needed to ensure facilities are available in the growth areas.

As is the case with other recreation facilities, the trail system would be funded primarily by POS and impact fees. Additionally, because the trail system also benefits the overall transportation system, an innovative use of the Maryland Department of Transportation funding programs can be explored.

Existing Parks & Recreation Areas

Carroll County Master Plan



Note: This map can also be viewed at:

<http://ccgovernment.carr.org/ccg/compplan/masterplan2010/default.asp>

Chapter 17: Priority Preservation Area

The Agricultural Stewardship Act of 2006 (HB 2), passed by the Maryland General Assembly, requires certified counties to establish Priority Preservation Areas (PPAs) in their comprehensive plans and manage them according to certain criteria. There are two sets of requirements, relating to conditions in the PPA itself and the county comprehensive plan, respectively.

More specifically, along with modifying the existing agricultural land preservation certification program to include PPAs, the legislation also established: an internship program; a task force to study the tax structure related to farmers; and, additional funding for several existing programs like the Maryland Agricultural and Resource Based Industry Development Corporation, Soil Conservation Districts, and the Maryland Agricultural Water Quality Cost Share Program.

Beginning in FY 2009, certified counties were required to include a PPA Element in their comprehensive plans in order to maintain certification. The legislation required the PPA Element to be adopted by July 1, 2008.

The Priority Preservation Areas Element identifies areas of agricultural and forestry resource land that would support agricultural production and timber harvesting for the present and future. An estimated 92,909 acres of land are delineated within the Agricultural Land Priority Preservation Area. Within this defined area, the County's goal is to permanently preserve 64,589 acres of undeveloped land for agricultural production.

Goal

Preserve 80 percent of undeveloped land in the Priority Preservation Area.

Agricultural Land & Forestry Definitions

■ Agricultural Land

"Agricultural land" means land used for all methods of production and management of livestock, crops, trees and other vegetation, as well as aquaculture. This includes the related activities of tillage, fertilization, pest control, and harvesting as well as the feeding, housing, training, and maintaining of animals such as cows, sheep, goats, hogs, horses, and poultry. (Source - <http://www.dnr.state.md.us/met/model.html>) For mapping purposes, agricultural land is based on property data provided by the Maryland Department of

Assessments and Taxation. Specifically, property that is designated in the state database as agricultural in use is recognized as agricultural land.

■ Forestry

“Forestry” is the management of forested land, together with associated waters and wetland, primarily for harvesting timber but also for conservation and recreation purposes. Modern forestry generally concerns itself with: assisting forests to provide timber as raw material for wood products, wildlife habitat, natural water quality regulation, recreation, landscape and community protection, employment, aesthetically appealing landscapes, and for atmospheric sequestration of carbon dioxide. The science of forestry is built around the principle of multiple-use land management, though the harvesting and replanting of timber are the primary activities. The main objective is to maintain a continuous supply of timber through carefully planned harvest and replacement. The forest manager is also responsible for the application of other land controls, including the protection of wildlife and the implementation of programs to protect the forest from weeds, insects, fungal diseases, erosion, and fire. (Source: <http://www.answers.com/topic/forestry>)

Agricultural Land & Forestry Descriptions

■ Agricultural Land

Carroll County has been actively working to preserve agricultural land since the Maryland State Agricultural Land Preservation Program was developed in 1979. Since that time, other programs have become available and are also being utilized. As of July 2009, 54,858 acres of farmland throughout the county were permanently preserved through the Maryland Agricultural Land Preservation Foundation (MALPF), the Rural Legacy Program, Maryland Environmental Trust (MET), the Carroll County Land Trust (CCLT), and the County’s own Agricultural Land Preservation Program. The majority of easements are located in the northern half of the county, more specifically in the northwestern sector.

Since 1998, Carroll County has had a goal of preserving 100,000 acres of farmland. This number represents nearly 70 percent of the total land in the county that is currently used for agriculture. This goal is targeted specifically at maintaining the long-term viability of farming in the county, including the businesses that support that sector of the economy.

■ Forestry

The County issues roughly 30 to 40 permits per year for private timber harvest. The total amount of forest acreage affected by timber harvesting varies from year to year. These areas are generally not clear cut. Instead, selective harvest and maintenance cutting are the common methods, helping promote the overall health of these woodlands. If the root systems remain after cutting, the potential also exists for the cut trees to re-sprout or regenerate.

On County-owned land, timber is occasionally harvested. The last harvest on County-owned property was at the Carroll County Airport, which was less than 15 acres. Prior to that, the previous timber sale occurred around 2000. Red, black, white, and chestnut oaks, combined with tulip poplar, accounts for over 80 percent of the types of species that are generally harvested. Hickory, maple, and cherry are generally minimal components of harvests, both in number and volume. Almost all County owned timber harvests in the past have been for silvicultural reasons, mainly woodland health and species regeneration. Those few that have not been were done for clearing purposes to address County projects similar to the airport or for the construction of improvement projects. Those harvests were done to salvage the merchantable timber and firewood from the woodland rather than turn the wood into waste.

There are approximately 864 acres, located in the north-central area (Union Mills) and surrounding the Piney Run Reservoir, in the Tree Farm Program. The program is run by the American Forest Foundation, an organization sponsored by both grants from the Federal Government and through private donation. The program was established in 1946 to encourage landowners to grow and manage woodlands for timber harvest, watershed protection, soil erosion, aesthetics, and wildlife protection.

As an industry, wood manufacturing accounted for 512 jobs countywide and generated an average wage of \$20,198 per year, according to the U.S. Census Bureau's 2007 Economic Census. As of June 2009, the Maryland Department of Natural Resources Forest Service reported roughly 24 licensed forest products operations with a Carroll County address. They included 3 sawmills, 9 loggers, 1 whole wood chipper, 2 pulpwood, and 9 firewood producers. A total of two licensed professional foresters had a Carroll County address. (Source: Maryland DNR Forest Service, June 2009, *Consulting and Industrial Foresters*)

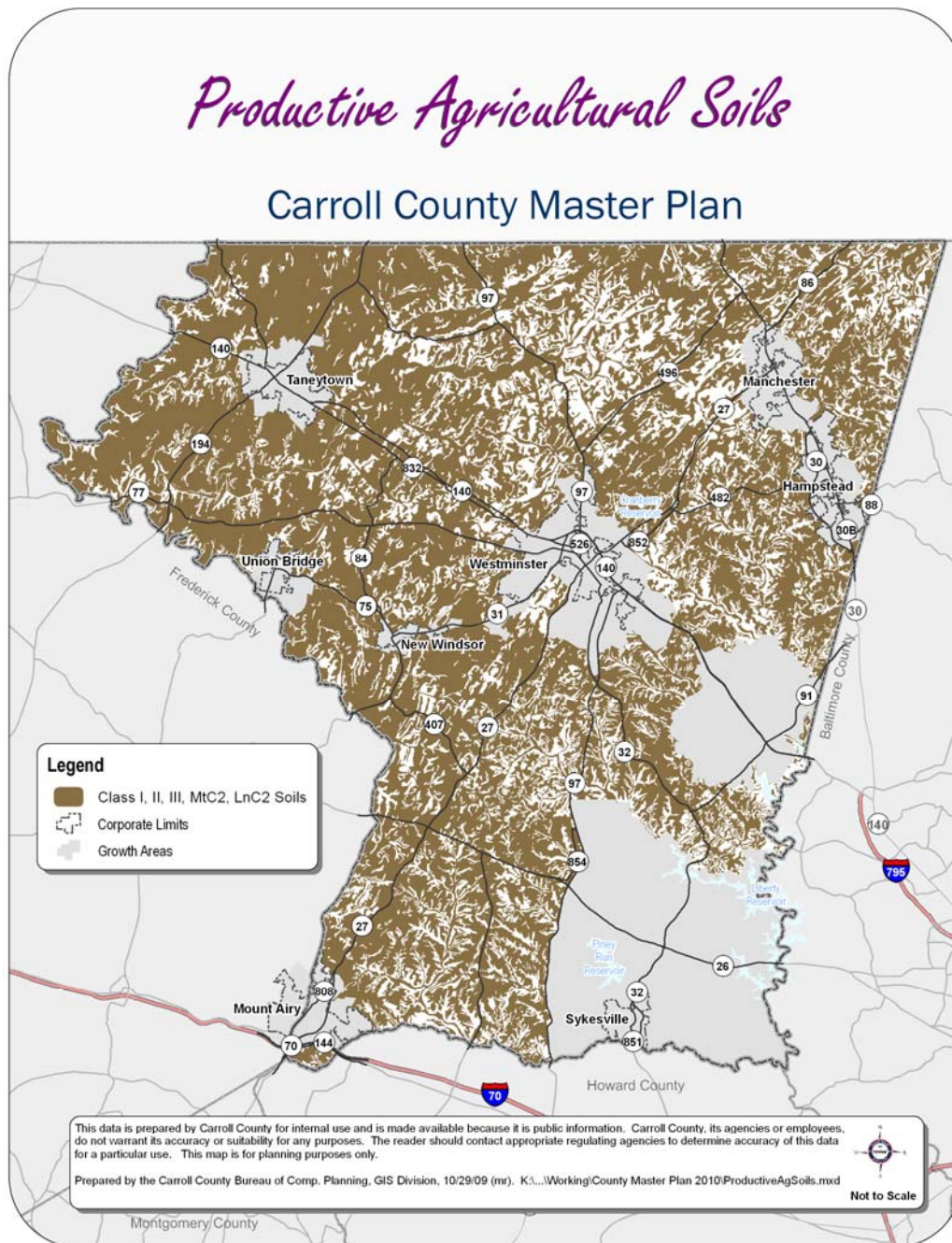
■ Soils

There are five major factors in the formation of soil – climate, living organisms, parent materials, relief (or slope), and time. Climate, whether cold, hot, dry or humid, influences the breakdown of minerals. Living organisms, both plant and animal, affect soils by what they either take from it or deposit in it. Parent materials are defined primarily by the weathering or rock formations and the movement of silt via gravity, wind, or waterway. Relief affects what remains on a particular soil based on runoff. Time demonstrates when these materials were laid down and how they have aged.

Soils are classified so that their more common characteristics can be readily identified. The current system has six basic soil categories; order, suborder, great group, subgroup, family, and series. Twenty-six different series of soils are identified in the *1969 Carroll County Soil Survey*. The USDA is currently updating the soil survey and anticipates completing this effort in 2010.

Class I, II, and III series soils are considered to be productive agricultural soils in Carroll County. These soils can be found in the following formations: Abbottstown, Bermudian,

Birdsboro, Bowmansville, Bucks, Cardiff, Chester, Codorus, Comus, Conestoga, Delanco, Elioak, Elsinboro, Glenelg, Glenville, Hagerstown, Hatboro, Lewisberry, Linside, Linganore, Manor, Melvin, Mount Airy, Penn, Raritan, Rowland, Steinsburg, and Urbana (UrA). Not every soil contained in the series listed above qualifies as a Class I, II, or III soil, but sixty-six different soils fall within this range. Only two Class IV soils, Mount Airy (MtC2) and Linganore (LnC2), are considered to be productive soils for agriculture.



Note: This map can also be viewed at:

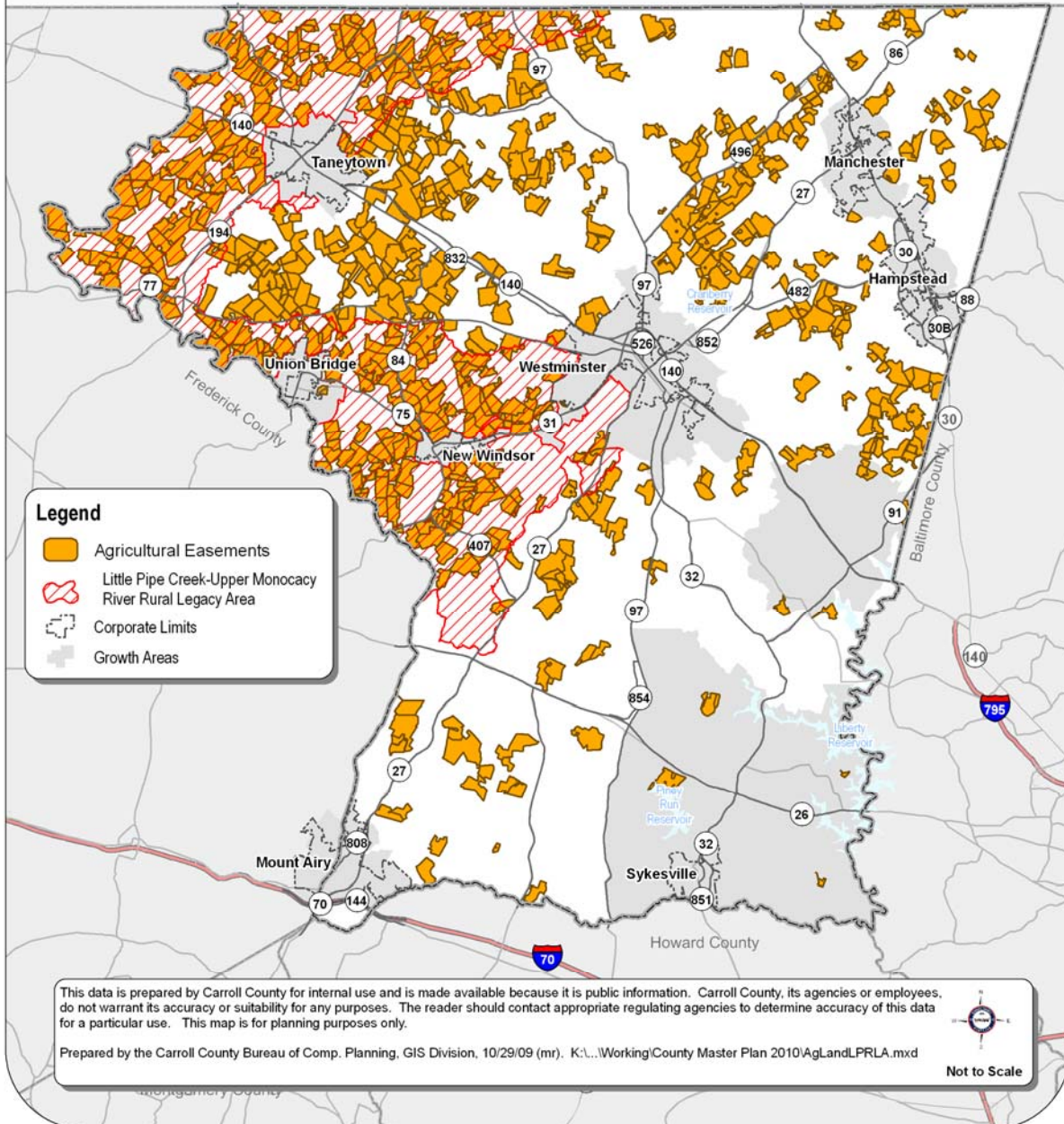
<http://ccgovernment.carr.org/ccg/compplan/masterplan2010/default.asp>

Note: This map can also be viewed at:

<http://ccgovernment.carr.org/ccg/compplan/masterplan2010/default.asp>

Agricultural Easements and Little Pipe Creek-Upper Monocacy River Rural Legacy Area

Carroll County Master Plan



Note: This map can also be viewed at:

<http://ccgovernment.carr.org/ccg/compplan/masterplan2010/default.asp>

Preservation Program Evaluation

For the most recent program evaluation, please reference the “State of Maryland Program Certification Annual Report, Fiscal Years 2007 and 2008, Agricultural Land Preservation Program, Carroll County, Maryland,” and/or the most recent biennial recertification report.

Creation of Agricultural Land Priority Preservation Area

The Agricultural Land Priority Preservation Area (PPA) focuses on agricultural land and the preservation of agriculture in the county. Forestry represents a very small enterprise in the county and is considered insufficient in the county to warrant specific and separate identification and preservation. Forest land is included within the Agricultural Land PPA, and while it may not contribute directly to agricultural production, it does serve to enhance a rural environment that is necessary to support the target of agricultural production necessary for sustainability.

Process to Determine Agricultural Land PPA Boundary

The Agricultural Land PPA contains an estimated 92,909 acres of land. This area was determined using the following steps:

- Step 1: Begin with the area of the county that is located outside the municipalities; designated Growth Areas for Taneytown, Westminster, New Windsor, Union Bridge, and Mount Airy; and the Priority Funding Areas designated as Rural Villages.
- Step 2: Within this initial area of the county, identify and map the following data:
 - All properties having a property assessment designation of agricultural use, as shown on the Agricultural Lands map.
 - All agricultural permanent easements, identified on the Agricultural Easements and Little Pipe Creek Rural Legacy Area map.
 - All productive agricultural soils (Class I, II, III, IV, MtC2, and LnC2). The Productive Agricultural Soils map displays their locations.
 - The Little Pipe Creek Rural Legacy Area, which has been targeted through the Rural Legacy Program for enhanced agricultural, forestry, natural resource, and environmental protection. This area is depicted on the Agricultural Easements and Little Pipe Creek Rural Legacy Area map.
- Step 3: Overlay the mapped information delineated by the above maps, and define a PPA boundary based on the area containing the highest concentration of these mapped characteristics. The Agricultural Land PPA Boundary Map indicates the area to be designated as the Agricultural Land PPA.

Preservation Goal

The sidebar below indicates undeveloped acreage by current zoning within the PPA. Undeveloped land, for purposes of this plan element, is defined as the combination of unimproved properties and improved properties comprised of 10 acres or more. Conversely, developed land is defined as the sum of improved properties containing less than 10 acres of land.

Properties deemed developed comprise an estimated 9,477 acres. Approximately 80,736 acres (86.7% of the total PPA) are considered undeveloped. The developed land (9,477) and undeveloped land (80,736) acreages combine to 90,213 acres, which is 2,696 acres shy of the total PPA acreage of 92,909. This discrepancy is predominantly due to the exclusion of public roadways from acreage calculations based on property data.

The majority of the Agricultural Land PPA (86,511 acres, of which 76,609 are undeveloped) is currently zoned Agricultural. Under current zoning regulations, residential development is restricted within this zoning district. The zoning code requires a density standard of one residential subdivision lot per twenty acres of land. This requirement is a regulatory barrier to the extensive loss of agriculturally productive land to residential development, the most prevalent type of development in the county. This deterrent to depletion of the agricultural land base gives the county a better opportunity to acquire easements before the land is pre-empted by development.

The creation of this PPA will help the County focus limited funds to achieve agricultural preservation. The County has had a longstanding goal of preserving 100,000 acres of agricultural land in order to maintain agriculture as a sustainable industry in the county. This goal applies to the entire county, not just the Agricultural Land PPA. To support attaining this overall goal, the remaining

undeveloped land within the defined PPA is targeted for preservation. The estimated acreage of the targeted land for preservation in the Agricultural Land PPA (64,589 acres) contributes to this 100,000-acre goal. In other words, of the 80,736 acres of undeveloped land within the PPA, 80 percent equates to 64,589 acres. Of this acreage, 37,986 acres are already under permanent easement, and 4,583 acres are designated “Remaining Portions” and are protected from further *residential* development, for a total of 42,569 acres. To meet the PPA preservation goal, it is the County’s objective to preserve the remaining 22,020 acres in the PPA for agricultural use and forestry through purchase of easements and zoning restrictions.

Agricultural Land PPA Preservation Goal

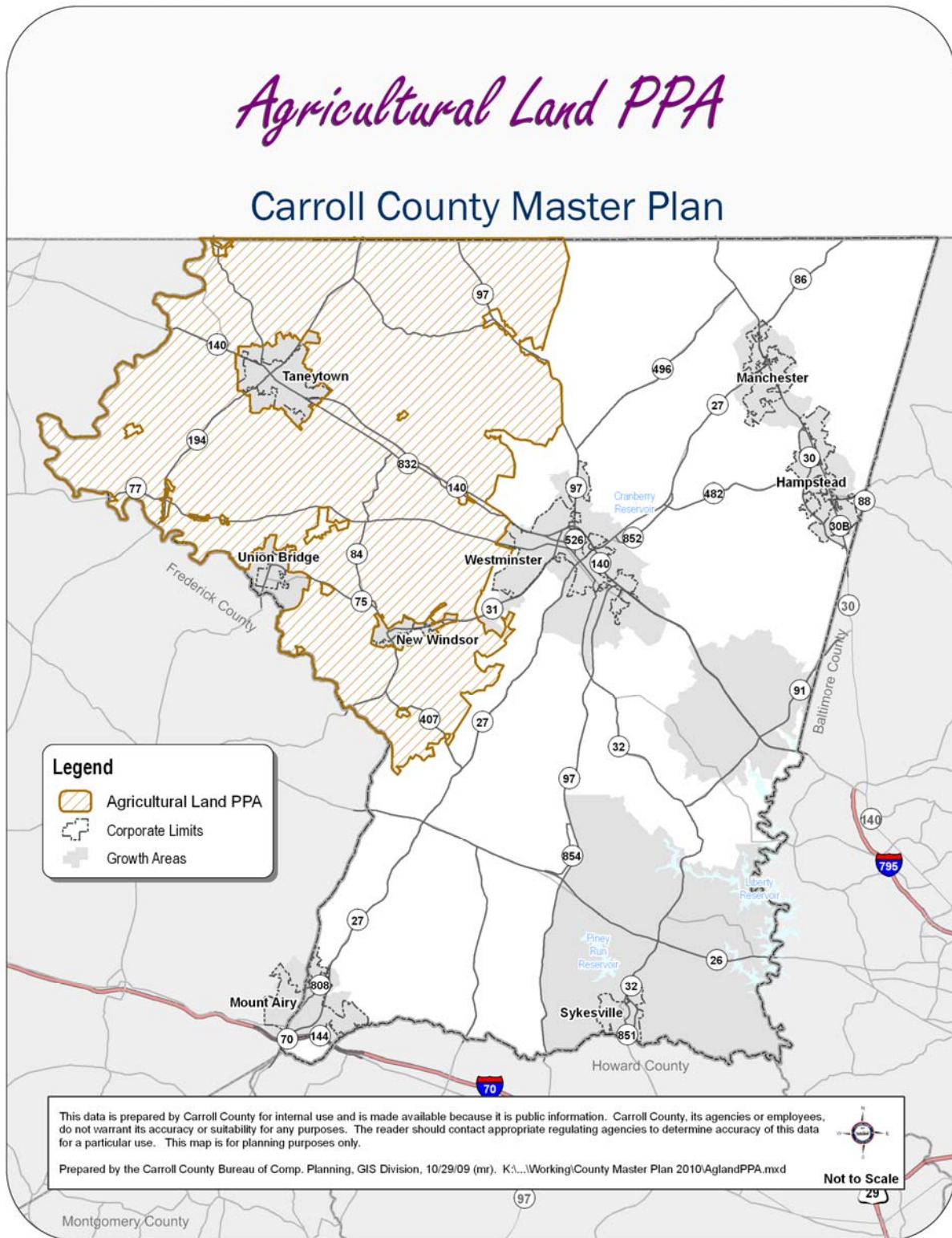
Total Undeveloped Acreage in PPA = 80,736 AC
80% of Undeveloped Acreage = 64,589 AC

Preservation Goal of... 64,589 AC

Acres already preserved = 42,569 AC

Remaining acres to preserve = 22,020 AC

Acreage located outside the Agricultural Land PPA is permanently preserved through agricultural land preservation easements. Additional acreage outside this PPA will need to be permanently preserved to reach the 100,000-acre preservation goal.



Note: This map can also be viewed at:

<http://ccgovernment.carr.org/ccg/compplan/masterplan2010/default.asp>

The Choice: Policies & Recommendations

Recommendations

- A. Consider strategies to reduce rural residential densities, thereby decreasing future impervious cover, road impacts, water quality impacts, and demand for new, or improved existing facilities.
- B. Incorporate strategies identified through the Builders for the Bay process into the appropriate Code chapters, practices, and manuals.
- C. Revise Chapter 103, Development and Subdivision of Land, to offer a preservation incentive lot in exchange for the placement of a permanent preservation easement on eligible remaining portions.

Chapter 18: Rural Villages

The “Smart Growth” Areas Act of 1997, Chapter 759 of the Laws of Maryland of 1997, requires the State to target funding for “growth-related projects to Priority Funding Areas (PFAs) beginning October 1, 1998. Growth-related projects are defined in the legislation and include most State programs which encourage or support growth and development such as highways, sewer and water construction, economic development assistance, and State leases and construction of new office facilities.

“...The Act gives local governments flexibility to identify and determine the boundaries of the communities, rural villages, and other public investment centers that will constitute Priority Funding Areas...” (*Smart Growth: Designating Priority Funding Areas,* *Managing Maryland’s Growth: Models and Guidelines, Maryland Office of Planning, pg. 1, November 1, 1997*)

The Smart Growth Areas Act allows counties to certify rural villages as Priority Funding Areas if they are designated in the Comprehensive Plan by July 1, 1998.

The Act defines a rural village as an “...unincorporated area that is primarily residential, including an area with historic qualities, that is located in an otherwise rural or agricultural area and for which new growth, if any, would derive primarily from in-fill development or limited peripheral expansion.” Each county has an opportunity to certify rural villages as PFAs without having to meet the density and infrastructure requirements that the law required of other county-certified PFAs. (*Smart Growth: Designating Priority Funding Areas,* *Managing Maryland’s Growth: Models and Guidelines, Maryland Office of Planning, pg. 19, November 1, 1997*)

The Board of Carroll County Commissioners originally adopted the boundaries of the Rural Village Priority Funding Areas (PFA) on June 2, 1998. These boundaries are generally indicated on this plan’s land use designation map. For more detailed descriptions and boundary maps, refer to the report “Rural Villages: Boundaries & Villages Designated as Priority Funding Areas.”

The following communities were certified as **Rural Villages** designated as PFAs.

Alesia	Middleburg
Bark Hill	Millers
Bruceville	Patapsco
Detour	Pleasant Valley
Feesersburg	Shiple
Frizzellburg	Silver Run
Gamber	Smallwood
Harney	Snydersburg
Keymar	Starners Dam
Keysville	Taylorville
Lineboro	Tyrone
Linwood	Union Mills
Louisville	Uniontown
Maple Grove	Warfieldsburg
Marston	Watersville
Mayberry	Winfield
McKinstry’s Mill	Woodbine
Melrose	

Chapter 19: Transportation

Goal

Provide a safe and functional transportation system which implements the land use plan and promotes access and mobility for people and goods through a variety of transportation modes.

The Significance to Carroll County

The transportation network in and around Carroll County provides access for people and products to small local markets as well as large metropolitan areas. The Carroll transportation system contains roadways, railways, and airways. This system enables citizens to work at the nearby employment centers of Baltimore and Washington while still residing in an area seen as offering a high quality of life. The increasing pressures being brought to bear on Carroll's transportation network by the commuting public indicate, however, that the transportation system needs attention.

Although railroads have played a large part in the development of Carroll County's small towns, the automobile has had and will continue to have a major impact on the county transportation system. In recognition of the influence of the automobile, Carroll County developed and adopted its first major street plan in 1962 – two years prior to the first countywide master plan. The Major Street Plan envisioned an interconnected network of state and local roadways that would provide access and mobility for residents throughout Carroll County and its eight municipalities.

The implementation of the Major Street Plan has been ongoing since it was first adopted in 1962. Considerable sections of the local roadway network have been constructed as part of residential, commercial, and industrial development projects. The difficult roadway connections, however, those having high construction costs or posing significant environmental challenges, have been problematic in their implementation. Therefore, the County policy, which placed the lion's share of the burden for road construction on the development community, has resulted in an interrupted and incomplete road system.

Problems have also been encountered in efforts to implement the State roads portion of the Major Street Plan. Traditionally, it has been County policy to depend completely on the Maryland Department of Transportation (MDOT) for their timely construction of the County's proposed bypasses and other State road improvements. Expansions of State roadway facilities, which are, in many cases, Main Streets in local municipalities, have not been forthcoming. Carroll County and its municipal governments, expecting timely State investments in its roadway network, have allowed residential, commercial, and industrial

development to proceed. The lack of State road construction as envisioned on the Major Street Plan has created near-failing and failing conditions at multiple locations along several state roadway segments in Carroll County.

In addition to the roadway network, Carroll's transportation system also offers other functional and recreational opportunities. The public transportation component offers several park-and-ride lots, a countywide paratransit service, private taxis, and bus companies. The system also includes a network of public and private airports and airfields. A pedestrian facilities network of proposed interconnected trails will provide both recreation and alternative transportation uses. The "Existing Transportation Facilities" map identifies existing transportation facilities in Carroll County, including State highways, rail lines, airports, park-and-ride lots, and the fixed shuttle routes for the County's current transit service provider.

The Carroll County Regional Airport plays a key role in the economic development plan for the Air Business Center business park in Westminster. The availability and location of the airport services offers a great range of opportunities for businesses to transport goods as well as providing convenient access for business travel. The airport is an amenity for this business center that can help to make this area more attractive to prospective businesses who might locate here.

The Challenge to Carroll County

All indications from statewide and regional travel forecasts are that the suburb-to-suburb commute will be the fastest growing travel pattern in the future. Suburban Baltimore and Washington employment centers, such as White Marsh, Owings Mills, Columbia, and Gaithersburg, will continue to grow in their regional influence. Carroll's location relative to these destinations presents special challenges for the local transportation network and its ability to continue to absorb the projected increase in commuters. With the two-mile segment of I-70 in the Mount Airy area making up the entire countywide interstate highway inventory, the major challenge to Carroll County will be to promote safe access and mobility on the existing and proposed roadway network. Four of the County's principal roadways – MD 140, MD 26, MD 32, and MD 30 – are approaching maximum carrying capacity at certain locations, thereby necessitating the bypasses and road widenings identified in the Major Street Plan. DGAs with a proposed bypass on this Major Street Plan include Manchester and Taneytown. The Hampstead Bypass was completed and opened to traffic in August of 2009. In other areas, intersection and spot improvements may be indicated for safety and increased traffic capacity.

With a population of 174,650 (Dec. 2008), major commercial centers, parks, libraries, and a community college, Carroll County has achieved a major portion of the 1964 Master Plan. However, the Major Street Plan implementation has not kept pace with the needs of the population. These planned roadways would reduce reliance on the State highways which are already overcrowded with through-traffic. Federal and State funding for major highway realignments, as envisioned on the Major Street Plan, have been cut. Carroll County,

therefore, is forced to petition the State for funds, often unsuccessfully, as State roadway needs arise.

In most cases, the scenic, rural, and small-town heritage of our municipalities and communities can be maintained and enhanced by carefully considering landscaping, streetscapes, median treatments, signage, access points, and other factors along the respective historic Main Street areas. Westminster and Mount Airy, in particular, have had great success with enhancing historic Main Street, and this success can hopefully be carried over to other communities in Carroll County. The State Highway Administration completed a streetscape project in Manchester and anticipates completion in 2010 of a similar project in Taneytown.

According to the American Community Survey (U.S. Census Bureau), in 2005 nearly 51.7 percent of the county's residents worked outside the county. The average commute time for all workers was 34.1 minutes. This situation is exacerbated by patterns of development in the county where residents of low-density, single-use developments are heavily dependent on the automobile not only for travel to work, but also for shopping, recreation, and other activities.

Carroll County's state roadways continue to show the effects of an increasing number of local citizens commuting elsewhere to work. The Average Daily Traffic (ADT) on MD 140 at the Baltimore-Carroll County line indicated the largest statewide increase in traffic volumes during the 10-year period between 1985 and 1995 (approximately 108 percent). In 1995, the 43,000 vehicles counted per day at the permanent count station on MD 140 east of the Liberty Reservoir Bridge was comparable to traffic volumes observed on I-70 near Frederick and Mount Airy (46,000 ADTs) and I-83 near Hunt Valley (46,000 ADTs).

The Choice: Policies & Recommendations

Policies

- Needed improvements will be a funding priority in the Carroll County CIP, especially for critical roadway segments and intersections.
- New subdivisions will be designed to minimize cul-de-sacs and use-in-common driveways while encouraging an interconnected road pattern.

Recommendations

- A. Calculate the accident rate based on the most recent available "Accident Detail Highway Location Listing," published by Maryland State Highway Administration, and review the high-accident intersections or roads to identify possible improvements needed.
- B. Implement traffic calming measures prior to construction where there is significant potential to slow traffic and improve safety in areas with nearby residences. On major roads, more appropriate solutions such as roundabouts, landscaping, pavement design, and geometric design may be considered.
- C. Develop and adopt a Bicycle and Pedestrian Facilities Master Plan(s) that identify(ies) bicycle and pedestrian facilities and amenities to allow and encourage residents to bike

or walk to their destinations and to serve as a guide for Community Investment Plan (CIP) and new development projects, to reduce traffic congestion, to provide transportation alternatives, and to provide recreational and health benefits.

- D. Investigate a greater role and responsibility for construction of State arterial and collector roads with the CIP funding in partnership with the State.
- E. Investigate a transportation improvement fund to permit needed transportation improvements on a more timely basis. This fund could be from an excise tax on new construction with proper State implementation legislation or an impact fee for roads.
- F. Maintain and/or improve with corridor preservation and other measures the level of service along State arterial roads.
- G. Revise the Zoning Ordinance, Subdivision Regulations, and the standards for highway and street design and construction to implement access control policies, particularly on arterials and collector roads, and a connecting system of internal and external streets, providing for shorter and fewer vehicle trips and better traffic circulation.
- H. Emphasize the importance of the Carroll County Regional Airport when developing transportation system linkages in a countywide comprehensive transportation plan.
- I. Work with the County's delegation to the General Assembly to seek funding for State highway projects and prioritize them with the State Highway Administration.
- J. Revise road standards to allow roads to be more pedestrian friendly. Program sidewalk improvements and connections into the CIP as an annually funded program for sidewalk connections and maintenance, particularly where it will improve safe access to schools. Utilize SHA funding available for this effort.
- K. Support land use recommendations for employment campus and telecommuting centers to reduce the length and number of household trips related to work.
- L. Revise Chapter 103 to promote the creation of neo-traditional communities and mixed-use communities, which typically incorporate non-motorized transportation facilities and the clustering of uses, thereby reducing Average Daily Traffic (ADT) volumes.
- M. Increase park-and-ride lots where needed and appropriate in the county.
- N. Encourage the use of alternative transportation, such as bicycles, transit, and carpools, to improve air quality by reducing the number of vehicles on the road during the week.
- O. Encourage community centers in major subdivisions so that community functions and meetings can be accessible by means other than automobiles.
- P. Increase employment opportunities to reduce commuting outside of the County.
- Q. Improve subdivision and road design to provide bicycle and pedestrian-friendly routes to shopping, schools, and recreation areas.
- R. Evaluate zoning and subdivision regulations to minimize cul-de-sacs, use-in-common drives, and panhandle lots in "R" Residential districts.
- S. Support community comprehensive plan update efforts to evaluate transportation needs at the more localized level.
- T. Prepare and adopt a more comprehensive countywide transportation master plan that considers evaluations of needs and potential projects to meet the community's transportation needs.
- U. Conduct a MD 75/MD 77 truck route study to determine viable options to safely and efficiently move heavy truck traffic in and around Union Bridge, Keymar, and Detour and identify functional improvements to the existing roadway network, for the purpose of system preservation.

Fiscal Impact to the County

The realization of the complete transportation network in Carroll County, including the successful implementation of the Major Street Plan, an interconnected countywide trail system, and new roadway improvement needs recently identified, would be very costly. The Major Street Plan includes a combination of State and County roads which exceeds \$931 million in total construction costs. A countywide trail system, consisting of over 200 miles of trails, could cost nearly \$52 million to implement (based on average cost of \$48 per linear foot supplied by the Carroll County Department of Parks and Recreation) if the County funded the complete proposed trail system. The cost to the residents of the county is expected to be much less because grants and developers of major projects construct much of the needed infrastructure.

Locally, the cost for construction of all County Planned Major Streets and Planned Neighborhood Connections would exceed \$182 million if it was completely County funded. This would equal an average cost of \$9.1 million per year over the planning period 2010 through 2030. The estimated cost for local road construction is based on an estimated \$11 per square foot of roadway, developed by the Department of Public Works, and a land acquisition estimate of \$133,000 per acre, developed by the Department of Planning, with an additional 10 percent contingency cost assumed. While the local road projects are located throughout Carroll County, the majority of local road construction is located within the Westminster and Freedom growth areas. In Freedom, in particular, it is important to note that the construction of several roadways involves the crossing of sensitive environmental areas. These projects will likely have higher costs due to permitting and construction requirements.

Regarding State road projects, Carroll County has traditionally relied solely on the State of Maryland to fund its State transportation improvements contained on the Major Street Plan. It is apparent that continuing to rely on the State for \$740 million in State transportation improvements is not realistic planning. In the future, the County will be expected to commit local matching funds toward engineering and construction in order for some of these State Highway projects to move forward.

The following tables list the Planned Roadway Projects for State Highway projects, local planned major streets, and neighborhood connections. Cost estimates by project are provided, along with the source or adopted plan in which the project appears or is adopted.

Planned Roadway Projects

Project	Estimated Cost*	Plan Source
State Highway Projects		
✓ MD 26 Improvements (MD 32 to MD 97)	\$59,000,000	Freedom
✓ MD 26 Corridor Improvements (MD 32 to Liberty Reservoir)	\$35,479,000	Freedom
✓ MD 27 Widening/Improvements	\$29,040,000	SHA (HNI)
✓ MD 30 Relocated (Hampstead Bypass)	Under Construction	Hampstead
✓ MD 30 Relocated (Manchester Bypass)	\$108,600,000	Manchester
✓ MD 32 Reconstruction (MD 26 to Macbeth Way)	\$3,988,000	Freedom
✓ MD 32 Multi-Lane Reconstruction (MD 26 to Howard Co. line)	\$48,000,000	Freedom
✓ MD 97N Widening/Improvements	\$82,390,000	Westminster
✓ MD 97S Widening/Improvements	\$82,720,000	Westminster
✓ MD 140 Relocated (Taneytown Bypass)	\$69,690,000	Taneytown
✓ MD 140 Improvements Project (Westminster area)	\$213,584,000	Westminster
✓ MD 140 Corridor Enhancements (Finksburg area)	\$80,410,000	Finksburg
Planned Major Streets (Local)		
Project	Estimated Cost*	Plan Source
✓ Bennett Cerf Drive Extended	\$16,298,333	Westminster
✓ Center Street Extended	\$1,399,333	Mount Airy
✓ Connector Road from Union Bridge Road to Main Street MD 75)**	\$4,896,667	Union Bridge
✓ George Street Extended	\$3,497,333	Union Bridge
✓ Georgetown Boulevard Extended	\$17,433,000	Freedom
✓ Johnsville Road Extended	\$7,694,333	Freedom
✓ Kate Wagner Road Extended (to MD 97)	\$466,667	Westminster
✓ Key Crossing Road	\$3,497,333	Taneytown
✓ Malcolm Drive Extended	\$11,192,667	Westminster
✓ Market Street Extended	\$1,818,333	Westminster
✓ Mount Pleasant Boulevard (formerly Ebert Road Extended)	\$4,896,667	Union Bridge
✓ Old Westminster Pike Extended (to Suffolk Road)	\$1,116,000	Finksburg
✓ Robert's Mill Road Extended	\$2,448,333	Taneytown
✓ Rockland Road Extended	\$2,448,333	Westminster
✓ Springdale Avenue Relocated	\$699,667	New Windsor
✓ Taneytown Bypass (Antrim Boulevard extended to MD 140)	\$25,014,333	Taneytown
✓ Worthington Boulevard	\$13,990,333	Taneytown

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Planned Neighborhood Connections (Local)

Project	Plan Source
✓ Aileron Court Extended	Westminster
✓ Allendale Lane Extended	Taneytown
✓ Amanda Lane Extended	Finksburg
✓ Arnold Road Realignment/Improvements	Westminster
✓ Arrington Road Realignment	Freedom
✓ Bandy Avenue to Mycroft Street Connection	Freedom
✓ Beck Drive Extended	Mount Airy
✓ Boxwood Drive Extended (MD 88 north to Upper Beckleysville Road)	Hampstead
✓ Boxwood Drive Extended (north to MD 88)	Hampstead
✓ Boxwood Drive Extended (Roberts Field to Trenton Mill Road)	Hampstead
✓ Century Drive Extended	Mount Airy
✓ Commercial Access Road	Taneytown
✓ Conan Doyle Way Extended	Freedom
✓ Connector Road between West Watersville Road & Century Drive	Mount Airy
✓ Crimson Avenue Extended	Taneytown
✓ Crossbow Road Extended	Mount Airy
✓ Crossbridge Drive Extended	Westminster
✓ Dede Road Extended	Finksburg
✓ Deer Park Road Realignment	Finksburg
✓ Dickenson Road Extended (various segments)	Freedom
✓ Diehl Road Relocated	Taneytown
✓ Feeser Road Relocated	Taneytown
✓ Hallie Avenue Extended (west of MD 30)	Manchester
✓ Hallie Avenue Extended (east of MD 30)	Manchester
✓ Industrial Park Internal Circulation Road	Finksburg
✓ Krider's Church Road Realignment	Westminster
✓ Lee Lane Extended	Freedom
✓ Leidy Road Extended	Westminster
✓ Lemmon Road Realignment	Westminster
✓ Locust Street Extended	Manchester
✓ Macbeth Way Extended	Freedom
✓ Mall Ring Road Ramp	Westminster
✓ Meadow Branch Road Realignment	Westminster
✓ Meadow Creek Drive Extended	Westminster
✓ Monroe Avenue Extended (Oklahoma Road to Bennett Road)	Freedom
✓ Niner Road Relocated	Finksburg
✓ Obrecht Road Extended	Freedom
✓ Pleasant Valley Road Realignment	Westminster

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✓ Prothero Road Extended	Freedom
✓ Ralph Street Extended	Westminster
✓ Ridenour Way Extended (various segments)	Freedom
✓ Ridge Road Relocated	Freedom
✓ Ridgeville Boulevard East Extended	Mount Airy
✓ Sells Mill Road Relocated	Taneytown
✓ Southwestern Avenue Extended (2 segments)	Manchester
✓ Starboard Drive Extended	Taneytown
✓ Strawberry Drive	Finksburg
✓ Stumptown Road Relocated	Taneytown
✓ Swiper Road Extended	Manchester
✓ Wyndtryst Drive Extended (2 segments)	Westminster

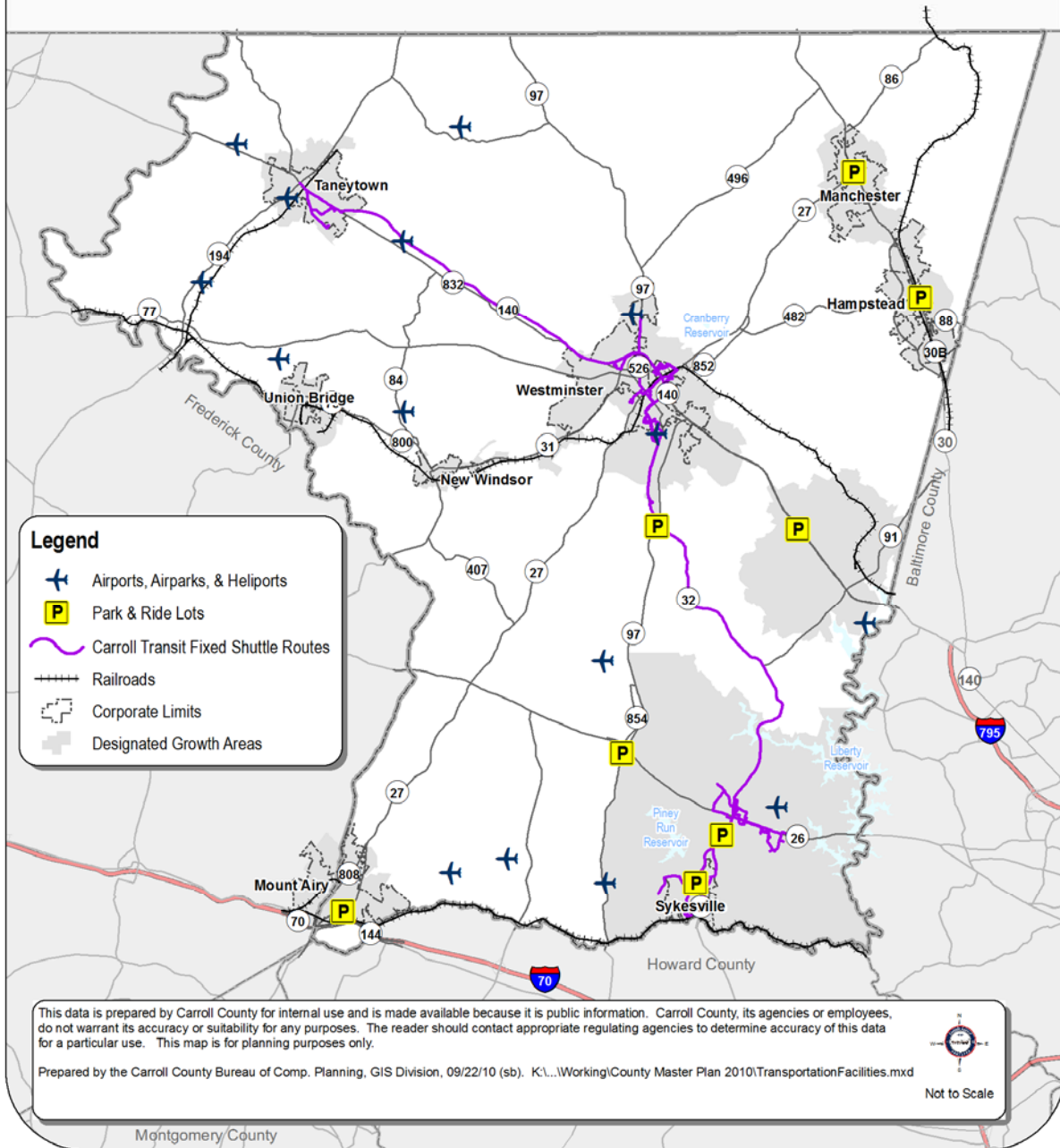
* Cost estimates were derived as follows:

1. State Highway Projects: data were provided by the Maryland State Highway Administration; projects that had cost estimates more than two years old were adjusted up by 10 percent; cost estimates include planning, engineering, right-of-way, and construction costs.
2. Planned Major Streets (Local): cost estimates were calculated using the following assumptions:
 - a. Engineering and construction costs were based on \$4,666,667 per mile for 2-lane roadways and \$8,571,429 per mile for 4-lane roadways
 - b. Right-of-Way costs were based on \$320,166 per acre
 - c. Right-of-Way width was assumed to be 60 feet, except for Georgetown Boulevard Extended (100 feet) and Taneytown Bypass as a local roadway (160 feet)
 - d. Cost estimates are the sum of engineering/construction costs and right-of-way costs
3. Planned Neighborhood Connections (Local): cost estimates were not calculated for these projects given that they will provide limited, if any, increase in transportation network capacity; most of these projects will occur at the time of development and will most likely be the responsibility of the developer

** This project incorporates a small segment of roadway referred to as "MD 77 Extended" in the Union Bridge Comprehensive Plan.

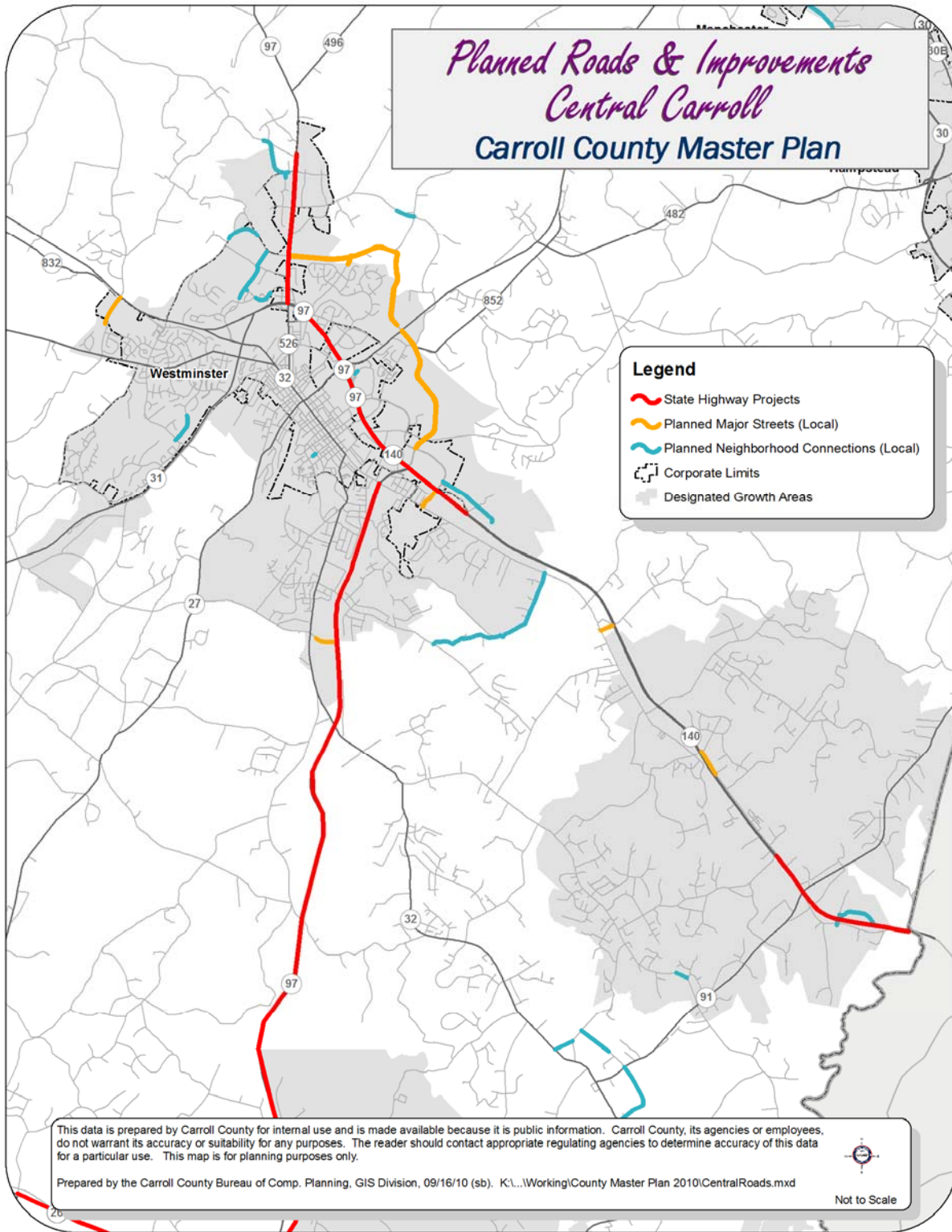
Existing Transportation Facilities

Carroll County Master Plan



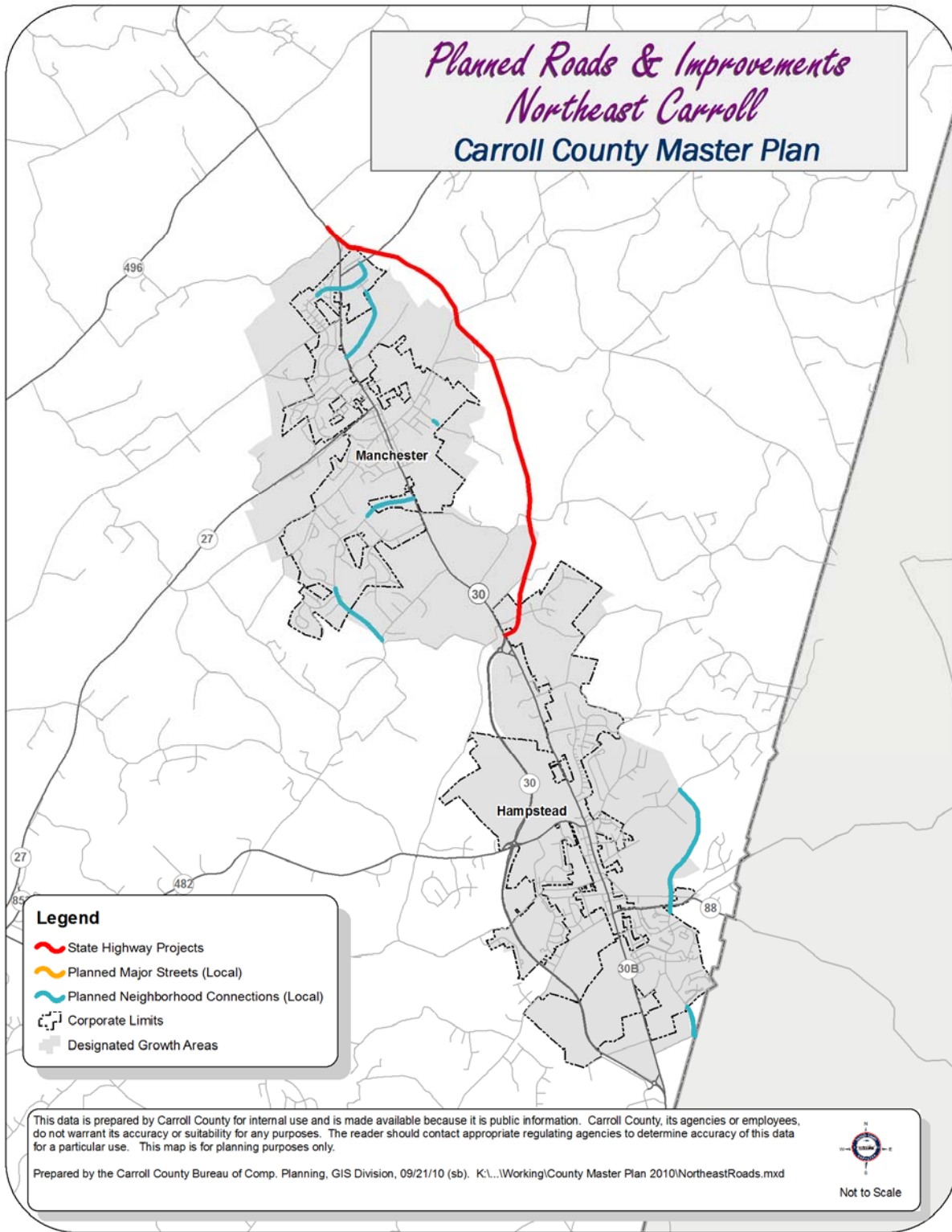
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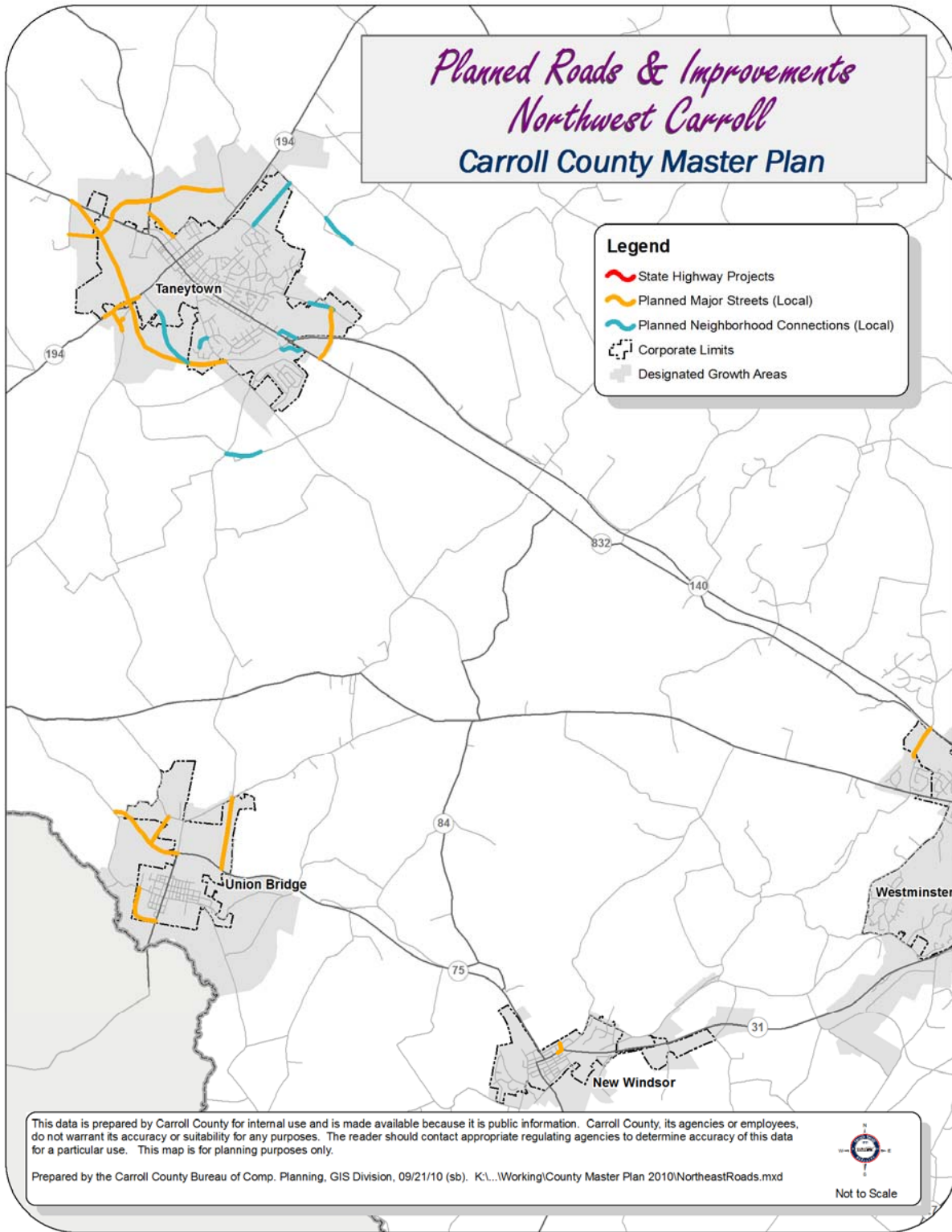
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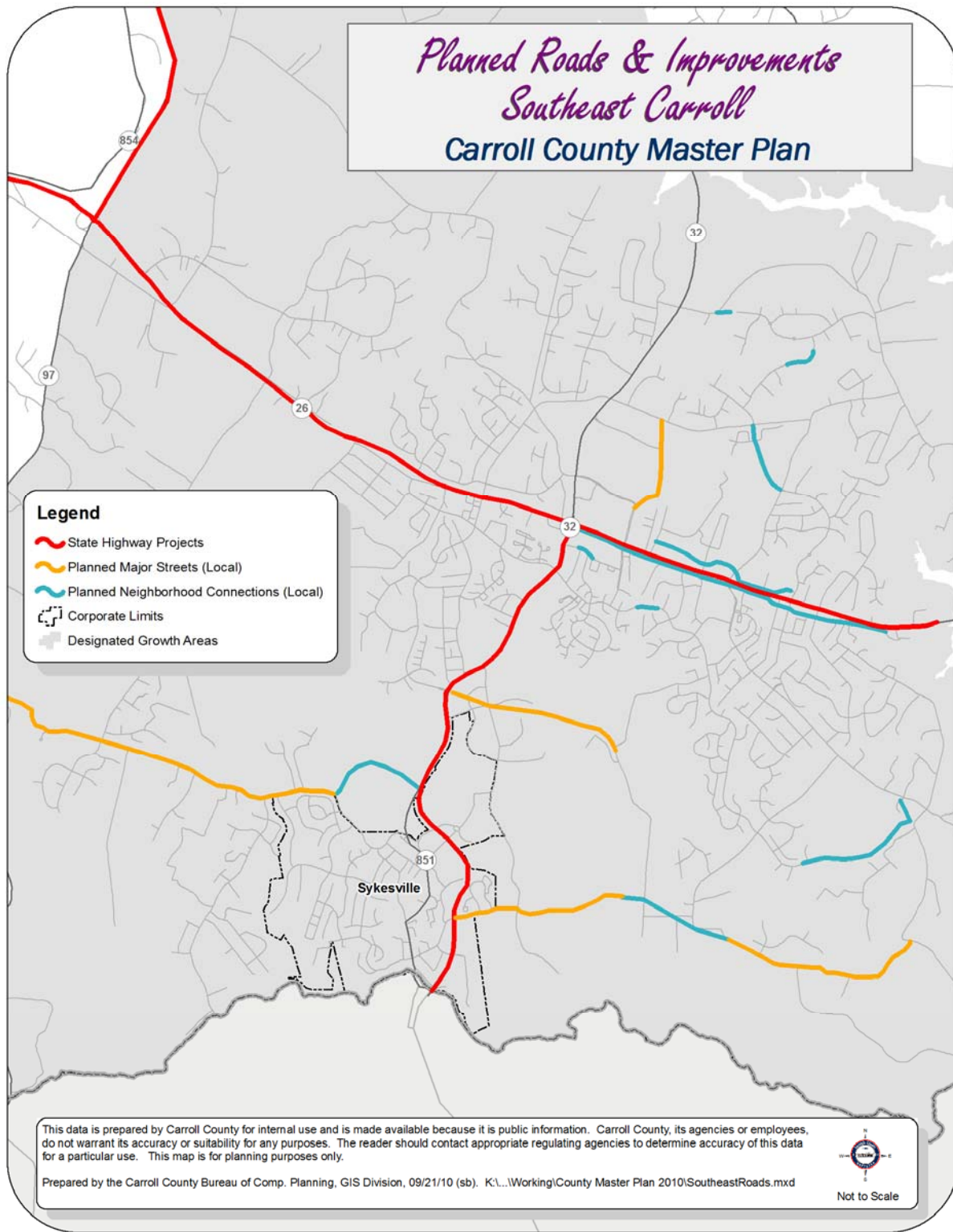
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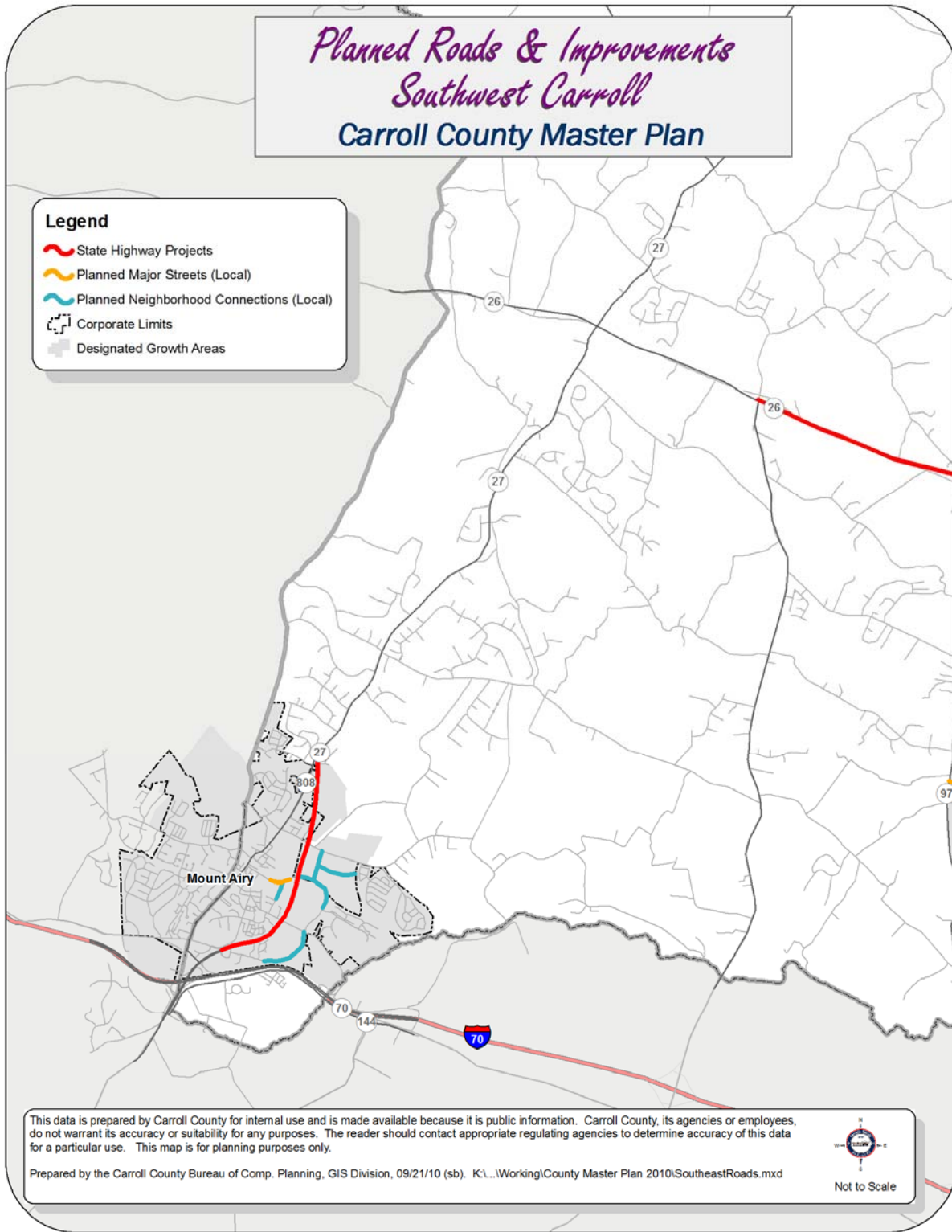
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Chapter 20: Water Resources

■ Legislative Requirement

Legislation (HB 1141) passed by the 2006 Maryland General Assembly resulted in several significant changes to land use regulations controlled by Article 66B of the Annotated Code of the State of Maryland. New watershed-based planning requirements are among the more significant changes. A Water Resources Element (WRE) must be developed and adopted by all local governments on or before October 1, 2009. The County and its eight municipalities were granted by MDP a six-month extension to April 1, 2010, to adopt the plan element.

This WRE must identify drinking water and other water resources needed for existing and future growth. It also must identify suitable receiving waters (where stormwater and treated wastewater can be discharged) and land areas for stormwater management and wastewater treatment. The WRE must address pollutant reductions, where needed, from both existing development and future growth. This legislation comes at a time when water quality and quantity planning is of utmost importance.

■ Process

Carroll County and its municipalities worked collaboratively to develop one unified WRE document that could be adopted by all of Carroll County's jurisdictions to satisfy the requirements of HB 1141. The forum for collaboration on this effort was the Water Resources Coordination Council (WRCC). The WRCC includes County staff, representatives of each Carroll County municipality, and the Carroll County Health Department. Meetings are advertised and open to the public.

Since this process involved substantial technical information, a WRE Guidance Team was formed to discuss issues as they arise. This team included representatives of County staff, each municipality, and the three relevant State agencies (MDE, MDP, and DNR). A WRE Work Group (consisting of the County and municipal representatives from the WRCC) met periodically to work through issues related to data collection and technical background assessments.

The WRE Work Group followed the Models and Guidelines (No. 26) developed jointly between MDE and MDP and additional guidance provided by the State agencies for the development of this plan element.

■ Technical Assessments

The Group collected data on the current capacity of each community water and wastewater system. This information helped identify additional capacity needs based on current (as of

Dec. 2007) and planned future demand/growth (based on adopted plans as of Dec. 2007 - no information was based on proposals). Where limitations identified cannot be overcome, reductions in future demand will need to be considered.

The County hired a consultant, Malcolm Pirnie, to provide technical assistance with several of the background assessments needed to form decisions and develop strategies to be included in a plan element. The consultant provided a number of assessments/evaluations.

- Reviewed the 1988 water study completed by R.E. Wright
- Completed a water balance assessment for each 8-digit watershed - water available for future consumption, from both groundwater and surface water sources
- Assessed overall limitations of wastewater
- Evaluated options/alternatives for individual community water and wastewater systems as well as countywide
- Identified strategies to address water and wastewater issues

The nonpoint source ("NPS" includes stormwater and septic) component of this plan was conducted by County staff. MDP and MDE provided a loading analysis model from which the results should be acceptable to the State. Recommended strategies need to address the NPS contribution to or impact on impaired waters (303d), Total Maximum Daily Loads (TMDLs), Tier II waters (high quality), and Tributary Strategies/Chesapeake Bay TMDL, among other things.

The County participated in the Center for Watershed Protection's Builders for the Bay Better Site Design Standards assessment and consensus document. This project provided the stormwater programmatic assessment required in the WRE guidance document. The consensus document primarily provides recommendations for addressing impervious surfaces and reducing runoff. Many of the recommendations have already been implemented. Others are incorporated into the WRE.

Upon completion of these assessments, County staff worked with the municipalities/WRCC members to draft the actual WRE plan document. The plan was approved by the Carroll County Planning Commission on March 29, 2010, and seven municipal planning commissions between February and April 2010 and was adopted by the Board of County Commissioners on April 1, 2010, and elected officials of seven municipalities between March and June 2010. One municipality received a six-month extension from MDP on the adoption deadline. This plan is incorporated to this document by reference.

Glossary

Accessory dwelling unit is an additional attached or detached dwelling unit on a lot with a principal dwelling unit.

Aesthetics relates to the pleasantness of the total environment and the perceptual aspects of the physical surroundings—their appearance to the eye and the comfort and enjoyment offered to the other senses.

Agricultural or Agricultural Purposes is the raising of farm products for use or sale, including livestock or poultry husbandry, and the growing of crops such as grain, vegetables, fruit, grass for pasture or sod, trees, shrubs, flowers, and similar products of the soil, and including stables for boarding and training horses.

Amend or Amendment means any repeal, modification, or addition to a regulation, any new regulation, any change in the number, shape, boundary or area of a zone or any repeal or abolition of any map, part thereof or addition thereto.

Board of Zoning Appeals (BZA) are residents of the County appointed by the County Commissioners to hear and decide appeals where it is alleged there is an error in any order, requirement, decision, or determination made by the Zoning Administrator in the administration and enforcement of the zoning ordinance. The BZA may also hear and decide requests for a conditional use to the zoning ordinance. The power to authorize variances from the zoning ordinance, upon appeal, in specific cases is also given to the Board when this action will not

jeopardize the public health, safety, and welfare.

Census data is the information published every 10 years by the U.S. Bureau of the Census for each state, incorporated towns and cities over 2,500 persons, and for all counties. There is a wide range of data available, including populations, ages, sexes, ethnic groups, housing conditions, property ownership, incomes, and commuting patterns, to mention but a few. The Agricultural Census is taken every 5 years (1987, 1992, 1997, etc.). Information includes farm size, crops, animal types, etc.

Cluster development means a development that groups residential, commercial, or industrial uses on a specific portion of a development site in order to provide for a reduction in permitted lot size and an increase in resulting open space, environmental or landscape resources, or recreation or other public facilities for the development.

Community Investment Plan (CIP) is a six-year timetable for the installation of permanent public structures, facilities, roads, and other public improvements based upon budget projections.

Concurrency Management is a program designed to ensure that proposed or planned residential growth proceeds at a rate that will not unduly strain public facilities, including schools, roads, water and sewer facilities, police, fire, and emergency medical services. The program establishes minimum adequacy standards

or thresholds for these facilities and services and mandates that the cumulative impacts of proposed or planned residential growth, within the incorporated municipalities and the County, be considered in testing for adequacy under these standards.

Conditional use means a use which may be permitted in a district, through the granting by the BZA upon a finding by the BZA that it meets specified conditions.

Connection Charge is a one-time fee levied when a sewer or water transmission line is made available to a dwelling or business. The proceeds are used to fund future capital improvements and to upgrade existing facilities.

Cul-de-sac is a turnaround at the end of a dead-end street. Generally, it is circular in shape, and is wide enough to allow an emergency vehicle or school bus to turn around.

Demographics are the characteristics of the population, such as average household size, density, growth rate, birth rate, etc.

Density means the number of buildings, offices, or housing units on a particular area of land.

Designated Growth Area (DGA) is an area on the Countywide Master Plan for which a more detailed comprehensive plan has been prepared. Most of the DGAs have a municipality at their center. These are the areas in the county where the majority of residential, commercial, and industrial development is concentrated, as they are generally also the areas where public and private services are available. Directing growth into the DGAs helps to reduce

sprawl, preserve farmland, and maintain the rural character surrounding the towns.

Development means any activity, other than normal agricultural activity, which materially affects the existing condition or use of any land or structure.

Dwelling is any building arranged, designed, or used in whole or in part for residential purposes, but not including a tent, cabin, trailer, or mobile home, or a room in a hotel or motel.

Easement is the right to use property owned by another for a specific purpose, such as power line easement, or the property owner gives up the right to some of the uses he or she may otherwise have of that property.

Environmental Resources Element (ERE) is the sensitive areas element of the master plan which was required under the 1992 Planning Act and which was adopted by the County Commissioners on January 16, 1997. This stand-alone element of the Master Plan was incorporated to this document. Legislation passed in 2006 amended Article 66B to require agricultural land and forest land to be addressed as “sensitive areas” in the Environmental Resources Element. These additional sensitive areas are addressed in the Environmental Resources chapter of this document.

Floodplain, 100-year, is that area which, after ultimate development of its watershed based on current zoning, would be inundated by water runoff from the 100-year storm.

Goals identify the purpose toward which an endeavor is directed. They are broad statements of intended accomplishments

which, if accomplished as a whole, would bring the community closer to meeting its overall vision of the future. They do not identify specific activities that will be undertaken.

Growth Area Boundary (GAB) is the border around the Designated Growth Area, outside of which allowable densities would be lower.

Growth management is a conscious program intended to influence the rate, amount, type, location, and/or quality of future development within a local jurisdiction. Recommendations vary, but they can include capping the annual number of building permits, relating allowable development intensity to certain levels of infrastructure service, or limiting the location of new development.

Impact fees are fees charged as a precondition to construction or development approval which are related to funding public improvements necessitated in part or in whole by the development.

Improvements refer to facilities which aid in land development, such as streets, sewer and water lines, curbs, sidewalks, street lights, fire hydrants, and street signs.

Industrial Park means a tract of land suitable for industrial use and subdivided and developed for occupancy by a group of industries.

Infrastructure is a general term for public and quasi-public utilities and facilities such as roads, bridges, sewer plants, water lines, power lines, fire stations, etc.

Infill development refers to development that occurs on vacant land which is scattered throughout an area which is already mostly developed. It does not refer to development that occurs on the fringes of a growth area.

Jurisdiction means the territory of a county or municipality within which its powers may be exercised.

Lot means a parcel of land occupied or intended to be occupied by a principal building and its accessory buildings and uses.

Master plan means a *comprehensive plan* or any portion of the general plan which may consist of maps, data and other descriptive matter as a guide for the physical development of the County or any portion thereof, including any amendments, extensions, or additions thereto adopted by the Commission, indicating the general locations for major roads, parks or other public open spaces, public building sites, routes for public utilities, zoning districts or other similar information.

Mixed-use development means a single, relatively high-density development project, usually commercial in nature, which includes two or more types of uses. Zoning approvals for a mixed-use development may require the approval of a schematic or other development plan at the time of zoning.

Overlay zone is a zone which is superimposed upon other zoning. Overlay zones are used in areas which need special protection or have special problems. Development of land subject to an overlay must comply with the

regulations of the underlying zoning district and the overlay.

Parcel is a contiguous lot or tract of land owned and recorded as the property of the same persons or controlled by a single entity.

Plan means the policies, statements, goals, and interrelated plans for private and public land use, transportation, and community facilities documented in texts and maps which constitute the guide for the area's future development. "Plan" includes general plan, master plan, comprehensive plan, and the like as adopted in accordance with §§ 3.01 through 3.09 of Article 66B.

Planned unit development (PUD) means a development comprised of a combination of land uses or varying intensities of the same land use in accordance with an integrated plan that provides flexibility in land use design approved by the local jurisdiction with at least 25 percent of the land permanently dedicated to open space. Zoning approvals for a planned unit development may require the approval of a schematic or other development plan at the time of zoning.

Planning Commission refers to an official body appointed by the governing body of a city or county that is responsible for making the comprehensive plan. In addition, the Planning Commission makes recommendations to the governing body on the zoning ordinance and zoning decisions as well as subdivision regulations. The Planning Commission has authority over approval of development proposals.

Policies identify the course of action to be taken when presented with a decision to

be made on a given issue. To fulfill its role as a guidance tool, policy statements are included in the plan. These policy statements express the community's desires for future decisions and help to guide the achievement of the goals they have developed. The policies indicate the direction that decision-makers would take when decisions are to be made regarding County services and land use development. The policy statements are based on an overall set of goals for the community and its future.

Preliminary plan refers to the plan submitted by a developer after the concept plan submittal. The preliminary plan shows the property to be subdivided, lots, all roads, and easements.

Preservation Incentive Lot (PIL) is a buildable lot used for residential purposes only offered to a property owner in exchange for a permanent preservation easement on a remaining portion.

Recommendations are optional courses of action which assist in the achievement of goals. Goals help to identify where a community wants to be and toward what they are striving. However, they do not identify specific things that can be done to help the community get there. Recommendations are planning, land use, and general government-related activities that can be pursued, ideally as a whole, to help the community meet its goals. Recommendations can also be described as implementation measures.

Regulation means any rule of general applicability and future effect including any map or plan.

Right-of-Way means the right to cross over property. A right-of-way (ROW) usually

refers to public land. For example, public land on which a street is built is a right-of-way. The ROW includes not only the street, but the land between the street and sidewalk and the sidewalk. Rights-of-way across private property are usually for utility lines or driveways.

Stream means part of a watercourse, either naturally or artificially created, that contains intermittent or perennial base flow of groundwater origin. Ditches that convey surface runoff exclusively from storm events are not included in this definition.

Stream buffers are the undisturbed zone extending from the banks of a stream. Stream buffers are applied countywide, regardless of whether they are located within another Water Resource Management Area (e.g., Surface Watershed Area). All stream buffers shall be a minimum of 50 feet wide from each stream bank. The existing conditions of the site shall determine the ultimate stream buffer width. Land features such as wetlands and slopes greater than 25 percent do not count toward the calculation of the stream buffer width. The average stream valley slope shall be calculated to determine the stream buffer width for each area along the stream; it shall be measured at regular intervals along the stream. The average stream valley slope shall be measured from the edge of the stream bank to a point 100 feet from the edge of the stream bank (measured perpendicular to the stream). The stream buffer is calculated by adding two feet to the minimum stream buffer width (50 feet) for each one percent of the adjacent stream valley slope.

Strip development is commercial and high-density residential development located

adjacent to major streets. This type of development is characterized by its shallow depth, street-oriented layout, orientation for vehicles rather than pedestrians, lack of unified design (especially one which reflects the character of the community), and numerous points of street access. It impedes smooth traffic flow.

Subdivision is the division of any tract or parcel of land into 2 or more lots or parcels.

Subdivision regulations are the controls that government exercises over the creation of lots and parcels.

Townhouse means one of a group of multi-family dwelling units in the same structure, each of which units is separated by a party wall from any adjacent unit and each of which dwelling units has its own entrance directly from the outside.

Variance is a relaxation of the terms of Chapter 223 (Zoning) of the Carroll County Code of Public Local Laws and Ordinances, in accordance with §§ 223-176, 223-178, and 223-186, where such variance will not be contrary to the public interest and where, owing to conditions peculiar to the property and not the results of the actions of the applicant, a literal enforcement of the chapter would result in practical difficulty or unreasonable hardship.

Vision or Vision Statement refers to a statement that defines a community's preferred future.

Water Resources Element (WRE) is a required element of the Master Plan put into place by HB 1141 which was signed into law May 2, 2006. The purpose is to

ensure that future county and municipal comprehensive plans reflect the opportunities and limitations presented by local and regional water resources. The WRE will address the relationship between planned growth and water resources.

Zone means an area within which certain uses of land and buildings are permitted

and certain others are prohibited, yards and other open space are required and lot areas, building height limits, and other requirements are established.

Zoning Capacity is the maximum number of dwelling units or businesses that could be expected to be built in an area based on the zoning.