

2.0 PHYSIOGRAPHIC LAND USE AND DEMOGRAPHIC CHARACTERISTICS OF CARROLL COUNTY

This chapter outlines Carroll County's present and projected population, its physical and cultural geography and land use. It also presents a general overview of the County's Master Plan. Data on population and land use provides the basis for waste generation projections (both volume and composition) and thus become basic factors on waste management decisions.

2.1 GEOGRAPHY

Carroll County is located in the Piedmont region of north central Maryland. It is bounded to the north by Pennsylvania, on the south by Howard County and lies west of Baltimore and east of Frederick counties (see Figure 2–1). It encompasses just under 456 square miles and extends approximately 27 miles in length and width at its widest point (See Figure 2–2). Elevations range from 300 feet above sea level in the southeastern corner to 1,080 feet near Manchester in the northeast. Carroll County is divided diagonally by Parr's Ridge, which slopes gradually from an elevation of nearly 1,100 feet in the northeast corner of the County, near Dug Hill, to about 750 feet near Mount Airy in the southwest and divides the Piedmont into its eastern and western regions. MD Rt. 27, the major northeast-to-southwest highway corridor, roughly parallels this ridge. The ridge divides the County into two major drainage basins: streams to the north and west drain into the Monocacy and eventually the Potomac River, and streams to the south and east flow into the Patapsco or Gunpowder Rivers towards the Chesapeake Bay.

Created by an act of the General Assembly in 1836, Carroll has been considered rural and agricultural. However, Carroll County is within commuting distance of both the Baltimore and Washington, D.C. metropolitan areas (see Figure 2–1). This fact has placed considerable development pressure on especially the southern and eastern portions of the County. To date, the far northwest quadrant has been less affected.

The County has eight incorporated municipalities. Those towns are: Westminster (the county seat), located in the center of the County along MD Rt. 140; Manchester and Hampstead, located along MD Rt. 30 to the northeast; Sykesville, located in the south-central portion of the County along MD Rt. 32; New Windsor and Union Bridge, located west of Westminster toward the Frederick County line; Taneytown, at the intersection of MD Rts. 194 and 140 in the northwest; and Mount Airy, located at the intersection of U.S. Rt. 70 and MD Rt. 27 in the far southwest corner adjacent to both Frederick and Howard Counties. The County also hosts two Federal facilities. (see Figure 2–2)

2.2 CLIMATE

Temperature and precipitation data is given in Table 2–1. The data was compiled by Carroll County's Bureau of Emergency Services Operations. Generally, the coldest period of year is late January and early February; conversely, the warmest period is the last half of July. The highest temperature on record in the County is 105° Fahrenheit at Taneytown on July 17, 1900, while the lowest is –23° Fahrenheit at Bachman's Valley on February 11, 1899. The distribution of monthly precipitation is fairly uniform during the year with a slight increase in August. The heaviest precipitation during the colder half of the year is generally the result of low-pressure systems moving northeastward along the Atlantic Coast; in summer, it occurs in thunderstorms. The greatest one-day precipitation is 11.55 inches at Westminster on June 22, 1972 when tropical storm Agnes swept through Maryland. Thunderstorms occur on an average of thirty days per year. While they may occur in any month, 75% occur in the months of May through August.

Prevailing surface winds are from west-northwest to northwest except during the months of May through September when they become more southerly. The average annual wind speed is about nine miles per hour. Damaging or dangerous storms, such as tornadoes, hurricanes, and blizzards, are rare but do occasionally occur.

2.3 DEMOGRAPHY

Carroll County's population was estimated to be 170,551 in December 2015. Consistently, the greater densities of population are found in southern and eastern portions of the County and within the environs of the County's eight incorporated municipalities. The population of Carroll County increased significantly during the period from 1960 to 1970, increasing approximately 31% over the period. In the next decade, 1970 to 1980, the overall rate increased to just under 40%. Although the percentage rates of increase decreased in the ensuing decades, from a 40% increase to 22% in the decade from 1990 to 2000, the numerical increase was relatively consistent at around 27,000 individuals per decade from 1980 through 2000. A 2.5% increase was realized through the period from 1990 through 2005 with the actual population increase dropping to just under 20,000. There has been a 3% population increase from 2005 through 2015 (see Table 2-2).

2.4 CARROLL COUNTY MASTER PLAN

2.4.1 THE HISTORIC PREMISE OF THE MASTER PLAN

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 Board of County Commissioners appointed the County's first Planning and Zoning Commission and by 1964, the first Master Plan was formulated and adopted for Carroll County. In addition, each of the County's eight municipalities have since adopted a community comprehensive plan, as well as two additional small area plans for the Finksburg and Freedom unincorporated areas of the County. These community comprehensive plans address issues and future land use patterns at the smaller community level. These plans include municipal boundaries and the identified annexation areas surrounding them. These areas as a whole, including the Finksburg and Freedom areas, comprise the County's Designated Growth Areas (DGAs).

During the past 50 years, community comprehensive plans and small area amendments to the original County Master Plan have been made, and new elements have been added. Considerable changes have taken place since the first County Master Plan was adopted in 1964. However, the basic premises and visions of the original Master Plan have not changed. The current Carroll County Master Plan was updated in 2014 and adopted February 26, 2015

2.4.2 THE VISION AND GOALS OF THE CARROLL COUNTY MASTER PLAN

VISION

To choose a vision, a community first must develop a mental image of a realistic, and at the same time, idealistic future state. A vision should respect the rights and wishes of individual property owners while simultaneously articulating a feasible, achievable and attractive future for the community. The process of developing a vision helps to empower members of the community. A shared vision builds community, cooperation and coordination between the public and private sectors, and civic leaders and residents. The purpose of the vision statement is to serve as a guide to civic leaders when making planning and development related decisions.

Carroll County's vision for its future is:

“Carroll County is a great place to live, work, and play. The County conserves and promotes its unique rural agricultural heritage, protects its environmental resources, and promotes a balanced approach to new development and economic opportunities consistent with the fabric of its communities. Carroll County values, and citizens' unalienable rights of life, liberty, and property, are respected, protected, and sustained.”

GOALS

To promote the public health, safety, and welfare, Carroll County will achieve its vision through the following goals (in no particular order of priority):

Goal 1 - Promote communication and coordination between and among the County, the municipalities, and state and regional jurisdictions on projects and issues of mutual concern. Encourage the involvement of the community in developing, amending, and implementing the Master Plan.

Goal 2 - Ensure respect for unalienable individual rights; encourage community involvement in planning in an open two-way communication process; encourage the involvement of the community in planning and implementing the Master Plan; provide participants with a balanced perspective on planning goals while promoting the need to respect private property rights; and accurately advise participants of the tradeoffs between various forms of development based on real-world effects.

Goal 3 - Protect and enhance the water quality of Carroll County's rivers, streams, reservoirs, and aquifers; comply with applicable state and federal requirements related to water quality and quantity; and maintain and protect adequate water supplies to serve current and planned development.

Goal 4 - To the extent feasible, provide adequate and appropriate Community Investment Plan funds to support public facilities and services. Provide an affordable, coordinated, and comprehensive system of community educational opportunities, facilities, and resources, including schools and libraries, which enhance our communities.

Goal 5 - Provide a safe and functional intra-County transportation system that promotes access and mobility for people and goods through a variety of transportation modes.

Goal 6 - Encourage a range of housing types, density, and affordability.

Goal 7 - Preserve at least 100,000 acres of agricultural land to support the production of agricultural products and promotion of related agribusiness.

Goal 8 - Preserve 80 percent of undeveloped land in the Priority Preservation Area, as adopted by the Board of County Commissioners.

Goal 9 - Provide an affordable, coordinated and comprehensive system of public and private parks, recreational facilities and programs, and open space that will enhance our communities.

Goal 10 - Preserve the county's historic, cultural, scenic, and architectural heritage.

Goal 11 - Protect, maintain, and restore, where feasible, 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, subject to appropriate cost/benefit analysis.

Goal 12 - Protect certain mineral resources of current and future economic importance from preemptive land uses and to ensure availability for recovery in a manner that minimizes impacts to surrounding areas; and for reclamation purposes, assure recovery to an environmentally sensitive, aesthetically pleasing condition.

Goal 13 - Promote a healthy economy and additional employment opportunities by: (a) supporting the retention and expansion of existing businesses including agribusiness through sensible land use policies; (b) focusing on development and redevelopment of existing vacant and underutilized commercial and industrial properties; (c) providing land appropriately located and zoned for a variety of types and intensities of new economic development activities; and (d) maintaining a desirable balance between economic development and residential development.

Goal 14 - Facilitate a development pattern that remains consistent with the fabric of our communities, is in harmony with the surrounding built and natural environments, encourages community interaction and, in rural areas, preserves the County's rural character.

Goal 15 - Pursue policies that facilitate development in appropriate areas, including the Designated Growth Areas, thereby protecting and conserving agricultural and environmental resources, preserving open space, and providing public facilities and services efficiently and cost-effectively.

2.4.3 IMPLEMENTATION OF THE CARROLL COUNTY MASTER PLAN

Water Resources

Protect and enhance the water quality of Carroll County's rivers, streams, reservoirs, and aquifers; comply with applicable state and federal requirements related to water quality and quantity; and maintain and protect adequate water supplies to serve current and planned development.

Carroll County and its municipalities worked collaboratively to develop one unified Water Resources Element (WRE) document adopted by all of Carroll County's jurisdictions to satisfy the requirements of HB 1141. As a result, in 2010, the Board of County Commissioners and seven of the municipalities adopted a WRE that addressed both the County as a whole, as well as the individual adopting municipalities.

Public Facilities & Services

To the extent feasible, provide adequate and appropriate C[ommunity] I[nvestment] P[lan] funds to support public facilities and services. Provide an affordable, coordinated, and comprehensive system of community educational opportunities, facilities, and resources, including schools and libraries, which enhance our communities.

Providing public facilities and services for the safety, health, and welfare of the County's citizens is a primary function of a local government. Public roads, water and sewer systems, schools, community colleges, libraries, parks and recreational sites, and public buildings are all facilities and/or infrastructure that may be provided by government. Police protection, fire and emergency medical services (EMS), public education, infrastructure maintenance, senior centers, and

recreational programs are some of the services provided. Providing services and maintaining facilities and infrastructure contributes to the health and quality of life of a community.

Transportation

Provide a safe and functional intra-County transportation system that promotes access and mobility for people and goods through a variety of transportation modes.

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, trails 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 placed upon Carroll's transportation network by the commuting public and continuing declines in levels of service indicate that the transportation system needs attention.

Housing

Encourage a range of housing types, density, and affordability.

Shelter is a primary need in every community. As Carroll County continues to grow housing stock must keep pace with demand or the increased demand will drive up housing prices. However, keeping up with demand is not the only concern. To support a larger resident population and increased 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 housing, and options to purchase or rent.

Agriculture

Preserve at least 100,000 acres of agricultural land to support the production of agricultural products and promotion of related agribusiness.

The preservation of agricultural land and the continuation of farming and agribusiness uses have 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 preservation goal is directed at protecting the land used for agriculture. Maintenance of a large agricultural land base will ensure that farming can continue into the future. Farmland is preserved by working with willing landowners to promote agricultural use of their property through conservation easements that prohibit development in perpetuity.

Priority Preservation Area

Preserve 80 percent of undeveloped land in the Priority Preservation Area, as adopted by the Board of County Commissioners.

The Agricultural Stewardship Act of 2006 (HB 2), passed by the Maryland General Assembly, required that those counties, including Carroll, that are certified by the state as operating a successful local agricultural land preservation program also establish Priority Preservation Areas (PPAs) in their comprehensive plans. There are two sets of requirements for managing the PPA, relating to conditions in the PPA itself and the County Master Plan, respectively.

Parks

Provide an affordable, coordinated and comprehensive system of public and private parks, recreational facilities and programs, and open space that will enhance our communities.

Carroll County has approximately 12,227 acres of publically-owned lands available to residents for various types of recreational activities. These open space areas range from scenic, natural places, such as Hashawha Environmental Center, Piney Run Park, Morgan Run Natural Environmental Area (NEA) and the land around Liberty Reservoir, to high activity parks such as Taneytown Memorial Park, Freedom Park, the Westminster Municipal Pool, or Sandymount Park. Included in this acreage are public 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. All told these opportunities provide nearly 47.6 acres of park land per 1,000 people (or 0.0476 acres per person) of publicly-owned park land or open space per person to Carroll County's citizens.

Heritage

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

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. Conservation 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.

Environmental Resources

Protect, maintain, and restore, where feasible, 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, subject to appropriate cost/benefit analysis.

Development on properties with environmental resources can vary greatly depending on the location, magnitude, type, and site design in regard to preserving these resources. Nearly every modification to the natural landscape, whether it is farming, construction of buildings, roads, sheds, patios or decks, impacts the quality of environmental resources. The County's commitment to manage these impacts is evidenced through its partnerships, programs, policies, regulations and watershed/Bay related analyses intended to conserve natural and environmental resources, and improve local water quality of groundwater sources and local feeder streams that eventually flow into the Chesapeake Bay.

Mineral Resources

Protect certain mineral resources of current and future economic importance from preemptive land uses and to ensure availability for recovery in a manner that minimizes impacts to surrounding areas; and for reclamation purposes, assure recovery to an environmentally sensitive, aesthetically pleasing condition.

Approximately 4,020 acres of Wakefield Marble exist in western areas of the county, specifically land that lies between Westminster, New Windsor, and Union Bridge. Due to preemptive land development, less than 1,600 acres of this resource is considered for present and future recovery.

Employment/Economic Development

Promote a healthy economy and additional employment opportunities by: (a) supporting the retention and expansion of existing businesses including agribusiness through sensible land use policies; (b) focusing on development and redevelopment of existing vacant and underutilized

commercial and industrial properties; (c) providing land appropriately located and zoned for a variety of types and intensities of new economic development activities; and (d) maintaining a desirable balance between economic development and residential development.

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.

Land Use & Growth Management

Facilitate a development pattern that remains consistent with the fabric of our communities, is in harmony with the surrounding built and natural environments, encourages community interaction and, in rural areas, preserves the County's rural character.

Pursue policies that facilitate development in appropriate areas, including 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.

Development 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 agricultural use of the surrounding land. Implementation of that premise was strengthened in 1978 through the adoption in the subdivision regulations of a lower density lot yield calculation formula for properties in the Agricultural Zone.

2.4.4 CARROLL COUNTY ZONING ORDINANCE

County Zoning Ordinance restricts Sanitary Landfills, Solid Waste Transfer Stations and Solid Waste Incinerators to Restricted Industrial (I-R) and General Industrial (I-G) districts. Sanitary landfills are conditional uses under Sections 158.079 (I-R) and 158.080 (I-G). Sewage sludge storage is covered by Section 223-26. County facilities are covered by Section 158.051 of the Code.

A complete description of both Industrial Districts is included as an Appendix C of this document.

These two zoning categories restrict the location of any type of privately-owned solid waste management facility to those zones. County-owned facilities, however, are not restricted in that manner, as specified (Section 158.049 County Public Buildings, Structures, and Uses).

It must be noted that this Solid Waste Management Plan shall not be used to create or enforce local land use and zoning requirements.