

Office of the Administrator Melissa B. Cook-MacKenzie

CERTIFICATION

I, Melissa B. Cook-Mac Kenzie, Administrator of the Town of North East, hereby certify that in accordance with the requirements of the Annotated Code of Maryland, a Six-Year review of the Comprehensive Plan was conducted.

I am pleased to present the Town's updated **North East Comprehensive Plan–2012.** The updated Plan was adopted by Resolution 2012-11-02, by the Mayor and Commissioners of the Town of North East, Maryland, on November 14, 2012. The attached **North East Comprehensive Plan-2012** replaces the October 7, 2002 North East Comprehensive Plan, and subsequent amendment numbers 1-5.

Given under my hand and Seal of the Town of North East, County of Cecil, State of Maryland, this 18th day of February, 2015 at North East, Maryland.

Melina B. Cook-MacKenzie Administrator





TOWN OF NORTH EAST

OFFICE OF PLANNING AND ZONING

P.O. Box 528 North East, Maryland 21901-0528

* * *

410-287-5801 410-287-8267 Fax

* * *

www.northeastmd.org

CERTIFICATION OF APPROVAL

I, Brian Morgan, Chairman of the North East Planning Commission for the Town of North East, Maryland, having been duly sworn and appointed, do hereby certify that the attached is a true and correct copy of Resolution No. 2012-11-01 passed by the North East Planning Commission at their regularly scheduled meeting, November 7, 2012, approving the amendments to the "North East Comprehensive Plan - 2004", hereafter, referred to as the "North East Comprehensive Plan", and that a true copy of said Plan, including all maps and text therein and all recommendations of each jurisdiction that commented on said plan, is attached hereto and made part hereof by reference

NORTH EAST PLANNING COMMISSION

rian Morgan, Chairmar





TOWN OF NORTH EAST

OFFICE OF PLANNING AND ZONING

P.O. Box 528 North East, Maryland 21901-0528

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RESOLUTION NO. 2012-11-01

WHEREAS, Pursuant to Article 66B of the Annotated Code of Maryland, the North East Planning Commission for the Town of North East, Maryland, hereinafter sometimes referred to as the Planning Commission, may recommend adoption of a whole Plan and any amendment to the Plan for the Town of North East, Maryland, and;

WHEREAS, Pursuant to said Article 66B, the Mayor and Commissioners adopted said Comprehensive Plan, entitled "North East Comprehensive Plan – 2004", including all maps and text therein, hereinafter sometimes referred to as the Plan on May 3, 2004; and

WHEREAS, the Planning Commission has performed a "six year review" of the North East Comprehensive Plan and desires to make recommendations to the Mayor and Commissioners to change the Title from North East Comprehensive Plan-2004 to North East Comprehensive Plan; to rescind the current Transportation Element, rescind Map 4. Transportation Plan Functional Classifications; and rescind Map 5. Transportation Plan Planning Considerations and to enact an updated Transportation Element with Transportation Maps; Amendments to Map 2. Town of North East Land Use Plan, identified on Tax Map 400, Parcels 163, 136, 137, 496 to be changed from Central Business District to Village Commercial; also, Tax Map 400, Parcels 402, 492, 279, 278, 277, 276, 461 (1-A) to be changed from Low Density Residential to Village Commercial and Tax Map 401: Parcel 147 to be changed from "VC" Village Commercial District to Central Business District; Amendment to Map 3 - Town Growth Area to revise the title from "Low Density Residential" to "Residential"; and to update the table of contents and page numbers to reflect changes to the text.

BE IT FURTHER RESOLVED, that in accordance with Article 66B, Section 3.07 of the Annotated Code of Maryland:

- 1) The Planning Commission held a public hearing on November 7, 2012; and
- 2) The Planning Commission published a notice of the time and place of said public hearing in the October 22, 2012 and October 29, 2012 edition of the Cecil Whig; and

North East Planning Commission



3) The Planning Commission provided copies of the recommended Amendment to the Plan to all adjoining planning jurisdictions; and all State and local jurisdictions that have responsibility for financing or constructing public improvements necessary to implement the Plan.

BE IT FURTHER RESOLVED, THAT AN ATTESTED COPY OF SAID Amendment along with the recommendations of each jurisdiction that commented on said Amendment shall be transmitted to the Mayor and Commissioners of the Town of North East, Maryland; and

NOW, THEREFORE, BE IT RESOLVED, THAT THE North East Planning Commission, on this 7^{th} day of November, 2012, does hereby approve the amendments to the "North East Comprehensive Plan – 2004", and recommends the adoption of the "The North East Comprehensive Plan" by the Mayor and Commissioners of the Town of North East, Maryland.

ATTEST:

Milissa B. Cook-MacKenzie Melissa B. Cook-MacKenzie Zoning Administrator

Brian Morgan Chairman



TOWN OF NORTH EAST

106 South Main Street • P.O. Box 528 • North East, Maryland 21901-0528 410/287.5801 • 410/287.8267 Fax • www.northeastmd.org

Mayor Robert F. McKnight

Commissioners
Eric B. Braley
Hilary A. Crothers-Moore
Kena L. Koch
Paul A. Stark

Administrator Melissa B. Cook-Mac Kenzie

Clerk/Treasurer Anne F. Barker

RESOLUTION 2012-11-02

WHEREAS, pursuant to Article 66B of the Annotated Code of Maryland, the North East Planning Commission of the Town of North East, Maryland has prepared amendments to the "North East Comprehensive Plan-2004", hereafter referred to as the "North East Comprehensive Plan"

WHEREAS, the Planning Commission held a public hearing for the amendments to the Comprehensive Plan on November 7, 2012, and thereafter approved the "North East Comprehensive Plan" for the Town of North East, Maryland which is hereby submitted for adoption by the Mayor and Commissioners of the Town of North East, Maryland,

NOW, THEREFORE, BE IT RESOLVED by the Mayor and Commissioners of the Town of North East, Maryland that the Comprehensive Plan Amendments for the Town of North East, recommended by the Planning Commission, are hereby adopted and will become part of the "North East Comprehensive Plan" for the Town of North East, on this 14th day of November 2012.

MAYOR AND COMMISSIONERS OF THE TOWN OF NORTH EAST

Melissa B. Cook-MacKenzie Town Administrator

Robert F. McKnight, Mayor

Absent

Eric B. Braley, Commissioner

Hilary A. Crothers-Moore, Commissioner

Kena L. Koch, Commissioner

Paul A. Stark, Commissioner

The Town of North East is an "Equal Opportunity Employer"

Member of The North East Chamber of Commerce



NORTH EAST COMPREHENSIVE PLAN

November 2012



P.O. Box 528 ● 106 South Main Street North East, Maryland 21901-0528 Telephone: 410-287-5801 ● Fax: 410-287-8267

Town of North East, Maryland Comprehensive Plan

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Introduction

The Comprehensive Plan is the official statement of the Mayor and Commissioners of the Town of North East setting forth policies concerning desirable future growth, which serves as a general guide to public and private development decisions. Once adopted, it becomes the basis for the preparation of specific policies, programs and legislation, such as zoning and subdivision regulations, and other actions, which implement the growth policies set forth in the Plan.

The Plan is comprised of several major elements that are prepared in such a manner that they form an integrated, unified document for guiding future growth and development. As a policy document it is general, comprehensive, and long range in nature. It is comprehensive in that it encompasses the entire geographic area of the Town and includes all functional elements that bear upon its physical development, such as transportation, land use, and community facilities. It is general in that it summarizes policies and proposals but does not establish detailed regulations. It is long range in that it looks beyond current issues to problems and opportunities related to future growth over the next twenty years.

The Vision for North East

Identifying a broad-based and widely supported community vision for the Town of North East is a major component of the comprehensive planning process. To ensure this vision, goals and objectives are established to build a framework for how the Town desires to grow and develop. Goals and objectives serve as the basis for formulating all Town policies, which will affect public and private decisions relative to the preservation and growth of North East.

The overall vision for the Town of North East is:

To preserve North East's rural community character while expanding the economic base of the Town by capitalizing on the local tourism, industry, planned employment growth and area commerce.

The Framework for Planning

As North East and the surrounding environs grow and change over the next few years, this Comprehensive Plan will serve as a guide for making public and private decisions regarding the Town's growth and development. This Plan presents the future vision of North East in the years to come along with recommendations for bringing that vision into fruition. The ideas of the Plan are a distillation of the community's many desires, tempered by what seems feasible and reasonable. This plan is not intended to be a static document, but should be reviewed and updated periodically to reflect new development trends, shifts in economy, or changes in the community's goals and objectives.

Legal Basis for Comprehensive Planning

Article 66B of the Annotated Code of Maryland is the Zoning and Planning enabling legislation from which the Town of North East derives its powers to regulate land use. Section 3.05 sets forth the minimum requirements for a comprehensive plan, which shall include, among other things:

- A statement of goals and objectives, principles, policies, and standards;
- A land use plan element;
- A Natural Resources and Sensitive Areas Element;
- A transportation plan element;
- A community facilities plan element;
- An element which shall contain the planning commission's recommendations for land development regulations to implement the plan; and
- Other elements, such as a community renewal and housing, conservation at the discretion of the commission.

The context for planning in the Town of North East must also take into consideration the role that the Town will play in implementing the overall growth management strategies established by the State of Maryland in the Planning Act of 1992 and reflected in the Cecil County Comprehensive Plan. The growth management policies established in the Planning Act and stated as "visions" for the future were the guiding principles for preparation of this Plan. These "visions" are:

- 1. Development is concentrated in suitable areas;
- 2. Sensitive areas are protected;
- 3. In rural areas, growth is directed to existing population centers and resource areas that are protected;
- 4. Stewardship of the Chesapeake Bay and the land is a universal ethic.
- 5. Conservation of resources, including a reduction in resource consumption, is practiced;
- 6. To assure the achievement of 1 through 5 above, economic growth is encouraged and regulatory mechanisms are streamlined;
- 7. Adequate public facilities and infrastructure under the control of the Town are available or planned in areas where growth is to occur; and
- 8. Funding mechanisms are in place to achieve all other visions.

Components of a Growth Management Program

This Comprehensive Plan provides the basic framework and direction for all components of what may be considered the Town's overall Comprehensive Planning Program. It is not a stand-alone document but is supported and, in turn, supports related Planning Program documents such as the ones listed below.

- Zoning Ordinance
- Subdivision Regulations
- Capital Improvements Budget

These documents and others, when used concurrently, are the basis for directing and managing growth in North East.

Acknowledgments

Mayor: Robert F. McKnight

Commissioners: Eric B. Braley

Hilary A. Crothers-Moore

Kena L. Koch Paul A. Stark

Town Administrator: Melissa B. Cook-MacKenzie

Director of Planning: Betsy Vennell

Planning Commission: Brian Morgan, Chairman

Eric B. Braley, Ex-Officio Member

Ranald Langille Michael Kline Mark Dobbins

Consultant: Markus Gradecak

Gradecak & Associates, Inc.

SUPPORT FOR THIS DOCUMENT WAS FINANCED IN PART BY THE WILMINGTON METROPOLITAN AREA PLANNING COUNCIL.

Chapter 1 Community Profile

Historical Background

The Town of North East is nestled at the head of the Chesapeake Bay on the North East River, in Cecil County. North of the Town lie two major roads, Route 40 and I-95, which have and will continue to have a profound impact on the growth in the North East area. Route 40 has developed commercially with restaurants, service stations, and similar auto-oriented uses. Commercial growth has occurred along MD 272, just north of Route 40, with the construction of North East Plaza in the early 1970's, the North East Commerce Center, and North East Station just south of Route 40.

Today, a Development District surrounds the Town of North East near the I-95/Route 40 corridor. Tourism continues to evolve into an economic force for the Town, attracting many visitors to the North East River with water-oriented recreational opportunities and the nearby Elk Neck State Park. According to park staff, Elk Neck State Park attracts 364,052 day visitors, 61,195 visitors for camping purposes and 3,607 visitors for cabin rental purposes annually.

Socio-Economic Background

Population Growth

Up until 1970, North East witnessed a steady increase in growth over each decade. However, in the decade 1970 - 1980, the Town population dropped by 349 or a decrease of 19 percent. This trend was reversed in the subsequent decade when the population reached 1,913 by 1990 and 2,733 in 2000.

Population Growth

	1980	1990	2000	Percent increase 1980-2000
Cecil County	60,430	71,347	85,951	42.2%
North East, election district	12,507	15,631	18,682	49.4%
North East, town	1,469	1,913	2,733	86.0%

Source: 2000 U.S. Census

North East declined as a percentage of Cecil County between 1970 and 1990 (3.4 percent in 1970 to 2. 7 percent in 1990). Between 1980 and 2000, North East climbed back to 3.2 percent of the County populations. If the trend continues and the Town of North East is approximately 3.2 percent of Cecil County's population, then the following projections can be made.

Population Projections

	2000	2010	2020
Cecil County *	85,951	99,600	103,300
North East, town **	2,733	3,187	3,306

^{*} Source: Maryland Office of Planning

Age/Sex

The age structure for North East changed little from 1990 to 2000. In 2000, over 70 percent of the Town's population was below the age of 45. Thirty-two percent was below the age of 18 and slightly less than 11 percent were 65 or older. Thirty-two percent of the population fell between the ages of 25 to 44.

In 2000, the median age of the Town population was 31.3, which is slightly over a year older than the median age in 1990. This compares to a median age in Cecil County of 35.5 and 36.0 in the State.

47.8 percent of the population was male and 52.2 females. The male female ratio was slightly higher in the age group 18 years and over and 65 years and older. In theses two age groups combined, females were 44.4 percent of the total population and males were 37.1 percent of the total population.

Race

According to Census 2000, 93.8 percent of the Town's population is classified as white. Black and African Americans are the largest minority and make-up 3.2 percent of the Town's population. Persons of Hispanic or Latino origin constitute 1.5 percent of the Town's population.

By way of comparison, Black or African Americans are 3.8 percent of the County population and 27.9 percent of the State population. Persons of Hispanic or Latino origin are 1.5 percent of the County population and 4.3 percent of the State population.

Educational Attainment

The 2000 Census data for education has not yet been released. In 1990, of persons over 25 years of age, 74 percent possessed a high school degree. This compares with 72.2 percent for Cecil County and 78.4 percent for Maryland. 12.8 percent of the Town's population had earned a bachelor's degree or higher, as compared to 12.1 percent for Cecil County and 26.5 for Maryland.

^{**} Based on a 3.2 percent growth rate

Employment

With an unemployment rate of 5.5 percent in 1990, North East experienced higher unemployment than both Cecil County and the State.

1990 Labor Force

	Population	Percent in labor force	Percent unemployed
Maryland	3,736,830	70.6%	4.3%
Cecil County	54,369	68.1%	4.6%
North East	1,502	69.7%	5.5%

Source: 1990 U.S. Census

1989 Income and Poverty Status

	Per capita	Median Income	Families	Nonfamily	Persons living	g in poverty
	income	Households	T diffines	Households	Number	Percent
Maryland	\$17,730	\$39,386	\$45,034	\$24,482	385,296	8.3%
Cecil County	\$14,314	\$36,019	\$40,420	\$18,696	5,206	7.5%
North East, town	\$14,448	\$29,647	\$32,143	\$20,990	170	8.9%

Source: 1990 U.S. Census

Although North East had a similar per capita income to the County, its incidence of poverty among persons, families, and female householders was higher. Poverty thresholds in 1989 ranged from \$6,310 for an individual to \$12,619 for a four person household with two children.

1990 Occupation of Employed

	Number of Persons	Percentage
Executive, administrative, & managerial	89	9.0%
Professional specialty occupations	106	10.8%
Technicians & related support occupations	42	4.3%
Sales occupations	95	9.6%
Administrative support occupations, including clerical	183	18.6%
Private household occupations	3	0.3%
Protective services occupations	31	3.1%
Service occupations, except protective & household	111	11.3%
Farming, forestry, & fishing occupations	16	1.6%
Precision production, craft, & repair occupations	144	14.6%
Machine operators, assemblers, & inspectors	67	6.8%
Transportation & material moving occupations	42	4.2%
Handlers, equipment cleaners, helpers, & laborers	57	5.8%
TOTAL		100.0%
Private for profit wage & salary workers 16+	690	69.9%
Private not-for-profit wage & salary workers 16+	49	4.9%
Local government workers 16+	78	8.0%
State government workers 16+	52	5.3%
Federal government workers 16+	62	6.3%
Self-employed workers 16+	50	5.1%
Unpaid family workers 16+	5	0.5%

Source: 1990 U.S. Census

Persons per Household

According to early data published by the Census Bureau, average household size in the Town increased somewhat, from 2.36 persons per household in 1990 to 2.52 persons per household in 2000. Between 1990 and 2000 the average household size decreased in Cecil County, from 2.81 to 2.71 person per household. It also decreased in the State, from 2.67 to 2.61 persons per household.

Housing Characteristics

According to the Census 2000 the total number of housing units in North East increased from 847 in 1990 to 1,215 units, over a 43 percent increase. Of the 1,081 occupied units, 49 percent were owner occupied units. The average household size of owner occupied units was 2.63 persons per unit. The average household size of renter occupied units was 2.41. During the period 1990 to 2000, North East experienced a 4.0 percent vacancy rate for homeowner units and a 6.3 percent vacancy rate for rental units. Fifty-one units, or slightly more than 4 percent, were classified seasonal, recreational or occasional use housing.

Chapter 2 Land Use

Goals

- Produce a desirable residential environment with the ability to grow.
- Provide for affordable, but attractive housing.
- Increase the downtown retail base, while maintaining and preserving the existing Central Business District and its small town charm.
- ◆ Attract industry and jobs to North East to avoid becoming a bedroom community.
- Perpetuate the economic success of established commercial areas while encouraging new economic activity in the Town.
- ◆ Encourage development of industrial activity, including high tech industries, which can provide additional sources of jobs and also compliment the Town and its sensitive environmental areas.
- Develop, promote, and expand tourism activities and industry.

Objectives

- Maintain the integrity of existing residential areas.
- Protect residential neighborhoods from through traffic and encroachment by commercial and industrial activities.
- Encourage residential infill and redevelopment that is appropriate in the existing neighborhood context.
- Accommodate growth primarily through appropriate annexation of adjacent lands.
- ♦ Emphasize the safety, convenience, and attractiveness of all commercial development.
- Prevent strip development by encouraging clustering of commercial activity at optimal locations.
- ♦ Minimize the undesirable effects of all development to insure pollution does not adversely affect the North East River and, ultimately, the Chesapeake Bay.

- ♦ Maintain opportunities for a viable economic base, which encourages further economic investment, diversification, and expansion creating more employment and business opportunities to meet the needs of Town residents and tourists while enhancing the tax base of the Town.
- ◆ Encourage infill and redevelopment of existing vacant or underutilized commercial and industrial sites.

Existing Land Use

Town

The corporate limits of North East encompass a total land area of approximately 995 acres. According to 2002 data published by the Department of Assessment and Taxation approximately 25 percent of the Town's land area was classified as residential use in 2002 and the predominant residential use was single family residential (See Table 1). Commercial and industrial classifications made up about 16 percent of the total land use. Land uses classified as "Other" consist of unclassified land within the corporate limits, including road right-of-ways and water courses.

Table 1
Existing Land Use - 2002
North East Planning Area

LAND USE	ACRES	PERCENT
Agriculture	12	1.2%
Single Family Residential	138	13.9%
Town House	89	8.9%
Multi-Family Residential	15	1.5%
Commercial/Residential	11	1.1%
Commercial	22	2.2%
Industrial	139	14.0%
Public/Semi-Public	149	15.0%
Park and Open Space	30	3.1%
Vacant	251	25.2%
Other	139	13.9%
TOTAL	995	100.0%

Source: MD Property View, RJA, Town Staff

The Planning Area

The comprehensive planning process considers the future of North East from several perspectives. The following section, entitled Land Use Recommendations, discusses a desired pattern of land use for areas within the corporate limits of North East. The land use pattern shown on Map 2 is greatly influenced by existing development, be it residential, commercial, industrial, institutional, etc. It will be further influenced by infill and redevelopment within the Town, new development in the County adjacent to existing developed areas, and by development of newly annexed areas. The incorporated area addressed in the Land Use Plan is the North East's Priority Funding Area (PFA), and as such, is the focus of short- and mid-range capital improvements programming for public facilities to serve existing neighborhoods, including infill and redevelopment within these areas. In addition, some of the existing and planned capacity of Town facilities may be used to serve new development in the existing Town limits and in newly annexed areas. The areas planned for water and sewer services as shown in the *Cecil County Master Water and Sewer Plan* reflect the Town's short and mid-range annexation priorities.

The area considered for planning purposes also includes a future growth area that lies beyond the Town limits (See Map 1) and the Town's short and mid-range annexation priorities. How and when these areas develop in the future is dependent on a number of variables. The purpose for including these future growth areas is to identify key areas where Town and County long range land use, transportation and capital facilities planning should be closely coordinated.

The Planning Area shown on Map 1 encompasses the area identified in the *Cecil County Urban Growth Boundary Plan* as North East's growth area. The purpose of the Urban Growth Boundary Plan, adopted in 2000, was to create areas around each Town whereby the provision of water and sewer infrastructure would be closely coordinated between the County and the Towns.

As a result of the Urban Growth Boundary Plan, the Town and County executed a Memorandum of Understanding in March 2002 in which both parties agreed to participate on a Water/ Sewer Infrastructure Implementation Council. The mission of the Council is to coordinate planning efforts to improve and/or effectuate water/ waste water services to areas defined in the Urban Growth Boundary Plan and the County's Comprehensive Plan.

The Town executed a water service agreement with the County in March 2002. This agreement addresses how water service would be provided within the North East portion of the Urban Growth area.

In February 1996 a water system facilities study was performed in preparation and anticipation of the growth that would be occurring in and around North East. To date approximately two million dollars has been spent implementing improvements outlined in the study.

As a result of the Urban Growth Boundary Plan, water service agreement with Cecil County and the Comprehensive Plan adopted in October 2002 the Town had commissioned a water supply study in March 2003 to update the February 1996 portion of the water system facilities study addressing population based on build-out calculations for the North East portion of the Urban Growth area. Because the Town already provides water service to a large portion of the planning area it was logical to assume that further expansion of service within the planning area would occur in the future. Based on the results of the water supply study, the Town has scheduled a number of water system improvements (at an estimated cost of over \$10 million) to upgrade the Town's water supply system.

In addition, the Maryland Department of the Environment has approved the issuance of an appropriation and use permit from the tidal portion of the North East Creek.

Not to be confused with a "Priority Funding Area" which is a short to mid-range capital improvements programming tool, the Potential Future Growth Areas shown on Map 3 encompasses land that <u>may</u> become part of the Town at some unspecified time in the future. Land use designations shown on Map 3-include existing settlements, where the land use pattern has already been established under County zoning, and in the case of large tracts, anticipated land uses. Because of the uncertainty concerning how much of the planning area may be annexed and when annexation would occur, the planning designations for this area are generalized simply indicating the most likely form of development for each area.

Annexation is typically dependent on the application of individual property owners seeking to be included in the incorporated limits. Typically the annexation process involves a request for a specific land use designation. The Town then considers the merits of the application, including the costs and benefits of the proposed annexation and the Town's ability to provide adequate facilities and services. The proposed land use will be considered in the context of existing development in the vicinity of the property, the North East Comprehensive Plan and the results of the cost/benefit analysis.

Land Use Plan Recommendations

The Land Use Plan for North East divides the community into a variety of planning districts, including residential districts, commercial districts, industrial districts, mixed-use districts, public/semi-public areas and park and open space areas. These planning districts are shown on Map 2 the Land Use Plan.

Residential

Residential is a significant land use within the Town's boundaries, and is a major future development. This land use is particularly important since the level of community facilities that will be needed to serve the Town's residential population is dependent upon the recommendations regarding density, location and distribution. Several residential density categories apply to North East:

Low Density. Areas characterized as "Low Density" generally consist of established residential neighborhoods with an average prevailing net residential density of approximately three dwelling units per acre.

Medium Density. "Medium Density" areas are characterized by net residential densities between four and five dwelling units per acre. The area also includes a few larger tracts that are potential sites for infill and redevelopment.

High Density. "High Density" includes detached, attached and multi-family units in scattered locations throughout the Town. These areas are characterized by a net residential density of approximately ten dwelling units per acre.

Planned Residential. The Planned Residential Development category encompasses North East Isles, a successful water oriented multi-family (townhouses and quadraplexes) project located along the North East River. North East Isles was developed in accordance with PRD provisions contained in the North East Zoning Ordinance. The PRD zone classification permits greater flexibility in the design of larger scale, unified residential development projects. It permits a variety of residential unit types in a single development, gross densities of up to six dwelling units per acre, and requires that a substantial portion of the site be set aside as common open space for the benefit of neighborhood residents.

Planned Neighborhood. The Planned Neighborhood land use classification is a new district that is shown on the Land Use Plan. The purpose of the Planned Neighborhood district is to establish land use planning policies for the "smart neighborhoods." Smart neighborhoods are well-planned, compact mixed-use neighborhoods that exhibit the following characteristics:

- integrated mix of uses, including residential, commercial, employment/office, civic, and open space;
- a range of housing types and densities;
- compact design;
- interconnected streets designed to balance the needs of all users, with sidewalks and on-street parking;
- open spaces integral to the community; and
- location adjacent to and extended fabric of existing development.

Development codes should be revised to implement the planned neighborhood principles discussed herein. Compact mixed-use neighborhoods should be the preferred type of residential development, where feasible, as opposed to single dwelling unit type developments that are the norm in existing medium and high density residential areas of the Town.

Limited Residential. North East's growth area includes land where existing residential development has already taken place or will have taken place prior to annexation. In

some cases, these residential development projects may have been approved by the County but have not yet commenced development. It is the Town's intent to consider annexing such areas and to minimize situations where the application of existing Town development standards would create extensive non-conforming situations. [Added 03/26/2008 by Resolution 2008-03-02]

Employment

The Land Use Plan provides for a variety of employment uses, including commercial and industrial uses, at intensities consistent with their location.

Central Business District (CBD). The Central Business District (CBD) should remain the commercial center of the Town, and not be infringed upon by commercial and business uses of a type, scale or intensity which would not complement or fit with existing shops or businesses. The CBD will continue to cater to local residents and tourists. Gaining status as a "heritage area" could significantly enhance the role of the CBD. The heritage program will be discussed at greater length when addressing economic issues.

The role of the CBD should remain that of a small business town. Its goal should be to attract tourists through its pedestrian oriented setting and specialty retailing. Aesthetics will be essential; trees, regulated signage, and well-maintained storefronts will help draw customers. The CBD needs to differentiate itself from the strip commercial development located along major highway corridors in Town, rather than compete with it, by maintaining shops situated near the street edge, with on-street and rear parking. Streetscape improvements (sidewalks, lighting, street furniture) will help to create a unified visual image of a shopping district which caters equally to the motorist and pedestrian.

Highway Commercial. Highway Commercial refers to commercial activity dependent on the local market area and passing highway traffic for business. The land use is characterized by retail and service establishments located to take advantage of highway access, typically consisting of restaurants, service stations, grocery stores, mini-marts, super markets, department and discount stores, and supply stores intended to serve travelers as well as local trade. The recommended location for highway commercial activity for North East is centered on Route 40 and MD 272 north of the Amtrak railroad tracks. The area has previously been deemed for high density development and the infrastructure necessary to do so is already in place. It would also have direct access to the highway traffic necessary to support commercial activity of this kind.

New highway commercial development along highways should be permitted in a clustered fashion rather than the linear or strip configuration. Access to such areas should be limited with consolidated entrances. This should be required in the Zoning Ordinance and Subdivision Regulations and coordinated with the State Highway Administration.

Village Commercial. The Village Commercial District is located at the fringe of the Central Business District and would allow for limited expansion of certain business and office uses south along Main Street. The plan classification anticipates a mix of uses, including residential, small professional offices, including those located in existing residential buildings, e.g., doctors, lawyers, accountants, small specialty shops, and similar uses that primarily operate between 9 a.m. and 5 p.m. during the week. In all cases, the scale and intensity of the proposed use should be the limiting factor. New buildings and conversion of existing buildings should be done in a manner that is consistent with the existing character of the street. Uses should not be so intensive as to create congestion and/or parking problems along Main Street and in the adjacent residential neighborhoods. The scale and quality of signage should blend in with the existing visual character of the area. The impact of new commercial uses on nearby residential areas should be carefully considered, implying that most new permitted non-residential uses should be processed as a special exception.

Village Marine. Like the Village Commercial land use classification, the Village Marine land use is a limited commercial category that will permit the development of key waterfront properties with uses that serve recreational boaters and watermen. In addition to docking and tie-up facilities, these sites may also be appropriate for related services, such as restaurant, boating specialties and supplies, and sanitary facilities. The sites are not appropriate for more intense marina uses, such as dry dock facilities, major boat repair, and high and dry storage.

Residential Office. The Residential Office land use classification encompasses areas of the Town where a mixture of residential uses and limited business uses coexist. Permitted businesses are strictly limited to those uses that are not unduly disruptive of the surrounding residential neighborhood, e.g., professional offices that are open only during daylight hours, result in little additional traffic and do not need substantial parking.

Mixed Use Office/Business/Commercial. The Mixed Use/Office/Business/Commercial classification provides for appropriate areas wherein a mixture of compatible business, commercial and office uses may be co-located on same or adjacent sites. This classification envisions larger sites, developed as master planned, mixed-use parks wherein development standards for access control, parking, landscaping architecture, lighting and signage are tailored for the particular development project as part of the master plan concept.

Limited Commercial. The Limited Commercial land use classification includes properties located outside of the Central Business District and the Highway Commercial area (described earlier) where existing limited industrial, commercial and/or business activities are currently being conducted. These properties are historically recognized commercial or business destinations that have adequate land area for the existing and potential uses and adequate vehicle access, including for limited truck traffic. Considering surrounding land uses these existing businesses pose minimal threat of adversely affecting neighboring properties. The Town does not intend to substantially increase the land area in this land use category but does intend for the existing uses to

continue and to be allowed to expand in compliance with existing standards. In addition, appropriate infill and redevelopment will be permitted.

[Added 01/10/2007 by Resolution 2007-01-01]

Industrial

Industrial development includes activities such as processing, manufacturing, assembly, and storage of bulk commodities. This land use can be described in two broad classifications, heavy and light industrial activity. Future industrial land use may include mineral extraction.

Heavy Industry. The uses include activities characterized by the operation of heavy equipment, manufacturing or assembly of durable goods, and handling or storage of materials in bulk quantity. It is typically separated from other land uses in a community and has optimum access to major highways and other transportation routes.

It is recommended that heavy industrial activity and development remain in the area north of US Route 40. Future heavy industrial should be located at appropriate locations in the US Route 40 and MD 272 corridors where optimum access to major highway routes are available.

Heavy Industry - Mineral Extraction. Currently no mineral extraction uses are located within the corporate limits, nor does the Town zoning ordinance permit such uses in any zoning district. However, the potential exists for the Town to annex land underlain with mineral deposits. Some of this land may be suitable for mineral extraction operations. The potential for mineral extraction uses on land annexed by the Town will be considered at the time annexation is proposed. If the Town determines that it is in the best interest of the Town to permit such uses, the Comprehensive Plan and implementing ordinances will be amended to establish appropriate policy concerning mineral extraction and the zoning ordinance will be amended to provide for mineral extraction uses that comply with acceptable standards for operation and reclamation.

Light Industry. The uses include activities such as processing, manufacturing, or assembly of soft or non-durable goods. Light industrial uses may be located in the Route 40 corridor at those locations where there will be little or no adverse impacts on existing commercial and/or residential land uses.

Strict performance standards should be required for all industrial uses along major highway corridors. For example these uses should be heavily screened behind landscape buffers. To the maximum extent possible, existing trees and vegetation should be incorporated into these landscaped buffers. The Town must strive to protect the North East River and North East Creek from the undesirable effects of industrial development, as it is a major recreational and scenic asset to the Town and a source of drinking water. North East should work with the County to insure appropriate regulation of all industrial activity, particularly industrial uses located in the Chesapeake Bay Critical Area.

Public/Semi-Public

Public land uses cover a variety of uses for the health, education, safety, and general well-being of the public (e.g. Town offices, post offices). They affect both the living and working environment of all residents. Once the desired living and working activities are described in the other land use sections, the Town must determine what its responsibilities are in accommodating these land uses and determine how to meet these responsibilities. The utilization of lands for public use, then, supports the planning of residential, commercial, and industrial development.

For purposes of this report, public land uses are defined as those uses, which are owned and controlled by a public body for use of or service to the general public. Semi-public uses are those which are owned and controlled by a private or civic group for the purpose of aiding in the health, education, safety, or general well-being of the public or segment of the public.

It is recommended that North East ensure that public facilities and services are available to all portions of the Town. Semi-public services, which are owned privately yet considered as meeting a need of the general public, should be guaranteed to be accessible for reasonable public uses. Semi-public facilities which are not available to the general public should not be included in the inventory of public services.

Public services can only be provided according to the community's ability to support the service. Those services that are provided should be utilized to their fullest, including using public lands for multiple purposes.

Park and Open Space

Park and open space includes public-owned park land, school athletic fields, and common open space in residential subdivisions. Public park and recreation land and facilities are discussed in Chapter 4, Community Facilities.

Potential Future Growth Areas

Annexation and Growth Management

Expansion of the corporate limits through annexation process will be carefully planned to ensure that growth is contiguous to the existing boundaries as to prevent scattered development. The cost-effective provision of roads, water facilities and other public services cannot be assured without a clear means of managing growth. This means directing growth to specific areas where development infrastructure already exists or where it is planned to be provided in the future and away from areas where it does not exist and/or is not planned in the future. In the case of existing settlements where development has already taken place but public facilities are lacking, the Town will only consider annexation when it has been determined that it is cost effective for the Town to do so.

When considering annexation, the Town will select areas with sufficient land for development purposes in order to accommodate growth without adverse environmental repercussions. Furthermore, the Town will select areas readily serviceable with Town water and County sewer infrastructure. North East will also consider the interrelatedness of land uses and how these land uses collectively contribute to "quality of life" in the community.

The areas that North East officials have identified as "potential future growth areas" are shown on Map 3. This is a general map that encompasses areas that may or may not be annexed by the Town of North East. When considering annexation, the Town will review each application on a case-by-case basis to determine if the short and long term fiscal benefits of the proposed land use will offset any anticipated impacts.

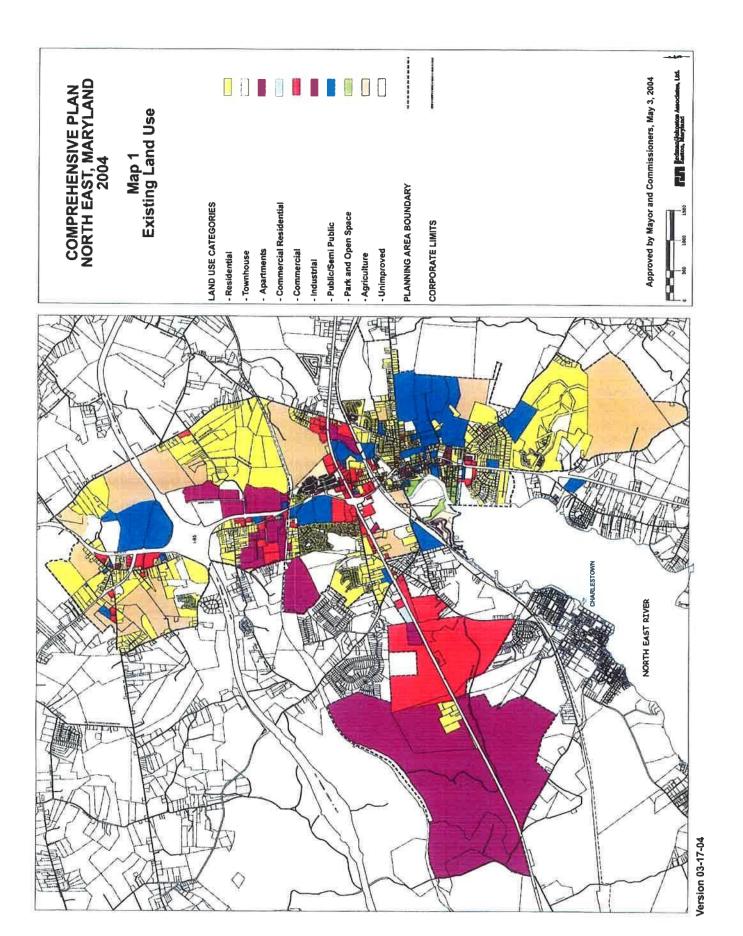
Map 3 divides the planning area into several land use classifications which are described as follows:

Existing Settlements – Existing settlements includes areas where the land use has already been established. It includes existing residential enclaves of varying lot sizes and existing commercial uses.

Potential Future Growth Areas – This land use classification includes large undeveloped tracts as well as developed tracts that may be redeveloped in the future. These areas are further classified as follows:

- Planned Neighborhoods The Planned Neighborhood category includes land that is potentially suitable for development as new residential neighborhoods following "smart neighborhood" principles discussed in the Land Use Recommendations section.
- Marine Commercial The Marine Commercial category includes land that may be suitable for development of new water-dependent facilities.
- Mixed-Use (Business, Commercial and/or Industrial) For the most part, this
 category encompasses land that is currently zoned for or in commercial and/or
 industrial use. These properties, located along major transportation corridors,
 lend themselves to industrial and employment uses.

The land use classifications shown on Map 3 do not imply that the Town will annex these areas or zone the property according to the land scheme shown on Map 3 at the time of annexation. The appropriate zoning for annexed properties will be determined in light of the results of a fiscal impact analysis and in consideration of such factors as neighboring land uses, access, existing or planned capacity of community facilities and services and highway capacity.



Reserved.

Chapter 3

Transportation

Overview

The movement of people and goods is an important concern to the Town of North East, making the Transportation element especially significant. Providing a safe and efficient transportation network with minimal disruption can sometimes be difficult to achieve. The Transportation element must be closely coordinated with other elements of the Plan to ensure that transportation plans and policies complement and promote those of other sections.

The North East Municipal Growth Element identifies suitable areas for municipal expansion and establishes a two-tiered priority for growth and development. Those priority areas and the uses identified for those tracts combine to determine where additional study and evaluation of existing and future transportation capacity should be focused.

The goals and objectives listed below provide guidance regarding the Town's desire to enhance the safety, convenience, and functionality of existing facilities and future system expansions and improvements. Building upon the goals and policies in the 1992 Economic Growth, Resource Protection, and Planning Act, more recent State legislation addressed priorities for public investments in infrastructure; linking infrastructure capacity to priorities for targeted future growth; and expanded planning visions that address quality of life, sustainability, public participation and community design. A package of Bills, collectively known as the Smart and Sustainable Growth Act of 2009, strengthened required consistency between Plan content and implementation ordinances. The 2009 Act requires documentation about local efforts to address Plan goals and implementation of the twelve Planning Visions through revised annual reporting to the Maryland Department of Planning (MDP) on a uniform set of smart growth measures and indicators.

Goals

- Improve the safety and security of the Town's transportation infrastructure.
- Provide a functional road and street system for the safe, convenient and efficient
 movement of people, goods and services among places of residence, employment,
 shopping and recreation and provide a circulation system which is compatible
 with and promotes the logical and rational development of the Town of North
 East.

¹ 1997 Priority Funding Areas Act and House Bill 1141 of the 2006 Maryland General Assembly

- Maximize the desired use of transportation systems while minimizing possible negative effects upon the neighborhoods, the environment, and the general public.
- Expand transportation options to include scheduled passenger rail service.
- Provide for more and easier bicycle travel within and through Town.
- Improve the mobility and access of pedestrians and bicyclists in the Town without adding to congestion, creating unsafe conditions, or requiring construction of major alternative routes.
- Expand opportunities for intermodal access and use of public transit services by pedestrians and bicyclists.
- Develop a transportation system that is safe, attractive, and gives careful consideration to its relationship to the land and the developed areas.
- Find ways to improve access to and between water-borne modes of travel and travel options on land.
- Incorporate an environmental stewardship ethic into transportation planning activities within North East and the North East Growth Area.
- Use creative funding opportunities to implement transportation goals and objectives.

Objectives

- Ensure the traffic-carrying capacity of the three major routes serving the Town (US Route 40, MD 272 and MD 7) are protected in the event of future development.
- Improve access to and movement and parking within the Central Business District.
- Provide a street and highway network integrating the Town, County, and State roads into an efficient transportation system that expands system capacity in support of adequate public facilities necessary to accommodate future growth at a minimum expense to the Town.
- Minimize the adverse effects of vehicular traffic on local residential streets when reviewing new development in the vicinity.
- Maximize the capacity, safety, and efficiency of the existing street and highway system.

- Coordinate land use and transportation planning to better promote smart growth patterns.
- Coordinate with the State Highway Administration and Cecil County Public Works Department to identify high rate accident locations by mode and time of day to determine potential system safety improvements within North East and the North East growth area.
- Track accident locations over time to evaluate the success of traffic system improvements in reducing accidents at high rate accident locations.
- Expand the Town's system of sidewalks and pedestrian paths and create linkages with regional pedestrian ways.
- Link existing and planned pedestrian improvements to the system of pedestrian trails that exist in the vicinity of North East, with priority on connecting to the Elk Neck Trail and providing connectivity into the Town Park.
- Cooperate with Wilmington Metropolitan Planning Council (WILMAPCO), Cecil County, and surrounding communities to create a regionally interconnected network of bicycle routes that also serves the needs of residents and visitors within North East.
- Increase pedestrian-scale lighting in high foot traffic locations [like the central business district and within and near high density residential areas, including municipal parking lots] to improve safety and convenience and promote walking in the evening and after sunset.
- Add pedestrian lighting at transit shelters to increase safety and convenience for transit users in the evening and after sunset, especially in commercial and employment areas and other high volume foot traffic locations.
- Increase the number of bus transit stops [and the number of transit shelters] throughout existing neighborhoods and especially in commercial and employment sections of Town and the North East growth area.
- Improve public access to regional and intra-regional destinations by locating a passenger rail station within convenient pedestrian access of central areas of North East and provide pedestrian linkages to more distant neighborhoods.
- Provide a number of pedestrian and bicycle crossings across US 40 to link the northern and southern parts of North East in safe, convenient, and logical ways to enhance overall transportation safety and multi-modal access for all residents and visitors.

- Support transportation initiatives that further the Town's commitments to enhanced environmental quality and regional connectivity.
- Develop and adopt an emergency response plan that coordinates municipal staff with County and State agency first responders.
- Maximize access to and use of State and Federal transportation funds to address the transportation needs of North East.
- Use Maryland Program Open Space funds to implement desired pedestrian and bicycle routes, paths, and trails.

Existing Transportation Facilities

Highways

North East's location is conveniently accessible to travelers, by US Route 40, MD 272, and MD 7 all running through the Town's boundaries. Interstate 95 is also located adjacent to the Town's northern boundary at the Northeast Commerce Center. Traffic counts at permanent locations are collected by the Maryland State Highway Administration. Available traffic counts for the years 2004 through 2010 are included in a table at the end of this Chapter.

Trucking Routes

Major trucking routes that pass through North East and vicinity include Interstate 95, US Route 40, and MD 272. Interstate 95 and US Route 40 are the two major truck routes that impact North East. However, the section of MD 272 that links Interstate 95 to US Route 40 is subject to significant truck traffic. Trucks account for approximately 25 percent of the average daily traffic (ADT) volume on Interstate 95, a little over 5 percent of the ADT on US Rte 40, and a little over 23 percent on MD 272 (between I-95 and US Rte 40). (Source: State Highway Administration).

Rail Services

The Maryland Transit Administration (MTA) operates commuter rail service between Perryville and Penn Station in Baltimore City. The MARC rail service runs from Perryville to the MARC and VRE systems via Union Station in Washington, D.C., on existing Amtrak rail lines. North bound passenger rail service accessing the Northeast Corridor begins in Newark, DE. Efforts are underway to construct a new passenger station in Elkton consistent with the recommendations of the Track A Feasibility Study, Phase I recommendations, but completion is not expected before 2015.

Freight service is available via Conrail, Amtrak and CSX rail lines in Newark, Delaware, approximately thirteen miles east of North East. Amtrak passenger service is available in

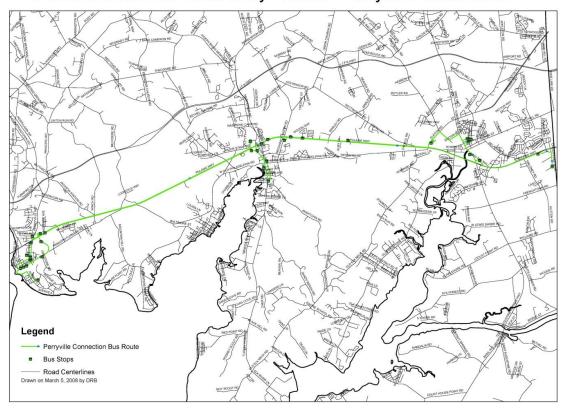
Perryville, about seven miles to the west of North East, in Newark, Delaware, and in Wilmington, Delaware, some 27 miles east of North East.

Transit Services

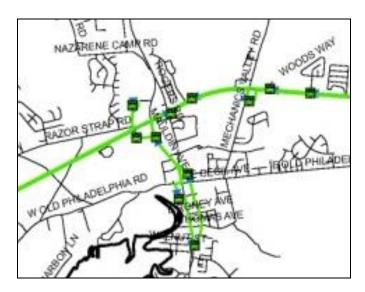
Cecil Transit (<u>www.ceciltransit.com</u>) provides bus service between Elkton, North East, and Perryville in both directions. The Perryville Connection is a fixed route public bus transit system in Elkton for all ages that begins at 6:00 a.m. and ends at 6:30 p.m. This connection travels between Elkton, North East, Perryville, the MARC Train and Perry Point V.A. Deviations may be made up to 3/4 mile for functionally disabled individuals with a C.T. Mobility Pass. To obtain a pass, individuals must make an appointment to be certified. All deviations must be scheduled in advance thru the Transit office. The C.T. Cruiser may be used in lieu of "The Bus."

The C.T. Cruiser service is provided by Cecil Transit and offers curb-to-curb service available on a first-come first-served basis and is available to the general public, seniors and persons with functional disabilities. For appointments, the County appreciates a two week notice, if possible. It may be necessary, at times, to reschedule appointments or have a layover to accommodate various routes. Hours of operation are from 8:00 a.m. – 4:00 p.m. Personal Care Attendants (PCA's) are required for any passenger needing assistance to board and disembark the bus or passengers who are in a wheelchair. Cecil Transit does not provide PCA's.

Senior Services & Community Transit - Perryville Connection



Existing Bus Stops in the North East area include:



RT 40-Charlestown Crossing RT 40-adjacent to Pat's Pizza NE-Mauldin Ave. & Jethro Street NE-Main St. 5 & 10 Antiques RT 40-after Ritchie Brothers RT 40-Belvedere Road NE-Walgreens/Food Lion NE-Mauldin Ave. & Cecil Ave.

Bus Shelters

Bus Shelters are located on US Route 40 at Stoney Run Apartments, at the North East Walmart, and at the south end of Town at Mauldin Ave. & Walnut Street.

Other Specialized Transit Services within Cecil County are provided by the following providers:

- Cecil County Activity Center
- Cecil County Health Department
- Cecil County Community College
- Chesapeake Care Resources
- Department of Social Services

- Maryland Rural Development Corp.
- Nazarene Adult Day Care
- SHARE Community Rehabilitation Program
- Union Hospital Medical Adult Day Care Center
- VA Medical Center

Inter-regional Greyhound Service

Greyhound buses stop at Elkton, North East and Perryville as part of a company program aimed at linking rural communities between Baltimore and Wilmington, Delaware. The buses, which also pick up passengers in Baltimore, White Marsh, Edgewood, Aberdeen, Newark and Wilmington, stop once daily in each direction at 1 E. Cecil Avenue by the Stop and Go.

Commuter Lots

The North East "Park and Ride" commuter lot is located off Peninsula Drive where the access road to the Peninsula Industrial Park meets MD 272 [approximately half way between I-95 and US Rte 40].

Sidewalks

There are approximately 10.2 miles of sidewalk within the Town of North East. An additional 4.9 miles of selected sidewalk additions have been proposed to fill in missing links and promote a more connected and cohesive pedestrian environment. A series of concept graphics (numbered 1 through 16) are included at the end of this Chapter that provides additional details.

Crosswalks

Stamped crosswalks are located on Main Street and are intended to provide traffic calming safety benefits. Other crosswalks throughout Town are currently thermoplastic over asphalt. Review and approval of stamped crosswalks or improvements that involve alternative materials to the normal thermoplastic used throughout most areas of Town require the review and approval by Mayor and Commissioners at the recommendation of the Planning Commission.

Pedestrian Trails and Greenways

A number of trails and related "green infrastructure" exist in the North East planning area and nearby locations that provide various degrees of connectivity to regional trails and greenways, both existing and planned. The most significant of these from the Town's transportation perspective include a section of the East Coast Greenway and a section of the Mason-Dixon Trail System.

Pedestrian trails have not been formally designated within Town limits. However, planning is underway to connect existing pedestrian routes and sidewalks to various trail systems in the area, and a connection between Cecil Avenue in the vicinity of Mechanics Valley Road and the Town's waterfront park is being contemplated, subject to more detailed study.

Bicycle Routes

There are currently no designated bicycle routes within the Town of North East. WILMAPCO is working on a regional county-wide bicycle plan which will provide further input and guidance for Town efforts to designate future bicycle routes and potential bicycle related improvements. The Town is a participant in the regional bicycle plan process and will incorporate those routes that are eventually designated that may pass through North East.

Water Transportation

There is a municipal pier at the Town Park that provides access both to and from boats. The Park also contains a canoe and kayak launching ramp. The Park serves as a connecting link

between water and land transportation networks and provides access and connectivity to the central business district and other areas in Town.

Streets and Highways - Functional Classification System

The basis of a long-range street improvement program is a system of classification of the function or level of service the streets and highways are designed to serve. The development of a functional classification system allows for the logical coordination of the system of the State highways and local streets in and around North East. The following identifies major road classifications applicable to North East (see Map 4).

Arterial Highway. Arterial highways are the highest level of highway service and carry large volumes of regional and interstate traffic. The primary purpose of the arterial highway is to provide continuous and efficient routes for the movement of high volume traffic between towns or major traffic generators, particularly those of intra-state or inter-state nature. Direct access to adjoining land should not be provided, except at certain key points. Arterial highways are designed to maintain homogeneous neighborhoods and to serve as boundaries between various neighborhoods. On-street parking should be prohibited on principal arterial highways. In the North East area, US Rte 40 is considered to be the principal arterial and MD 272 (and Main Street) a minor arterial. In 2010, the average daily traffic on US Rte 40 was 21,671 vehicles per day west of MD 272 and 30,901 vehicles per day east of MD 272. MD 272 had an average daily traffic of approximately 19,080 vehicles per day between US Rte 40 and I-95 and 7,470 vehicles per day near the Town limits on the south end of Town. A detailed summary of average annual traffic counts in the North East area for the years between 2004 and 2010 are presented in a table at the end of this Chapter. Counts are collected and reported from permanent traffic count stations at selected locations by the Maryland State Highway Administration.

Collectors. Both major and minor collectors serve a similar function, though they vary in volume and intensity of use. The primary purpose of the collector system is to collect traffic from local residential streets and provide for the direct movement of traffic to commercial and industrial areas and the arterial highways.

Major collectors connect areas of relatively dense settlement and often provide access to major uses--industrial, commercial, and residential. These streets are intended for inter-neighborhood and thru traffic. MD 7 is a major collector in North East that connects major residential areas and the arterials. In 2010, MD 7 had an average daily traffic of approximately 2,371 vehicles per day at station B1606 (just west of Town).

Minor collectors link local function roads to higher order roads, provide direct access to abutting properties, intercept minor streets, and connect with community facilities to serve neighborhood traffic. In North East, Mechanic's Valley Road and Irishtown Road fall under this category. In 2008, Mechanics Valley Road in the North East area had an average daily traffic of approximately 879 vehicles and Irishtown Road had an average daily traffic of 317 vehicles.

The Thomas Avenue and Cemetery Road connection between South Main Street and Cecil Avenue/MD 7 also serves as a minor collector route, but no traffic counts are available from the

Cecil County Department of Public Works.

There currently exist approximately 4.4 miles of State highway within the Town of North East.

Local Streets. Local streets, including cul-de-sacs, are intended primarily to provide access to abutting residential property and are designed to discourage their use by thru traffic. Such streets assume light traffic flow. All Town-owned streets fall into this category, except Lums Road. Nazarene Camp Road will in all likelihood change in character from a local street to a minor collector, following construction of North East Commons shopping center and connection with a redesigned and signalized intersection at MD Rt. 272 and Rogers Road (as illustrated on Concept Graphic G-7).

There currently exist approximately 12.75 miles of local streets within the Town of North East.

Alleys. The Town permits alleys in new developments. Alleys can provide numerous benefits when properly laid out, landscaped and maintained. They often provide useful access and support in commercial areas for loading and unloading and provide an additional point of lot access, as well as useful locations for utility corridors and refuse collection. When used in conjunction with rear loading garages, alleys reduce curb cuts on the streetscape, increase opportunities for on-street parking, and enhance the visibility of the streetscape.

<u>Level of Service (LOS)</u>

The ability of a roadway system to carry traffic is qualitatively measured as Level of Service (LOS). LOS can be determined at any given intersection or on any given segment of road and is based on the ratio of volume to capacity. Levels of service are often utilized as a measure of system performance and to define public policy concerning highway performance. They are also used in traffic impact analysis to determine local traffic impacts of proposed developments. Highway LOS reflects driver satisfaction with a number of factors that influence the degree of congestion, including speed and travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience, and delays. Six levels of service are used to describe highway flow conditions (road segments and intersections).

Commonly accepted definitions for each category are:

LOS A represents a free flow where individual users are virtually unaffected by others in the traffic stream.

LOS B is in the range of stable flow, but the presence of other users in the traffic stream begins to be noticeable.

LOS C is also in the range of stable flows, but marks the beginning of the range of flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream.

LOS D represents high density but stable flow.

LOS E represents operating conditions at or near the capacity level.

LOS F is used to define forced or breakdown flow.

For planning purposes, LOS "C" or better is acceptable on most roadways and at intersections. In urban areas LOS "D" is acceptable during the peak hours of use. According to information published by WILMAPCO, current and future "level of service" issues have been identified on MD 272 between MD 7 and I-95.

Cecil County and relationship to the Town of North East transportation plans

There is a compelling need to improve planning for transportation system improvements in the North East planning area. Cecil County's planned growth area overlaps with that of North East, and it is critical that development [and supporting infrastructure improvements] be coordinated to ensure efficient and effective implementation of overall comprehensive planning and growth management. The scope of current traffic impact analyses required should include the consideration of all potential impacts upon Town streets and the cumulative incremental impacts of increased traffic as a result of the County and Town Growth. Coordination of the County and Town to evaluate the transportation system improvements is imperative to support the build-out of the planning area and to develop coordinated strategies to address future mobility needs.

Coordinated reviews of major site plans and subdivision proposals within the North East planning area and adjacent County growth areas should include a formalized notification process so that concerns, including mutual input by staff in the review of traffic impact analyses and related discussions of infrastructure impacts generally, can be efficiently conducted. Such coordination would be a logical extension of the cooperation between the County and Town on road standards and stormwater management issues.

WILMAPCO and relationship to the Town of North East

WILMAPCO is the Metropolitan Planning Organization (MPO) for Cecil County, Maryland and New Castle County, Delaware. WILMAPCO is charged with planning and coordinating transportation investments for this region. WILMAPCO's mission is to create the best long-range transportation plan, one that meets all requirements of the Federal Clean Air Act and its Amendments and the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users.

WILMAPCO's decision-making body is its nine-member Council, consisting of representatives from:

- Delaware and Maryland Departments of Transportation
- Delaware Transit Corporation
- Cecil and New Castle Counties
- Appointee of the Delaware Governor
- Cecil and New Castle County Municipalities

A Public Advisory Committee and a Technical Advisory Committee advise the Council on key decisions. The Technical Advisory Committee is, in turn, assisted by specialty subcommittees around these topics: air quality, data and demographics, congestion and non-motorized transportation.

Four documents comprise the backbone of WILMAPCO's planning efforts: the Regional Transportation Plan (RTP), the Transportation Improvement Program (TIP), the Unified Planning Work Program (UPWP) and the Congestion Management Process (CMP). Numerous other regional and sub-regional studies, planning support to local planning agencies, and extensive public outreach processes work to inform and implement these documents.

WILMAPCO's 2040 RTP has three goals, each with associated objectives. Actions are also identified to carry out the objectives. The goals and objectives of the 2040 RTP are:

Improve Quality of Life

- Protect the public health, safety and welfare
- Preserve our natural, historic, and cultural resources
- Support existing municipalities and communities
- Provide transportation opportunities

Efficiently Transport People

- Improve transportation system performance
- Promote accessibility, mobility, and transportation alternatives

Support Economic Growth, Activity and Goods Movement

- Ensure a predictable and adequate public investment program to guide private sector investment decisions
- Plan and invest to promote the attractiveness of the region

The TIP is a four-year listing of all federally-funded transportation projects in the region. It is updated annually. The UPWP is the annual work program for WILMAPCO, listing the funding set aside for projects. The CMP tracks congested highway corridors in the region, and offers a specific matrix of alternatives to relieve congestion in each corridor.

Specific to North East, key financially-reasonable transportation projects listed in the 2040 RTP include: bus connection from Cecil College to North East (2012 in-service), Saturday bus service

(2012 in-service) and MD 272: US Rte. 40 to Lums Rd., two to four lane divided (2020 inservice).

WILMAPCO undertook the *Track A, Phase II Extension Feasibility Study* in 2005 to examine the ridership, economic development and engineering feasibility of extending rail track A from Elkton to Perryville. As a follow up to the 2005 Study, North East was invited to participate with WILMAPCO in the *Cecil County Chesapeake Connector Freight and Passenger Rail Benefits Study* in 2011. This study will address the benefits of added track capacity on Amtrak's Northeast Corridor on the segment between Prince and Bacon Interlockings in Cecil County, for a distance of approximately 6.3 miles.

If implemented, this project would eliminate a gap in commuter rail service and a bottleneck in freight rail service along the Northeast Corridor between Perryville and Newark, Delaware. It would support North East's objective to re-establish commuter rail service in the town.

WILMAPCO partnered with the Town of North East in 2011 to perform a Transit Oriented Development Plan which, among other modes of transportation, will identify potential location(s) for a future train station and development scenarios for the station area to support the planned train station.

WILMAPCO's FY 2012 UPWP includes this work, along with support for the Town's update to subdivision regulations and road code revisions, along with funding to update the transportation and land use maps featured in this comprehensive plan. Further, a Cecil County Bicycle Plan will address the need to plan for bicycle facilities in North East, as well as in other incorporated and unincorporated communities across the county. WILMAPCO asked the Town to join in the County-wide bike plan in 2011. As the County-wide bike plan evolves and is adopted, the Town will be able to ensure ongoing coordination and regional cooperation and consistency.

The Town of North East is committed to continued close coordination between the Town, WILMAPCO, the Maryland Department of Transportation and Cecil County and the towns of Perryville, Charlestown, and Elkton as pedestrian, bicycle, and rail planning moves forward in expectation of a fully integrated multi-modal transportation system that links North East with destinations throughout Cecil County's growth corridor, as well as locations in Delaware and Maryland, south and west of the Susquehanna River.

Existing detailed planning

Transit-oriented Development (TOD) Feasibility Study

Transit-oriented development (TOD) is a mixed use residential and commercial area designed to make public transit successful, walking and bicycling convenient and safe, and provide for a vibrant, livable community. Within North East, Maryland there is currently fixed route Cecil County transit and interregional Greyhound bus service which could be supported through TOD. In addition, the WILMAPCO 2040 Regional Transportation Plan and MTA MARC Growth & Investment Plan call for the extension of commuter rail from Perryville to Elkton, MD or Newark, DE. In addition, the Cecil County Transportation Development Plan calls for a future

express bus stop in North East with service between Newark and Aberdeen, MD and an extension of bus transit within North East. The Town supports these proposals and feels that the future passenger rail station and a bus station should be collocated to maximize transit services and intermodal efficiencies. With the introduction of transit-ready development, North East could promote the feasibility of having a station along this extended rail service. Enhancing use of and access to existing and planned bus transit and promoting TOD around a future station area is a critical component of North East's plans to further economic development and provide greater travel choices to this rapidly growing area.

This project seeks to contribute to the revitalization of the traditional and historic community of North East with the improvement of the community's transit-served areas and potential future train station. North East's compact mix of housing, businesses and institutions offers a unique opportunity to bring together all the characteristics that comprise a Transit-Oriented community. Improved, convenient access by transit, walking and bicycling is essential, as is preparing for vehicular access needs and parking. Implementation of a transit corridor and train station improvement plan will strengthen North East's identity and focus attention on its function as a transit-oriented community. Additional bus stops, expanded bus routes, and a collocated intermodal terminal will further enhance transit opportunities and encourage ridership. WILMAPCO's Cecil County Bicycle Plan initiative will coordinate with the Town's detailed TOD planning project and also help inform ongoing trail planning efforts.

Master Vision Plan

The feasibility study will result in a concept plan for existing and planned transit corridors and potential train station site. The plan will include all necessary roadway improvements, upgraded pedestrian, bicycle and bus amenities, expanded automobile parking areas and new rail facilities. The plan will address the potential for Transit-Oriented Development/Transit-Ready Development along transit corridors and at the identified train station site.

Traffic Circulation, Transit Access and Parking Plan

The station also has the potential to serve as a transit hub for existing bus transit service. An internal circulation plan will be included that will limit automobile and bus interaction. The bus travel path will be designed to limit exposure to automobile parking areas. Station parking will also be identified. In addition, pedestrian and bicycle access to the station site and bus stops will be identified.

Transit Supportive Land Use Recommendations

The plan will include development scenarios for the station area to support the planned train station. The current inventory of infrastructure and land use will be assessed to determine how it supports a TOD development project. Land use recommendations will consider market demand for retail and higher-density housing and employment. Analysis will examine impacts of existing zoning [such as lot coverage, setbacks, and height limits] which may make transit supportive land use difficult to achieve and lead to recommendations for new land use policies, as required. Land use recommendations will promote the location of key services near the planned station to

accommodate transit users. Mobility friendly design will be applied near bus stops.

Transportation Planning and Programming

The primary agency responsible for implementing major transportation improvements in the North East area is the Maryland Department of Transportation (MDOT). MDOT meets with local officials each year to review capital project priorities in Cecil County. These projects are then programmed in the MDOT's six-year Consolidated Transportation Program (CTP).

State Priorities for Local Improvements

Consolidated Transportation Program (CTP)

The Maryland Department of Transportation develops the Consolidated Transportation Program (CTP) to detail the ongoing and new capital programs to be implemented over a six year period. Projects are categorized by modal, such as highways, transit, aviation, etc. Each project approved by MDOT progresses through five funding stages: planning, design, right-of-way acquisition, utilities and construction.

Projects in North East in the 2012-2017 CTP:

• Reconstruction of the MD 272 bridge over Amtrak (currently in design)

Annual Tour

As part of the coordination that occurs between MDOT, Cecil County and the Town of North East, State officials meet annually with local officials in what has become known as "the annual tour." The purpose of the tour is to facilitate face-to-face interaction between the State and local officials to help ensure understanding and agreement about the projects that will be included in the annual update of the CTP. It also affords an opportunity for local officials to directly comment on aspects of the proposed projects and also suggest projects and priorities that are of local concern. While interjurisdictional coordination is ongoing at the staff level, this formalized tour structure helps ensure that elected officials have the opportunity to communicate directly with the senior officials at MDOT on an annual basis.

Highway Needs Inventory (HNI)

The Maryland State Highway Administration (SHA) identifies long-term projects in the Highway Needs Inventory (HNI). The HNI is not fiscally constrained and contains projects that are beyond the CTP's six year period. The HNI lists the following projects that could impact future development in North East:

The HNI referenced in the 2010 Cecil County Comprehensive Plan identified MD 7, from Charleston to MD 272 as needing two lane reconstruction. That project should also consider the widening of the bridge adjacent to North East Isles over North East Creek to facilitate a bicycle and pedestrian pathway. The current configuration of the bridge does not appear to include

sufficient space to avoid a "bottleneck" for motor vehicles, bicycles and pedestrians using the bridge.

The County Plan also identified MD 272 north of couplet to US Rte. 40 as requiring multi-lane urban reconstruction and US 40 to Lums Road requiring divided highway reconstruction. Design of these projects should include pedestrian crosswalks that have been identified on the pedestrian system graphics included at the end of this Chapter. The draft Cecil County Bicycle Master Plan identified MD 272 from its intersection with Old Elk Neck Road north through the Town of North East and all the way to the Pennsylvania State boundary as a proposed on-road bicycle route.

Complete Streets

SHA is in the process of adopting a Complete Streets policy. The Complete Streets approach includes planning and designing our roads to safely accommodate all users including pedestrians, bicyclists, transit riders, emergency vehicles, people with disabilities, and the elderly. The policy also strives to achieve a roadway section that includes space to accommodate not only the physical roadway, but stormwater management features that meet the new Maryland Department of the Environment regulations, bus stops, utility easements, and other features identified in site plans along the roadway frontage. These features are incorporated using a context-sensitive planning and design approach that involves members of the community as projects are developed. The result will be a transportation network that balances safety, accessibility, community cohesion, effectiveness and reliability for all users and has the support of residents and officials.

Level of Service Policy

A Level of Service policy establishes a basis for evaluating proposed development plans and projects against the LOS that the Town and County seek to achieve or maintain as growth occurs. These criteria are used to evaluate the transportation system impacts of proposed development and the Municipal Growth Element (as described in Chapter 9), to evaluate alternative transportation plans, and to determine capital requirements.

The recommended minimum LOS for developments in North East and the County's adjacent growth areas is LOS C for off-peak periods and LOS D during peak hour conditions. Potential LOS deficiencies below those standards on major roadways would prohibit future development adjacent to these roadways. However, new development in such areas could be approved where those adverse effects are mitigated by the developer.

The Planning Commission should consider adopting minimum acceptable LOS standards that would be made part of the development approval process. Additional tools that could be evaluated from time to time include threshold criteria for requiring Traffic Impact Studies (TIS), an Adequate Public Facilities requirement for roadways that incorporate LOS standards, or direct incorporation of the LOS standards into Zoning and/or Subdivision ordinances. The Town should coordinate its approach (and development review process) with the State Highway Administration and with Cecil County. This would enable the Town and County to consistently require traffic studies and to require improvements if post-development impacts on a

transportation facility (roadway or intersection) will exceed the minimum LOS standards, or to amend development proposals that would exceed LOS standards regardless of mitigation.

A coordinated approach would help ensure that major traffic generating projects reviewed by the Town would receive County input in a timely manner and vice versa. To ensure acceptable Level of Service on regional arterials and to improve connectivity, road system upgrades and expansions should focus on the following key objectives:

- Improving north-south connections on MD 272 between US Rte 40 and I-95.
- Increasing connectivity within the North East Growth Area to provide alternate route options and minimize congestion. This could include site specific long-range planning for the employment areas within the western portions of the Growth Area.
- Working with the State Highway Administration and the Maryland Department of Transportation, Cecil County and WILMAPCO to incorporate bicycle, pedestrian and transit improvements to promote and maximize alternative means of transportation to reduce congestion and improve air quality.
- Incorporate the conclusions and recommendations of the Chesapeake Connector Study, the WILMAPCO Cecil County Bicycle Plan and Town and County Transit Development Plans into an Action Plan that can be used to leverage future funding opportunities.

WILMAPCO

Priorities for upgrades to Cecil County's road network are also influenced by regional planning conducted by WILMAPCO. WILMAPCO used Maryland's Upper Eastern Shore regional travel demand model to evaluate anticipated traffic impacts based on assumptions in the Cecil County's Future Land Use Plan. The model assumed that WILMAPCO's Regional Transportation Plan improvements would be in place by 2030, as would the County's 2007 Roadway Improvement Strategic Plan improvements. Based on these improvements and projected population, household, and housing units, the model determined future peak hour² LOS for major roads in Cecil County.³

Results of this modeling suggest that MD 272 from US 40 south through Town will approach or equal LOS F as will MD 7 from MD 272 east to Mechanics Valley Road.

² Peak hour refers to the hour or hours of maximum traffic volume. In Cecil County, this occurs during the evening commute period.

³ For more details on the transportation model, methodology, and findings, please see: Transportation Modeling Methodology in the 2010 Cecil County Comprehensive Plan Appendix.

Maryland 272 is presently programmed in the WILMAPCO long range plan for improvements. This is consistent with the future travel demand for the facility. The roadway is anticipated to fail by the design year (2030), carrying approximately 30,000 vehicles per day. In order to meet the future demand, the roadway should be widened to four lanes from I-95 to US Rte. 40 or to the beginning of Main Street. The State Highway Administration has recommended that the widening of MD 272 should terminate at the US Rte 40 intersection to avoid widening through the downtown of North East.

Transit Oriented Development Plan (TOD Plan)

WILMAPCO has prepared a scope of work on behalf of the Town of North East for the preparation of a Transit Oriented Development Plan. Transit-oriented development (TOD) is a mixed use residential and commercial area designed to make public transit successful, walking and bicycling convenient and safe, and provide for a vibrant, livable community.

Fixed route Cecil County transit and interregional Greyhound bus service exist within North East and could be supported through enhanced TOD. In addition, the WILMAPCO 2040 Regional Transportation Plan and the Maryland Transit Administration (MTA) MARC Growth & Investment Plan call for the extension of commuter rail from Perryville to Elkton, MD and Newark, DE. In addition, the Cecil County Transportation Development Plan calls for a future express bus stop in North East with service between Newark and Aberdeen, MD and an extension of bus transit within North East. With the introduction of transit-ready development, North East could promote the feasibility of having a multi-modal station along this extended rail service. Enhancing use of and access to existing and planned bus transit and promoting TOD around a future rail station area is a critical component of North East's plans to further economic development and to provide greater travel choices to this rapidly growing area.

When finished, the TOD Plan will:

- Study the opportunities and land areas within North East to form recommendations for future land uses around existing and future transit locations;
- Identify potential location(s) for a future train station / transit hub location;
- Identify multimodal transportation needs related to existing and planned transit including vehicular access, bicycle and pedestrian circulation, parking and amenities.

Through these activities, the Plan seeks to:

- Promote future re-introduction of rail service to North East:
- Promote greater use of existing and planned bus transit;
- Enhance community character in the downtown;
- Improve regional access and local walking, bicycling, and transit services;
- Support local and state Smart Growth policies and economic development initiatives;
- Embrace the community history while preparing for the future;

• Help improve regional ambient air quality through the reduction of vehicle travel and traffic congestion in North East.

Chesapeake Connector

• The Chesapeake Connector is a WILMAPCO project which will address the benefits of added track capacity on Amtrak's Northeast Corridor (NEC) on the segment between Prince and Bacon Interlockings in Cecil County, Md. for a distance of approximately 6.3 miles. This section of the NEC is currently a two-track section in a corridor that is generally a three track railroad. Although this section of track is located in Cecil County, MD, it is one of Delaware's priority rail projects; and it is anticipated to provide both public and private benefits. In Amtrak's NEC Master Plan, existing two or three track railroad segments south of Claymont, DE, would be expanded to three or four tracks to enable intercity and commuter rail expansion in Delaware and Maryland; the Chesapeake Connector is cited by name as a priority project. The Town's Transit Oriented Development Plan will build upon Phase II of the Track "A" Extension Feasibility Study, sometimes referred to as the "Chesapeake Connector."

Cecil County Strategic Roadway Plan

The Cecil County Strategic Roadway Plan (SRP) analyzed AM and PM peak hour volumes to determine traffic impacts at key intersections. This analysis showed that the following locations are expected to operate at level of service "E" or worse: US 40/Red Toad Road, US Rte. 40/MD 272, US Rte. 40/Mechanics Valley Road; and MD 272/MD 7. The County's SRP also predicts that MD 272 from I-95 to Irishtown Road will operate at LOS E/F during the morning peak and LOS F during the afternoon peak. The SRP lists numerous resurfacing, restoration, and rehabilitation projects as well as intersection realignment projects at Razor Strap and Red Toad Road as well as addition of turn lanes at MD 7 and Mechanics Valley Road [including studying potential realignment with Cemetery Road].

The SRP also recommends that a streetscape study be conducted for US Rte 40 from Elkton through Perryville. Such a study should also address a variety of design, development, land use and safety concerns within the Town of North East.

The County envisions US Rte. 40 as the County's primary business corridor, a free-flow roadway that incorporates transit and bicycle/pedestrian facilities, and a connector between towns and nodes of development. That is consistent with North East's vision for the highway corridor as well.

Town of North East Transportation Projects

The Town of North East has its most direct control over new local roads, parking areas and the location and construction of new pedestrian improvements. New local roads are reviewed and approved through the site planning and subdivision processes under the oversight and administration of the Planning Commission and Town staff. New pedestrian improvements are

created through the private development of lands and through the planning and capital programming of publicly funded expansions within the existing public rights-of-way.

US Rte. 40 Corridor Intersection Improvements

Gateway

North East envisions a corridor streetscape that provides a visually appealing sense of place. Trees should be planted to provide shade. Lighting should be designed and placed to fit the character of the community while providing necessary elements of safety. Sidewalks should be defined to develop connections between areas north of US Rte. 40 and neighborhoods and destinations south of US Rte. 40 [to encourage pedestrian activity].

The creation of distinct parkway or suburban boulevard segments along US Rte. 40 through Town plus the establishment of special "gateways" at the entrances into North East will help identify and reinforce the land use and development pattern transitions along the North East portion of US Rte. 40.

- Pedestrian crossing from the North side of US Rte. 40 to the South side of US Rte. 40. Consideration of the following three locations: (please see concept plan graphics collected under: "Transportation Maps and Graphics" at the end of this Chapter.)
 - a. At the intersection of US Rte. 40 and Route 272
 - b. North East Station across US Rte. 40 to location of State Police Barracks
 - c. North Main Street Extended across US Rte. 40 to Rogers Road
- Sidewalk installation along the east side of Mauldin Avenue from Irishtown Road to the existing sidewalk at Church Street.

Rail and Transit

- Rail Service: Identify the transportation impacts of rail service to the town in relationship to the State Highway systems.
- Add North East as one of the stops for the extension of the existing MARC Penn Line commuter rail service.
- Prepare and Implement a Passenger Rail Station feasibility study.
- Add Transit Oriented Design (TOD) concepts and priorities to North East's transportation planning principles and practices.
- Create appropriate design guidelines and standards to implement TOD principles and practices.

State Roads

- East Cecil Avenue: Due to the condition of the road, the Town sent a letter dated March 24, 2011 to the State Highway Administration, requesting reconstruction of East Cecil Avenue.
- MD Route 272 State Highway Administration/Bridge over Amtrak Rail: Request for lighting to be installed for the safety of pedestrians.
- MD 7, from Charleston to MD 272 needs two lane reconstruction which includes widening of the bridge over North East Creek to facilitate a bicycle and pedestrian pathway.
- MD 7, Ridgely Forest impacts. State Highway Administration comments on the Revised Traffic Impact Study for the Ridgely Forest development notes that SHA will require a continuous 3-lane MD 7 left turn lane at both site access driveway intersections on MD 7. SHA will require the southbound Site Access Drive approaches at both access points to provide separate left and right turn lanes and has recommended that a site access connection to Deans Bank Lane and/or May Street be studied to reduce site traffic impacts at the MD 7/Mechanics Valley Road intersection.

The Traffic Impact Study included a Traffic Signal Warrant Study at the MD 7/Mechanics Valley Road-Cemetery Road intersection. The study determined that signal warrants would be satisfied and the Town of North East will require the developer to conduct a follow-up Traffic Signal; Warrant Study at the 50% and the 100% development stages (if not already warranted and deemed necessary by SHA at the 50% development stage). Geometric intersection improvements should be explored first to enhance intersection operations without the need for a traffic signal.

If a traffic signal and/or intersection geometric improvements are found to be warranted and deemed necessary by SHA, the Town will require the developer to design and install a traffic signal or turn lane improvements at the MD 7/Mechanics Valley Road-Cemetery Road intersection. Any necessary right-of-way to construct or install the improvements will be the responsibility of the developer.

• MD 272 north of couplet to US Rte. 40 requires multi-lane urban reconstruction and US Rte. 40 to Lums Road requires divided highway reconstruction. Design of these projects should include pedestrian crosswalks that are identified on the pedestrian system graphics included at the end of this Chapter. A bicycle path should also be included to augment pedestrian circulation.

Local Streets

The Town performs an annual assessment of the condition of its streets and sidewalks and includes planned improvements in the Annual Capital Budget. Projects included in the Town's Annual Capital Budget are selected from a priority list maintained by the Town Maintenance Department.

Parking and Coordination

Providing adequate parking in the appropriate locations is an important planning objective, especially in the Central Business District (CBD). Public parking facilities have been provided at two locations in the CBD (see Map 4) totaling approximately one hundred (100) spaces. An additional 100 spaces are available at the Park and Ride lot located at Peninsula Drive and MD 272, and public parking is provided at the Town Park at the foot of Walnut Street. The Town of North East recognizes the necessity for additional parking in the Central Business District and in the Village Commercial District and continues to explore opportunities.

The Town reminds all affected agencies that at such time as preliminary discussions occur between State, County and/or regional agencies regarding any of the above matters of mutual interest, that the Town of North East should be notified in a timely manner so that the Town's concerns and priorities will be included and efficiently addressed.

Pedestrian Improvements

The Town of North East is committed to a "pedestrian friendly" environment throughout Town. Existing sidewalks should be maintained and a list of projects ranked in priority order should be developed to address missing links in the system and extensions from the downtown core to new residential neighborhoods and major concentrations of commercial and especially retail commercial land uses fronting State highways within Town.

As a precursor to more detailed study and evaluation of opportunities and constraints, safety, and cost concerns, the Town has identified existing sidewalks and cross-walks and included graphics at the end of this chapter that identify preliminary priorities for pedestrian system extensions and enhancements.

In addition to new sidewalks, it is important to provide residents and visitors with safe and convenient access to regional pedestrian trails. A new link between MD Rt. 7 at the Mechanics Valley cross-walk and the Elk Neck State Forest and Park Trail [that runs south along MD Rt. 272 into Elk Neck State Park and on to the end of the peninsula] is identified on a graphic at the end of this Chapter. This new pedestrian linkage between the Town and the regional walking trail will provide both recreational and mobility improvements to the Town's residents and serve as a tourism enhancement and economic development tool.

Recommendations

General

Promote alternatives to driving alone and encourage the County and State to inform citizens of the public and private monetary and environmental costs of continued dependence on autos.

- The Town should support bicyclists and pedestrians by providing safe, convenient, and inviting routes and walkways between activity centers.
- In Central Business District, priority shall be given to building pedestrian friendly streets. This pedestrian orientation will create an environment where people will want to get out of their cars and onto the sidewalks and bike routes. This, along with appropriate zoning and other Town efforts, will encourage development and redevelopment.
- Sidewalks along Cecil Avenue should be extended to connect with the County's proposed Greenway.
- The Town should accommodate the safe and efficient movement of goods and people, acknowledging the importance of both functions to the long-term economic vitality and livability of the Town of North East.
- The Town should establish street designs for new development that will contribute to reaching the transportation and land use goals of the area, provide safe and efficient mobility for all people, and contribute to the quality of life.
- New collector and local streets will be built by developers according to the developer's site plan and Town specifications.
- The Town should require that the layout of new street connections in undeveloped areas assure connectivity to the overall Town street system.
- All developments should have adequate access and circulation for public service vehicles, but actual paved street sections should be as narrow as possible to maintain a human scale.
- The Town should work with the State and County to coordinate the land use and transportation elements of the Comprehensive Plan with adjacent jurisdictions.
- The Town should amend the zoning ordinance to require new large scale commercial, business and industrial developments to provide reserved parking spaces for carpools, vanpools, and bicycle racks at office and industrial sites to accommodate and encourage high occupancy vehicle (HOV) commuting and to support bicycle commuting and travel.
- Encourage the State, County, WILMAPCO and Amtrak to re-establish railroad service to the Town, with bus transit provided in the interim.

Commercial Streets

New local streets serving commercial land uses should provide safe and convenient access to the parcels they serve and be designed to preserve or improve existing access to parcels that may be impacted by the new street(s).

Strategies for improved development design and aesthetic appeal of infill and redevelopment projects are especially important along highway corridors (e.g., US Rte 40), in the central business district and at the future Town gateways. In the case of highway corridors, North East has adopted a special highway corridor overlay zone. The purpose of this overlay district is to protect and enhance the aesthetic and visual character of the Town and to provide for and promote orderly growth. The Highway Corridor Overlay District (HCOD) regulations supplement the regulations of the underlying zoning districts and help provide harmony and compatibility of development along the major highway corridors that serve as gateways to the community. The HCOD includes all lands within 500 feet of each side of the center line of the following rights-of-way: US Rte. 40, I-95, and MD 272 north of North East Creek.

Pedestrian and bicycle improvements within the HCOD will be guided by the design guidelines contained within Appendix A – Guidelines for Pedestrian Crossing Treatments in the Manual of Uniform Traffic Control Devices published by the national Cooperative Highway Research Program, Federal Highway Administration. The second principal source of design guidelines in use within North East will be the Maryland State Highway Administration – Office of Traffic and Safety (OOTS) document, "Accessible Pedestrian Signals-Design Guidelines." The Town of North East will also coordinate with the Assistant District Engineer for Traffic.

Residential Streets

New residential streets serving residential neighborhoods should be designed to ensure that the Streets provide:

- safe and convenient access for motorists, pedestrians, cyclists, and emergency vehicles
- maintain the integrity of the land uses and streetscapes they are serving;
- provide access within new neighborhoods and to adjacent neighborhoods, shopping areas, and schools;
- where possible, facilitate solar access alignment for residences;
- promote land use policies that minimize required local travel distances (e.g., between residences and work, schools, shopping and recreation); and
- reduce the land area devoted to local roadways to the minimum required for safety and efficiency.
- avoid difficult driveway approaches;
- promote safe, convenient pedestrian and bicycle travel;

Large-scale development projects

- Architectural harmony, including compatibility in styles, materials, colors, and building size and setbacks;
- Variety in housing types, density, and cost;
- Parks, squares, and other common open spaces for residents to interact and recreate, and to provide a setting for the architecture of the development;
- Neighborhood centers and civic spaces may include places to shop, work, learn, or worship;
- An interconnected street and sidewalk system which is based on a modified grid system;
- Sidewalks, street trees, and substantial on-street parking, providing distinct separation between pedestrians and traffic;
- Streets and sidewalks that are spatially defined by buildings in a regular pattern;
- The Town should amend the zoning ordinance to require new large scale commercial, business and industrial developments to provide reserved parking spaces for carpools, vanpools, and bicycle racks at office and industrial sites to accommodate and encourage high occupancy vehicle (HOV) commuting and to support bicycle commuting and travel.
- The Town should separate truck traffic from shoppers and employees where possible: and
- The Town should control truck loading and unloading that occurs on-street during morning and evening peak traffic periods.
- The Town should require traffic calming, including more narrow streets with shorter turning radii than typical residential streets, plus medians, circles and related features along prominent streets;
- Turning radius should be determined by the types of vehicles proposed for using the road.
- The Town should require lighting which is designed for safe walking and signage which has a pedestrian orientation;
- The Town should work with the State and County to coordinate the land use and transportation elements of the Comprehensive Plan with adjacent jurisdictions, and encourage the State, County, WILMAPCO and Amtrak to establish railroad service to the Town, with bus transit provided in the interim.

 A system of land subdivision and development which links one neighborhood or commercial site to another and can be logically extended by interconnected circulation, roads, and walkways.

Pedestrian and Bicyclist Improvements

Promote alternatives to driving alone and encourage the County and State to inform citizens of the public and private monetary and environmental costs of continued dependence on autos.

- The Town should support bicyclists and pedestrians by incorporating safe, convenient, and inviting routes and walkways along all State highways and between activity centers as an integral part of any roadway upgrade or reconstruction.
- In Central Business District, priority shall be given to maintaining pedestrian friendly streets. This pedestrian orientation will continue to promote an environment where people will want to get out of their cars and onto the sidewalks and bike routes. This, along with appropriate zoning and other Town efforts, will encourage infill development and redevelopment.
- In designing street improvements, the Town should accommodate the safe and efficient movement of goods and people, acknowledging the importance of both functions to the long-term economic vitality and livability of the Town of North East. This may require the physical separation of motor vehicles and bicyclists or pedestrians, especially in high traffic volume locations.
- The Town should establish street designs for new development that will contribute to reaching the transportation and land use goals of the area, provide safe and efficient mobility for all people, and contribute to the Town's quality of life.
- New streets should promote land use policies that minimize required local travel distances (e.g., between residences and work, schools, shopping and recreation); and reduce the land area devoted to local roadways to the minimum required for safety and efficiency.
- New collector and local streets will be built by developers according to this Comprehensive Plan, the developer's approved site plan and Town specifications.
- In commercial areas, new streets will be designed to separate truck traffic from shoppers and employees where possible, and control truck loading and unloading that occurs on-street [during morning and evening peak traffic periods].
- The Town will require that the layout of new street connections in undeveloped areas assure logical connectivity to the overall street and sidewalk system.

- All developments should have adequate access and circulation for public service vehicles, but actual paved street sections should be as narrow as possible to maintain a human scale.
- New local streets serving commercial land uses should provide safe and convenient access to the parcels they serve and be designed to preserve or improve existing access to parcels that may be impacted by the new street(s). Special needs and requirements may apply in the US Rte. 40 and MD 272 corridors.
- New residential streets serving residential neighborhoods should be designed to ensure
 that the streets provide safe and convenient access for motorists, pedestrians, cyclists, and
 emergency vehicles and maintain the integrity of the land uses and streetscapes they are
 serving.
- New residential streets should provide access within new neighborhoods and to adjacent neighborhoods, nearby shopping areas, and schools;
- New residential streets should, where possible, facilitate optimum solar alignment for residences;

Enhancing Walkability

Enhancing walkability and expanding pedestrian linkages between the Town's residential neighborhoods and the commercial districts remains a priority of the Town of North East. Factors currently affecting walkability within Town include the absence of buffers from traffic, the width of the existing sidewalks, the absence of existing sidewalks, and lack of right of way. The Town remains proactive to provide a walkable community that includes specific similarities such as:

- Short block lengths no longer than 500 feet with few exceptions.
- Frequent crossing opportunities at least every 300 feet near pedestrian trip generators such as schools, parks, libraries, shopping centers, and hospitals.
- A variety of land uses within walking distance of one another including neighborhoods within 1/4-1/2 mile of a transit stop, shopping centers, restaurants, public facilities, parks and employment centers.
- General enhancements of pedestrian amenities include street trees, pedestrian lighting, pedestrian oriented building facades, way finding signage, benches, trash receptacles, water fountains, and newspaper racks. Consistency in design and placement is encouraged in both residential and commercial areas.
- Wide sidewalks with buffer zones sidewalks at least five-six feet wide with six-foot planting strips may be appropriate especially if future intensification of commercial and mixed uses occurs along MD 272 on the south end of Town.

• Compact intersections – with short crossing distances and longer time cycle lengths for pedestrians where pedestrian signalization is in place.

Pedestrian Capital Improvement Program

A capital improvement program will organize, set project priorities, and provide preliminary cost estimates and identify potential funding sources for implementing the pedestrian plan. It is the Town's intent to develop a capital improvement program for pedestrian improvements.

Elements:

- Consolidated list of all proposed pedestrian improvement projects consistent with concept graphics #1 through #16 at the end of this chapter.
- Set priority or phasing for the implementation of each improvement
- Estimated cost of each project
- Anticipated source(s) of funding for each project

Each project listed in the pedestrian CIP should be assigned an implementation phase or a priority. This enables those implementing the plan in the future to select projects that will provide communities with maximum benefits in an equitable way within funding constraints. The pedestrian CIP should be as specific as possible, listing the total cost by year, for the first five years of the plan. However, the CIP should also be a flexible and dynamic document, and it may prove useful to estimate the total costs for later project phases that extend beyond the typical five year time frame of a CIP to help guide long range budgeting.

When selecting a prioritization methodology, consideration should be given to the time and resources available for oversight and project management by available Town staff. If time or resources are scarce and/or there are a small number of proposed improvements, a more simple qualitative methodology can prioritize the improvements.

Transportation Guidelines for Site Plan and Subdivision review

Transportation Impact Analyses

Transportation impact studies, whether as stand-alone documents or chapters in an environmental document, are intended to disclose information to assist decision makers and the public in the project review process. The National Environmental Policy Act (NEPA), the Federal law governing environmental analysis, and the Maryland Environmental Policy Act (MEPA)⁴ have many differences, such as the level of specificity of alternatives analysis, but both

⁴Guidelines for Implementation of the Maryland Environmental Policy Act are found in COMAR under Title 34 Department of Planning, Subtitle 01, Chapter 02 Authority: Natural Resources Article, §§1-303 and 1-304, Annotated Code of Maryland; Environmental Policy Act Guidelines of the Secretary of Natural Resources.

require a full disclosure of transportation impacts, not just vehicular traffic impacts. The term "transportation" captures a wide range of potential impacts and modes. The North East Planning Commission should require all major residential development and all new commercial development proposals to provide a complete transportation analysis that considers all modes of transportation for on-site circulation as well as impacts on the surrounding parcels and the general vicinity. The criteria below represent a minimum standard for assessing a broad set of transportation impacts. They are generally organized around the themes of identifying impacts that disrupt existing operations, interfere with plans for the future, conflict with adopted policies, and/or create new demand.

Site Plan and Subdivision Review Criteria

North East will consider the following topics during site plan and subdivision reviews to improve the linkage between land use and transportation planning:

- 1. Identify the components of the Town's existing transportation systems (e.g. highways, streets, sidewalks, paths, transit routes, etc.) and how they are impacted by the proposal.
- 2. Examine capacity of the existing transportation system and the projected demands from various existing land uses in the community (e.g. residential subdivisions, commercial shopping, employment centers, public buildings and places, and recreation areas).
- 3. Identify future land uses that may be served by the Town's transportation systems (e.g. undeveloped parcels in the community or areas of the county adjacent to the Town).
- 4. Discuss ways that the Town's transportation systems can be improved to better existing and proposed land uses (e.g. increase mobility, connectivity and maintain and/or enhance community character).
- 5. Ensure that new project approvals include pedestrian and bicycle improvements identified on pedestrian system improvement concept graphics #1 through #16 [found at the end of this Chapter].
- 6. Consider the utility and desirability of transit stops and/or transit shelters at all major new commercial and employment centers, in Master Planned Communities, and within high density residential projects even if not specifically identified on concept graphics #1 through #16 identified above.
- 7. Consider requiring electrical services [or service line stubs for future utilization] at all transit shelters and major parking lots to support future use as "charging stations" by electrically powered bicycles and other vehicles.
- 8. Consider future space requirements for secure bicycle storage adjacent to, or otherwise conveniently located near, public facilities, transit shelters, the future passenger rail

- station, and commercial and employment centers and include adequate space to provide such storage facilities at the time of project construction.
- 9. Consider existing pedestrian facilities. This can include adding new vehicular, pedestrian or bicycle traffic to an area experiencing pedestrian safety concerns such as a nearby crosswalk or school.
- 10. Consider whether the project supports and implements planned pedestrian facilities.

Site plan and major subdivision proposed off-site improvements, including mitigation, should be reviewed for consistency with local codes and design standards, including parking requirements, the Town's road code, and other adopted guidelines that may be developed and adopted from time to time. Site plans and major subdivisions will be coordinated with the Maryland State Highway Administration and with the Cecil County Planning Department to ensure that potential congestion, safety concerns and general growth management topics can be addressed in a cooperative and interjurisdicational manner. The Town of North East also desires to participate and provide timely comment on State and County projects that may have impacts on transportation infrastructure within the Town of North East.

Pedestrian Guidelines

The North East Zoning Ordinance, the North East Subdivision Regulations, and the North East Road Code are the three most important parts of the Town Code that govern the design, review and approval of local roads and pedestrian improvements. However, this Transportation Chapter addresses the Town's policy regarding the local pedestrian system of sidewalks, paths and trails. This clarification should be used to guide developers and inform residents regarding the Town's desires and intent regarding pedestrian convenience, safety, and the Town's general commitment to enhancing transportation options and opportunities in support of a healthy and sustainable community life for all Town residents and visitors.

Purpose

This section is intended to identify and communicate the design elements important to improving pedestrian safety and walkability within the Town of North East. This section provides *design elements* to inform designers, planners, and policymakers on available design treatments and best practices for pedestrians. When implementing these elements, engineering judgment will determine the specific locations and features of each design. Other important considerations include the requirements contained in the American Disabilities Act and revised Stormwater Management requirements promulgated by the Maryland Department of the Environment and incorporated in the Cecil County Stormwater Management Regulations. One of the new challenges will be to reconcile the need to manage urban drainage issues with these new stormwater management requirements within the space available in the Town's built environment.

Scope and application

Most streets should be targeted to have "basic" facilities such as curbs, gutters, sidewalks and well-delineated cross walks. In locations where pedestrian demand is higher, more intense improvements should be implemented. More intensive improvements could include traffic calming devices, wider sidewalks, use of pedestrian scale lighting and pedestrian scale signage, landscaping and higher quality pedestrian crossing treatments. These improvements are targeted for commercial streets with medium to high levels of automobile traffic or within a high density residential development.

Sidewalk Guidelines

North East currently requires a minimum 48" wide sidewalk with a 36" thru passage for new development. This means that sidewalks must maintain a minimum of 36" of unimpeded room for the passage of wheel chairs and similar aids for handicapped mobility. These dimensions conform to sidewalk requirements found in the Americans with Disabilities Act Accessibility Guidelines (ADAAG) which are minimum widths for passage.

The Institute for Transportation Engineers recommends planning sidewalks that are a minimum 60" wide with a planting strip of 24" on local streets and in residential and commercial areas. Sidewalks consist of the through passage zone and the utility zone. The through passage zone is the paved part of the sidewalk that pedestrians use. This zone should be wide enough to accommodate different walking speeds and shared use by people with mobility aids. It should also be proportionate to street size and pedestrian volumes.

All streets require a utility zone to accommodate above ground public infrastructure including street furniture, lampposts, street trees, and signs. Locating this infrastructure in the utility zone prevents it from encroaching on the thru passage zone. The utility zone also creates an important buffer between pedestrians and motor vehicles by providing a horizontal separation and a vertical buffer. Vertical elements like utility poles, signs, street lights and street trees improve pedestrian safety and comfort by buffering the sidewalk from travel lanes. This buffering effect is similar to that provided by curbside motor vehicle parking. Walkways and trails do not have utility zones but still require a minimum through passage zone.

The proposed guidelines would apply to sidewalks accompanying new development.

Proposed Sidewalk Guidelines			
Street Type	Through Passage Zone	Utility Zone	Total Width
Arterial (Regional)	8'	4'	12'
Collector (North East)	6'	4'	10'
Local (Neighborhood)	5′	4'	9'
Walkway	4'	-	4'
Trail (Shared Use or Natural surface)	8-10'	-	6'

Sidewalk Materials

Paving materials should be consistent, durable, accessible to people using mobility aids, and smooth enough for passage (but not slippery). Concrete paving is recommended for arterial, collector, and local sidewalks. The concrete should be textured for safety and scored to match existing patterns. In all cases, ADAAG requirements shall be applicable and followed. Standards address curbs, sidewalks, paths and trails whose primary focus is on pedestrian mobility.

In pedestrian activity areas, painted curbs should be textured to ensure traction. To support pedestrians, cyclists, and joggers, trails may be constructed of asphalt, crushed granite, or bark mulch; however, concrete is the preferred paving material. Special paving may occur at neighborhood commercial areas, schools, and parks to give them a distinctive identity.

The Town of North East has adopted a standard for stamped and patterned public sidewalks which link either commercial or residential development into the Central Business District. The Planning Commission and the Mayor and Commissioners shall approve the location, color, material and design of all public sidewalks which are not the standard concrete.

Walkways

Walkways are usually made of concrete, wood, or stone. The construction of new walkways and the reconstruction of existing walkways should avoid wood to minimize long-term maintenance costs. Where wood is used, the construction should be of species that contain natural preservative characteristics such as Cedar and Redwood. Pressure treated Douglas Fir may be practical when initial cost is a consideration. Continuous handrails of wood on wood stairs and metal on concrete stairs are required on both sides. Stairs should have closed risers, treads with non-slip surfacing, and sufficient clearance from surrounding vegetation.

Stair flights should be 12 feet in length or less. Where slope or grade issues may require longer runs, individual sections of stair flights should be separated by 5 feet landings with concrete footings. Landings are good locations for benches and pedestrian light fixtures.

Lighting

Pedestrian-scale lighting improves accessibility by illuminating sidewalks, crosswalks, curbs, curb ramps, and signs, as well as barriers and potential hazards. Lampposts should be staggered on opposite sides of the street and be placed at crosswalks, bus stops, and corners. All commercial developments should provide appropriately designed lighting which will assist pedestrians on sidewalks and parking lots and ensure safe and convenient well lit transit stops and bus shelters. Pedestrian-scale lighting and motor vehicle-scale lighting each should be provided as a complement to the other to ensure that both sidewalks and travel lanes are effectively illuminated. The proposed location of the streetlights shall be coordinated with the proposed street trees and landscape. It is recommended that the street lights be located a minimum of 10 feet from the full growth canopy of adjacent trees.

Public lighting shall include poles and fixtures chosen from existing models identified by the Town. Shields or hoods should also be utilized to avoid light pollution and direct lighting onto the sidewalks. The installation of new lighting shall take into account potential light spillover that may adversely affect adjacent residents. The proposed lighting guidelines provide specific guidance in establishing adequate pedestrian scale lighting for a range of rights-of-way. The implementation of pedestrian-scale lighting should occur as part of pedestrian-oriented street projects.

Signage

Signage is encouraged to assist pedestrians in wayfinding. The signs will consist of a distinctive logo and directional guidance to neighborhood destinations or destination points of interest in North East. For example, destinations like the Town Park are often invisible from adjacent streets like Main Street and would benefit from additional pedestrian-scale signage. Pedestrian signage will comply with the criteria for character, proportion, height, and contrast specified by the Manual on Uniform Traffic Control Devices and the Americans with Disabilities Act Accessibility Guidelines and shall be compatible with the character of the Town. Signage shall also comply with the *Maryland* Manual on Uniform Traffic Control Devices (MdMUTCD), when possible. The implementation of these signs should occur as part of a proposed development or within an existing pedestrian-oriented improvement projects to enhance the pedestrian network in and around the Town of North East.

Plantings

Trees are a dramatic street improvement that create an attractive visual and psychological separation for pedestrians between the sidewalk and the roadway. Trees may also encourage drivers to move through an area more slowly and should be installed to allow for proper sight distance for both vehicles and pedestrians. They can be located in the utility zone to provide sidewalk shading or placed between on-street parking spaces in tree bulb-outs where sidewalks are narrow. (See the explanation of Bulb-outs on page 34.) The North East Zoning Ordinance contains specific "buffer yard" tree and shrub planting requirements.

Street Furniture

Street furniture includes benches, mailboxes, trash and recycling receptacles, bike racks, newspaper boxes, drinking fountains, information boards, kiosks, artwork, public phones, signs, bus shelters, and other items used by pedestrians. These features humanize the scale of a street and encourage pedestrian activity.

Street furniture should be placed in the utility zone to maintain thru passage zones for pedestrians and to provide a buffer between the sidewalk and the street. For bus shelters on crowded sidewalks, bus bulb-outs are recommended for providing additional space. (See the explanation of Bulb-outs on page 34.) Bus shelters should also have clearly displayed bus schedules and Town maps for way-finding.

Placement of street furniture along building edges is acceptable if the through passage zone is preserved. Buildings with lower floor windows, canopies for rain protection, tables, umbrellas,

signs, planters, benches, and other street furniture contribute to street life and enhance the pedestrian environment.

Driveways

Driveway entrances can be both dangerous and inconvenient for pedestrians. Driveway curbcut aprons that extend into the through passage zone may cause people on foot or in wheelchairs to fall. Driveways also reduce the available space for street trees, lighting, street furniture, and parallel parking. Wherever possible, entrances should be consolidated such that multiple users share a common curbcut for motor vehicle access. The ramp portion of a drive entrance should be located within the utility zone where possible. Design requirements are contained in the North East Road Code.

Crosswalks

Crosswalks assist pedestrians in getting from one side of the road to the other and provide continuity to sidewalks. Crossing treatments are classified as either passive or active treatments. Passive treatments are physical improvements like crosswalks or curb ramps that do not change in time.

Active treatments like traffic signals and audible pedestrian signals have multiple states that are triggered by automated detection or activated by pedestrians. Both types of treatments may be combined to create a comprehensive crossing system. With all treatments, engineering judgment is necessary to determine the specific locations and features of each project.

Crosswalk Materials

Crosswalks can be marked with white paint, reflective tape, signs, and/or lighting. The typical crosswalk in North East is a white painted thermoplastic treatment. High-visibility yellow ladder striping should be considered in school zones and selected high traffic volume locations.

While striping of all four legs of an intersection is recommended, engineering judgment should be used in all cases. High contrast crosswalk striping also helps people with visual impairments to cross streets. Striping should correspond to the width and location of sidewalks.

The Town of North East has adopted a standard for stamped and patterned public crosswalks which link either commercial or residential development into the Central Business District. After recommendation from the Planning Commission, the Mayor and Commissioners shall approve the location, color, material and design of all public crosswalks which are not the standard concrete. Where a proposed subdivision does not link in with the Central Business District, a Developer may opt to utilize the stamped, colored, patterned public crosswalks. This option shall require a recommendation from the Planning Commission and approval from the Mayor and Commissioners. Stamped concrete or asphalt along a state road will require the approval of the State Highway Administration.

Raised Crosswalks

Raised crosswalks provide a continuous street crossing for pedestrians at sidewalk level. They additionally work like speed humps to slow motor vehicle traffic at crosswalks. While eliminating the need for curb ramps, raised crosswalks should be marked or textured so that persons with visual impairments are able to identify the street edge. Approval of raised crosswalks within a public right of way requires Planning Commission recommendation and approval from the Mayor and Commissioners.

Passive Crosswalks

Safe and frequent pedestrian crossings are a basic building block of the pedestrian infrastructure. A crosswalk is an area of roadway designated for pedestrian crossings and is a continuation of the sidewalk across an intersection. Marked crosswalks should be straight for easy navigation and perpendicular to the sidewalks to minimize crosswalk length. However, ensuring the safety of crossings is the most important priority and engineering judgment should be used on a case-by-case basis. In locations where a marked crosswalk alone does not provide a safe crossing, additional treatments like bulb-outs, refuge islands, and signage may be considered to ensure pedestrian safety and access.

Active Crosswalks

Traffic signals provide protected crossing opportunities for pedestrians and may be used with other solutions categorized as either passive or active. Traffic signals can be especially effective at maintaining vehicle flow while limiting vehicle speeds to provide a safe and comfortable pedestrian environment. However, such speed regulation requires numerous traffic signals on a single street and the careful coordination of traffic signal timings.

Pedestrian signals work in conjunction with traffic signals to assign right-of-way at intersections. Pedestrian signals are appropriate at all intersections with traffic signals where crossing is permitted. Using symbols and colors, they should provide a clear distinction between "walk" and "don't walk" that is readily identifiable for people with limited vision.

Leading Pedestrian Interval Timing improves the visibility of pedestrians by allowing them to enter an intersection before vehicles with conflicting movements.

Countdown Signals let pedestrians know the exact amount of time remaining in the walk phase. This type of signal is recommended at all pedestrian crossings on US 40 and MD 272.

Audible Signals indicate to persons who are blind or have low vision the direction in which it is safe to cross. They should be installed at intersections with new traffic signals, actuated signal timings, complex traffic patterns, or irregular traffic volumes. Traffic signals should be retrofitted wherever there is a request from persons with visual impairments.

Pedestrian call buttons and kickplates allow pedestrians to request a signal phase for safe crossing. Audible call buttons should be installed in conjunction with audible pedestrian signals.

They should be conveniently located and clearly marked to indicate the crossing directions they trigger. Tactile symbols may also be installed alongside call buttons to provide crossing information on lane configurations for persons with visual impairments.

Curb Ramps

The Town of North East requires curb ramp installation in all proposed street intersections. Where resurfacing, sidewalk improvements, crosswalks, utility upgrades or alteration projects are proposed within the public right of way, improvements shall be designed to comply with the requirements of the Americans with Disabilities Act Accessibility Guidelines.

Corner Radius

A corner's turning radius determines how fast a driver can comfortably make a turn. A tighter turn or shorter radius forces drivers to slow down allowing them to see pedestrians better and stop more quickly. Slow corners with short turning radii increase safety for pedestrians at intersections by creating more sidewalk space and less road space.

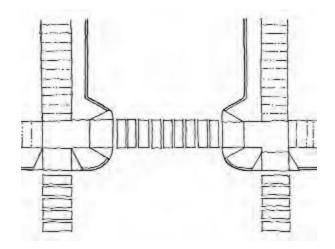
A decreased curb radius also allows for the placement of curb ramps that are aligned parallel to crosswalks. A 10' turning radius is recommended for streets with curbside parking. For streets without curbside parking, a 20' turning radius is recommended. Streets with significant volumes of truck traffic may also have larger corner radii.

Bulb-outs

Bulb-outs are extensions of the curb line at intersections that reduce the road way cross-section for a limited distance back from the corner. These "captured" sections of the road, if of sufficient size, may be landscaped and act as "gateways" to the block.

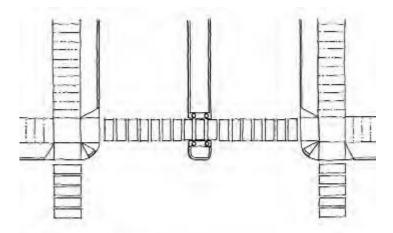
Bulb-outs reduce the crossing distance for pedestrians, increase visibility for motorists and pedestrians, prevent illegal parking at corners, and provide additional room for people waiting to cross the street. The added space may also be used for street furniture like benches, bike racks, and street trees.

Bulb-outs are also important for accessibility because they provide space for curb ramps, crossing buttons, and a safe waiting area. Bus bulb-outs provide space for bus shelters and increase the pick up and drop off efficiency of transit. Wherever possible, a bulb-out located at a bus stop should be designed as a bus bulb-out. If a bus bulb-out is not possible, the bulb-out should be designed with special care, so as not to interfere with bus movements. Tree bulb-outs can be used where sidewalks would otherwise be too narrow for plantings. Bulb-outs can be used at mid-block crossings and are beneficial when combined with pedestrian refuges. All bulb-outs should extend into the street no further than the edge of the travel or bike lane. Bulb-outs and accompanying street furniture will require additional maintenance.



Refuge Islands

Refuge islands are located at crosswalks in the middle of streets to provide a safe waiting area for pedestrians. They may include curbs and bollards to ensure the safety of waiting pedestrians. A refuge island may be part of a median or a stand-alone feature. By allowing pedestrians to cross only half of the street and then wait, the refuge island increases the number of gaps in traffic that are safe for crossing. While increasing the visibility of pedestrian crossings, refuge islands decrease the percentage of pedestrian collisions by reducing pedestrian/vehicle conflicts, motor vehicle speeds, and exposure time for pedestrians. The waiting area in refuge islands should be in line with the crosswalk and as wide as the crosswalk, such that persons with disabilities are able to pass through without obstruction.



Traffic Calming

Traffic calming modifies the physical arrangement of a street to deflect the path of motor vehicles and thereby slows traffic. It provides a cost-effective alternative to traffic signals for reducing motor vehicle speeds and improving pedestrian safety. Two types of deflection are discussed in this section, vertical deflection, which slows traffic by making motor vehicles drive over traffic calming devices, and horizontal deflection which slows motor vehicles by changing the street width or course of travel.

Vertical Deflection Speed Humps

Road humps are broad and gently sloping mounds of asphalt added across the width of a street to slow traffic. They are like speed bumps except they tend to be wider such that the slope of the bump is more gradual. The Mayor and Commissioners of the Town of North East have determined that there may be situations which are conducive to the installation of road hump(s), for the purpose of calming traffic. Specific design standards are included in the "Town of North East Neighborhood Traffic Management Road Hump Program."

Medians and Access Control

Medians increase safety by separating oncoming motor vehicle traffic and minimizing turning conflicts. They may be constructed with curbs or painted stripes, landscaping, or combined with pedestrian refuge islands. Medians also increase the safety of marked crosswalks at uncontrolled intersections. Medians with landscaping will beautify wide streets by breaking up large expanses of pavement and making the street feel smaller. Medians also often cause natural traffic calming. Median upgrades are recommended for all areas proposed for US Rte. 40 bicycle and pedestrian crossings and other locations, such as MD 272 at the south end of Town. Intense median landscaping can also serve to create an "urban parkway" feel that can help reduce oncoming traffic headlight glare at night and a sense of increased pedestrian safety during the day.

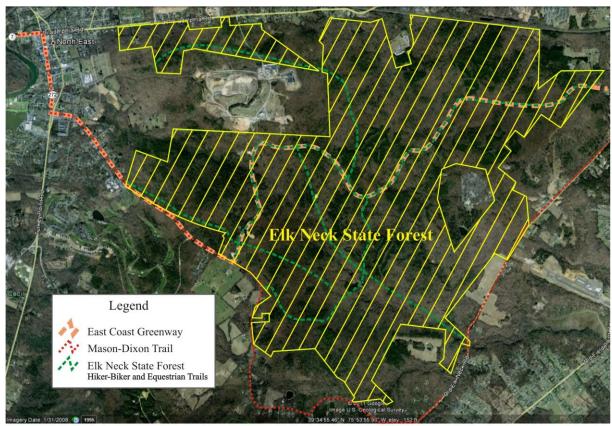
On-Street Parking

On-street parking slows traffic and acts as a buffer between pedestrians and motor vehicles. It increases the number of people on the street and thereby increases public safety. Diagonal parking may be used to narrow streets, but it causes serious conflicts with bicyclists and is not recommended. On-street parking is the standard configuration for both residential and commercial streets within North East.

Trails and Greenways

Trails

A number of trails and related "green infrastructure" exist within the Town of North East, the Town's planning area, and nearby locations that provide various degrees of connectivity to regional trails and greenways, both existing and planned. The most significant of these include a part of the East Coast Greenway and a length of the Mason-Dixon Trail System that follow designated sections of MD 7 from Charlestown eastward to the intersection with MD 272, south along Main Street, then southeast on Irishtown Road before temporarily diverging. The Mason-Dixon trail continues along Irish Town Road until it intersects with Old Elk Neck Road whereupon the route curves northeastward following the eastern boundary of Elk Neck State Forest before continuing on to Elkton. The East Coast Greenway follows existing trails through Elk Neck State Forest before exiting the Forest in its northeast corner and reconnecting with the Mason-Dixon Trail on Old Elk Neck Road. Overall, both routes include about ten miles of trail.



Imagery: U.S. Geological Survey courtesy of Google, Inc.
Elk Neck State Forest and Trails data added by Gradecak & Associates, Inc.

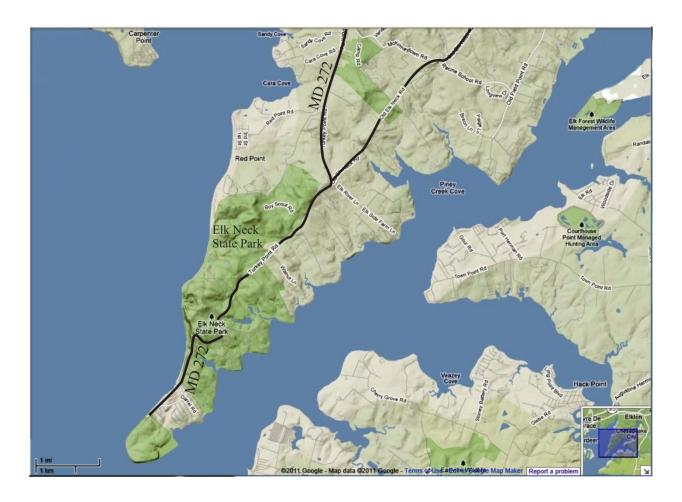
Elk Neck State Forest is approximately 3300 acres situated in central Cecil County consisting of four separate tracts of land. Elk Neck State Forest is open to the public for hunting, hiking, horseback riding and mountain biking. Approximate trail locations are shown as green dashed lines above.

Mason-Dixon Trail

The Mason Dixon Trail connects the Appalachian Trail with the Brandywine Trail. This 193 mile long trail starts at Whiskey Springs on the Appalachian Trail, in Cumberland County, PA and heads east towards the Susquehanna River, passing through Pinchot State Park en route. The trail then follows the west bank of the Susquehanna south to Havre de Grace in Maryland. Across the river in Perryville, the Mason-Dixon Trail continues east on MD 7, passes through North East to Irish Town Road, on through Elk Neck State Forest, then on to Iron Hill Park in Delaware, north along the Christina River and White Clay Creek to the White Clay Creek Preserve. The trail then heads northeast to its eastern terminus at Chadds Ford, PA on the banks of the Brandywine River.

Elk Neck State Park Trails

Elk Neck State Park is located on MD 272 at the end of the Elk Neck Peninsula approximately ten miles south of the Town of North East. Five hiking trail loops are located within Elk Neck State Park as well as a number of camping areas. Detailed maps for Elk Neck State Forest and Elk Neck State Park are available from the Maryland Department of Natural Resources.



Elk Neck State Park Hiking Trails		
Trail Section	Length	Degree of Difficulty
Blue Trail	2.0 miles	easy
Green Trail	1.0 miles	moderate
Orange Trail	4.0 miles	difficult
Red Trail	1.5 miles	difficult
White Trail	0.75 miles	moderate

Trail locations, points of access, and related parking areas are shown on the State maps.

The Elk Neck Trails Association

The Elk Neck Trails Association is a volunteer organization that helps maintain and improve the hiking trails within the Park. The Association is also working to identify problem areas and opportunities for extending a trail link from Elk Neck State Park generally paralleling MD 272 north to the Town of North East with the intent to link with the Town's pedestrian network and the waterfront Town Park.

Trail linkages are proposed to the Town Park via Walnut Street, and a link is proposed to connect along Thomas Avenue and Cemetery Road north to MD 7. Signage and related improvements are desired to expand and develop a true regional hiker-biker and integrated pedestrian friendly environment that will connect the Town of North East to neighboring communities and regional bicycle and pedestrian networks

Water Trails

Through partnerships with local governments, citizen associations, and nonprofit organizations the Maryland Department of Natural Resources is working to build a statewide network of water trails. To date, Maryland has over 600 miles of designated water trails. A water trail generally consists of interaction with the Maryland Department of Natural Resources, follows a waterway, has an educational component involved with it and is typically maintained by a specific entity or entities such as a municipal, county, state or federal agency, to ensure user safety, legal access and compliance with state rules, regulations and goals.

The Town of North East supports the creation of a water trail originating at the Town Park located at the foot of Walnut Street. Connections to Elk Neck State Park and other destinations, such as Charlestown and Perry Point are envisioned.

Greenways

East Coast Greenway

The East Coast Greenway, or ECG, is a project to create a nearly 3,000-mile urban path linking the major cities of the Atlantic coast of the United States, from Calais, Maine to Key West, Florida, for non-motorized human transportation. Maryland has been actively participating in this initiative since 1996. Thirty-two percent of Maryland's 166-mile route is complete as off-road trail, and another fourteen percent is in development. Most of the identified future trail is either in development or planning, so goals in Maryland revolve primarily around finding routing options in gap areas and creating linkages to other greenways and trail systems.

Elk Neck Peninsula Greenway

The Elk Neck Peninsula Greenway is a planned greenway that would offer an excellent opportunity for a true recreational passageway from Elk Neck State Forest through smaller state holdings, possibly utilizing a portion of the Rodney Scott Boy Scout Camp, and ending at Elk Neck State Park. The Elk Neck Trail Committee has been working with property owners and public officials to design and develop a narrow, natural surfaced pathway that would eventually

stretch between the town of North East and <u>Elk Neck State Park</u>. This greenway is almost entirely forested and would connect 6,000 acres of publicly owned land. Trails utilized by private clubs currently exist in this area.

North East Creek Greenway

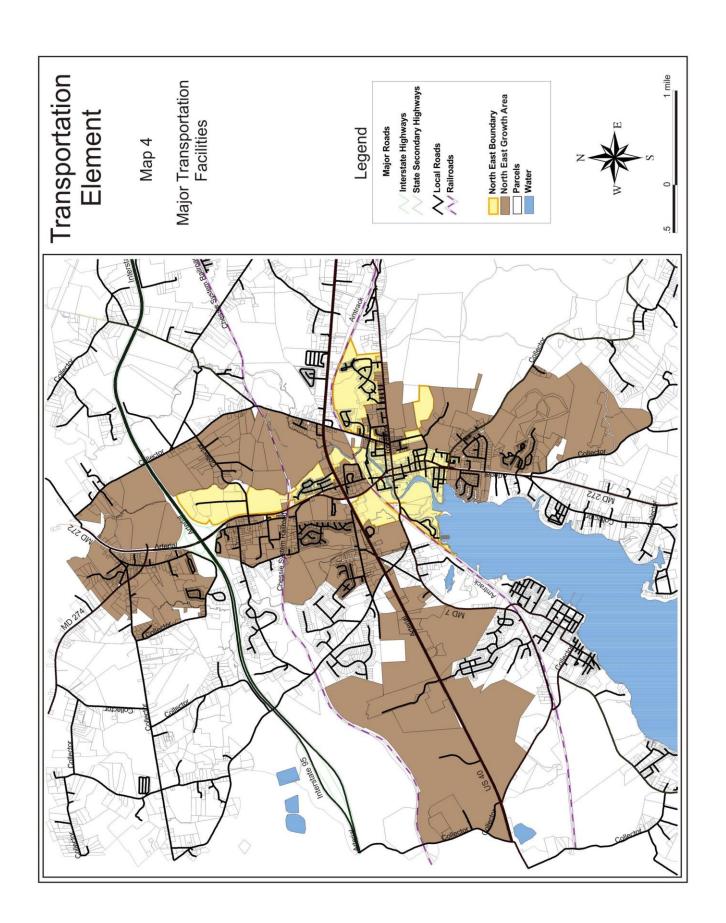
The Northeast Creek Greenway is a potential greenway along Northeast Creek. The town of North East is planning a trail system to link the community park to the downtown business district and continue north along the creek. Establishment of this greenway would protect water quality, wildlife, and fish spawning sites in Northeast Creek. The greenway would include the historic covered bridge at Gilpin's Falls and connect to an established trail at Cecil Community College. Plans for this trail include acquisition and easements in targeted development areas. The Town has obtained a number of easements for this greenway as part of development project approvals.

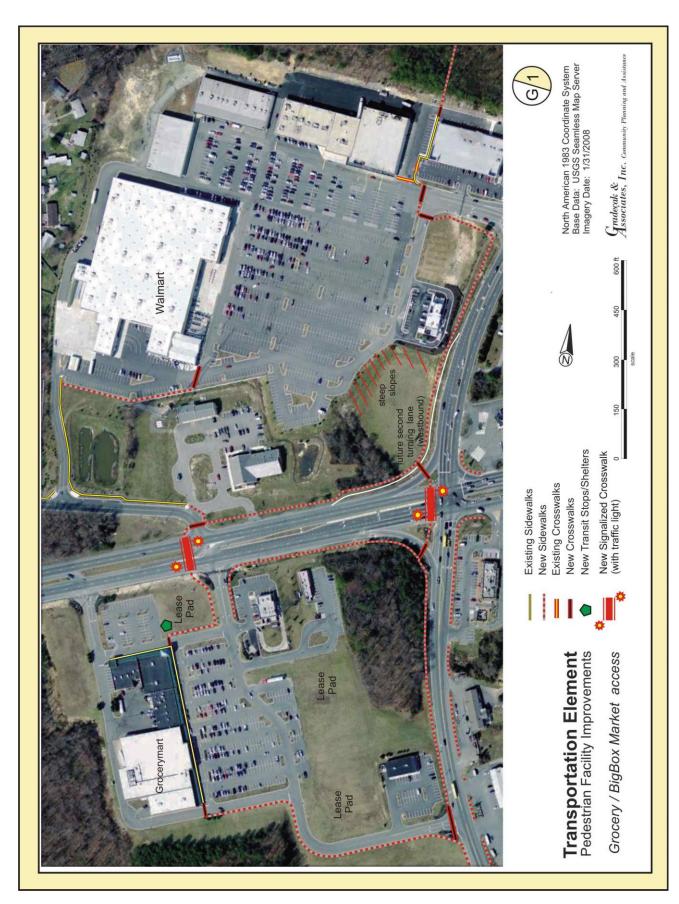
Lower Susquehanna Heritage Greenway

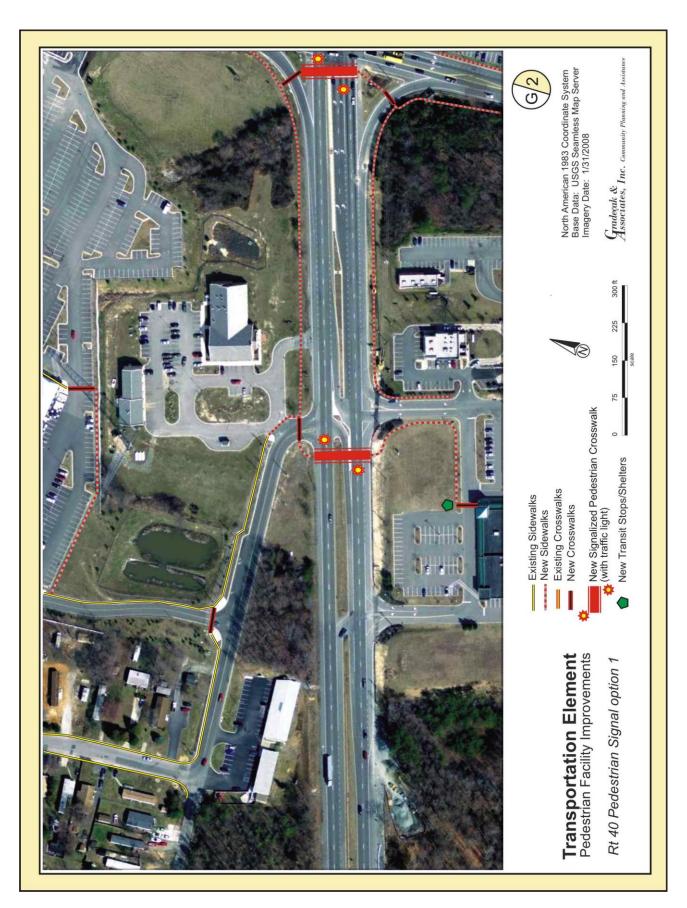
The Lower Susquehanna Heritage Greenway (LSHG) is a non-profit organization whose mission is to stimulate local economic activity by developing a linkage between our natural, historic and cultural resources. This linkage is a series of land and water recreational trails that weave the past into the future while promoting an understanding and appreciation for the character of this region. As part of a statewide system of Heritage Areas, the LSHG is responsible for implementing a local management plan targeting the area's waterfront communities. The Greenway includes designated trails and public lands along both banks of the Susquehanna River. Potential exists to create pedestrian and bicycle connections between North East and Perryville and the other parts of the Lower Susquehanna Heritage Greenway.

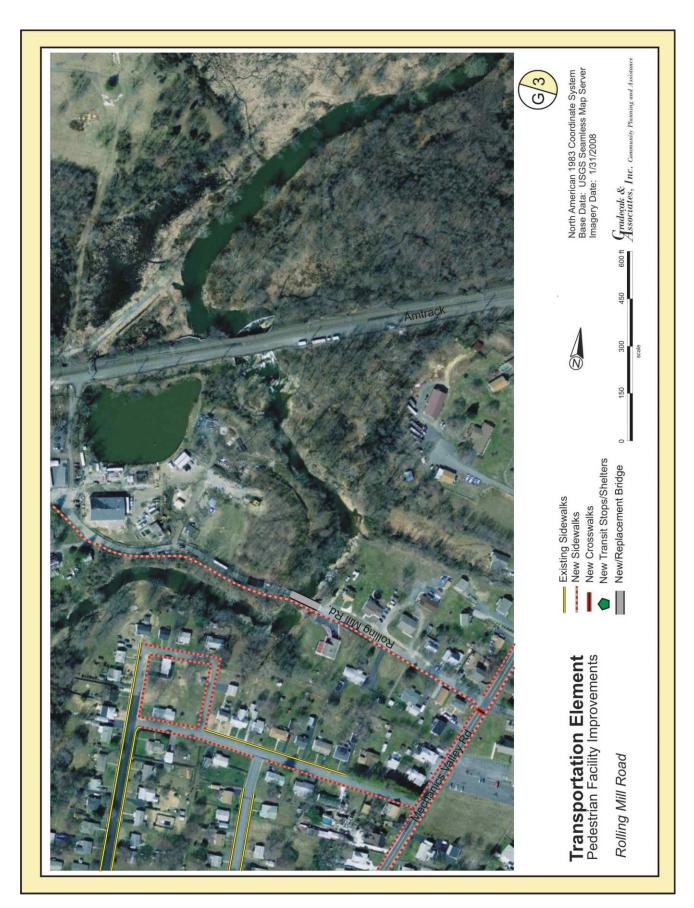
Maps and Graphics

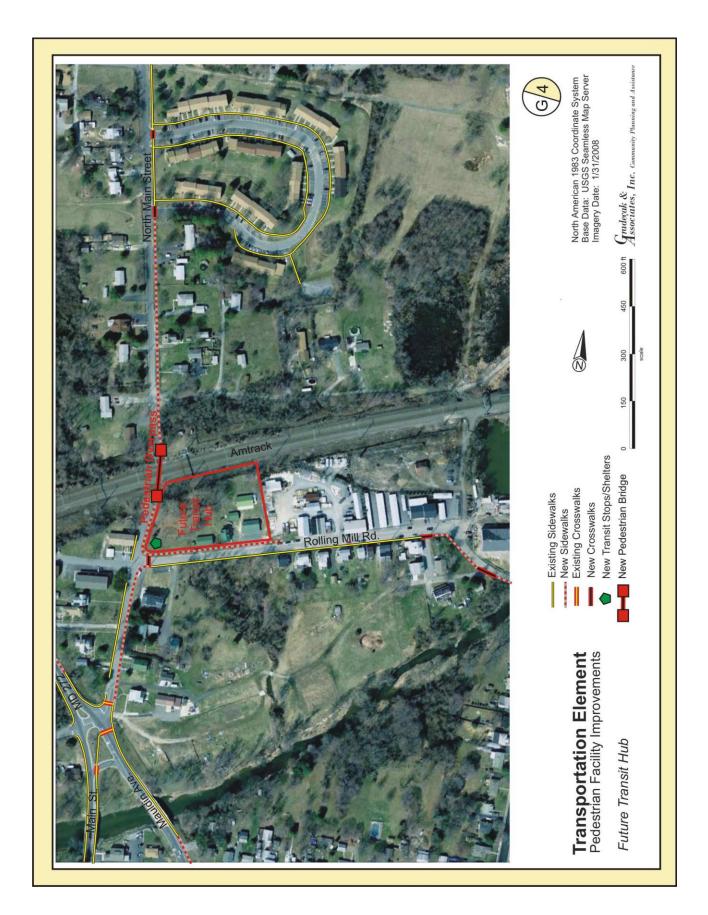
The following pages provide graphic and spatial detail regarding specific Transportation planning concerns and improvements the Town would like to pursue with ongoing input from citizens, businesses, and State and regional planning partners.

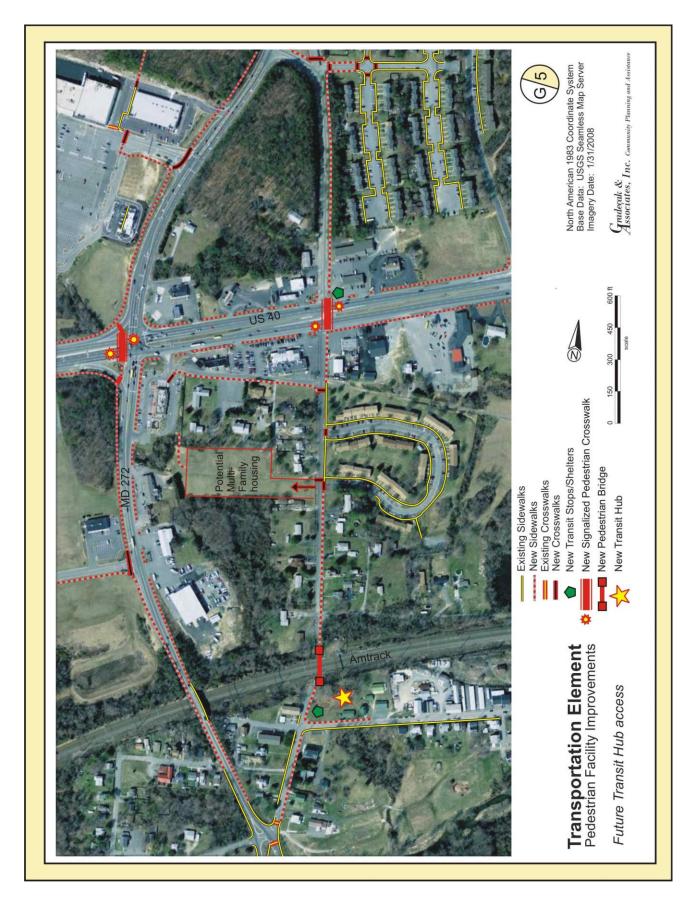




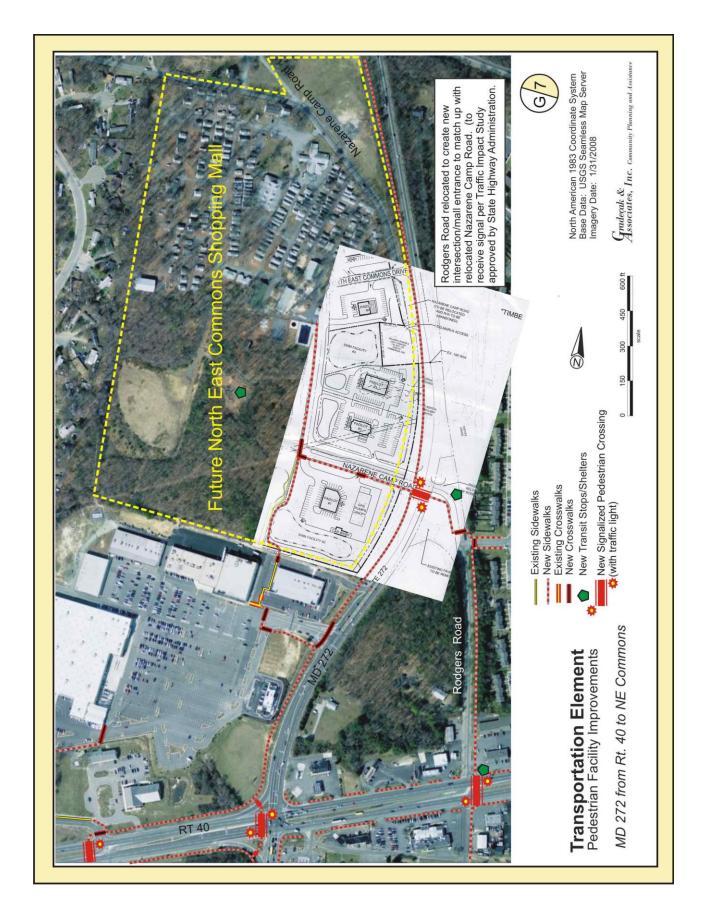




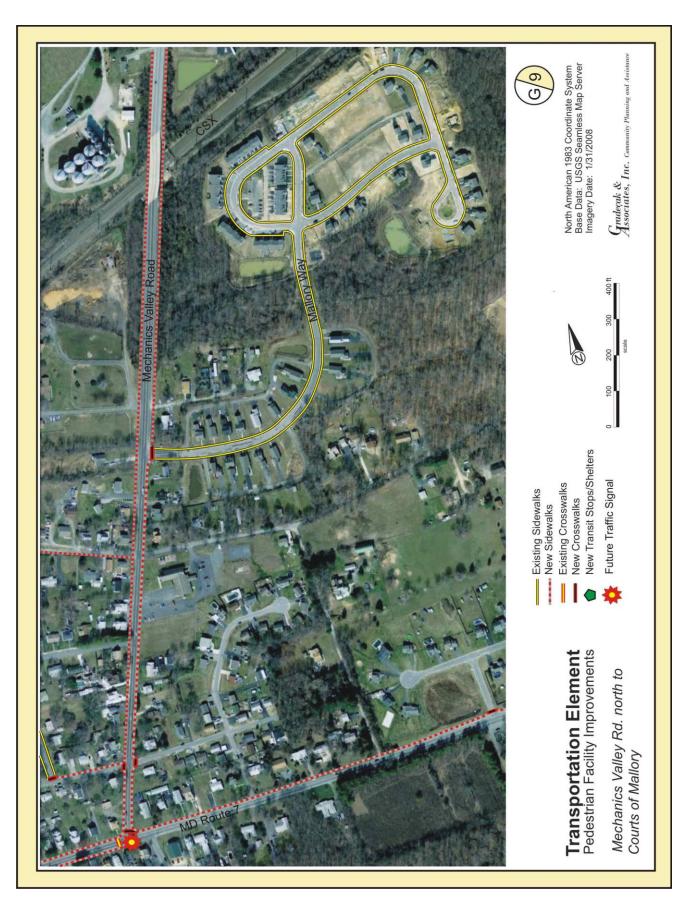


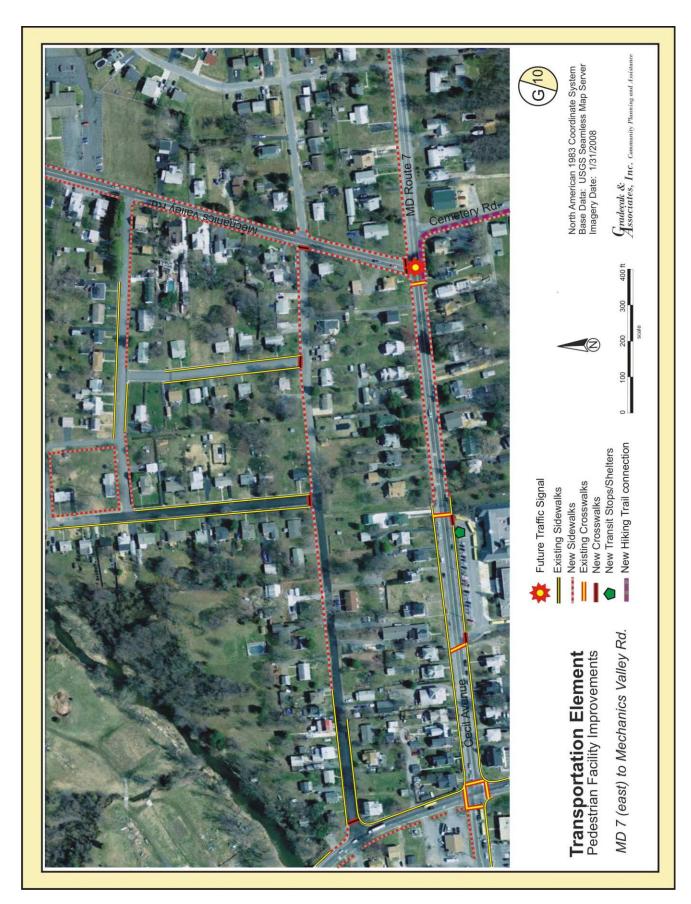


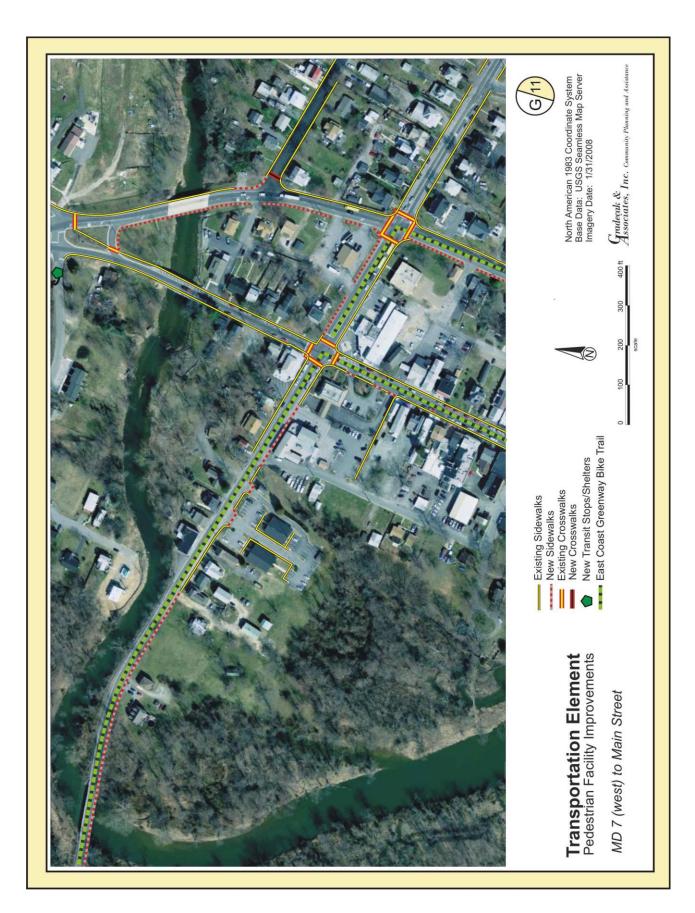




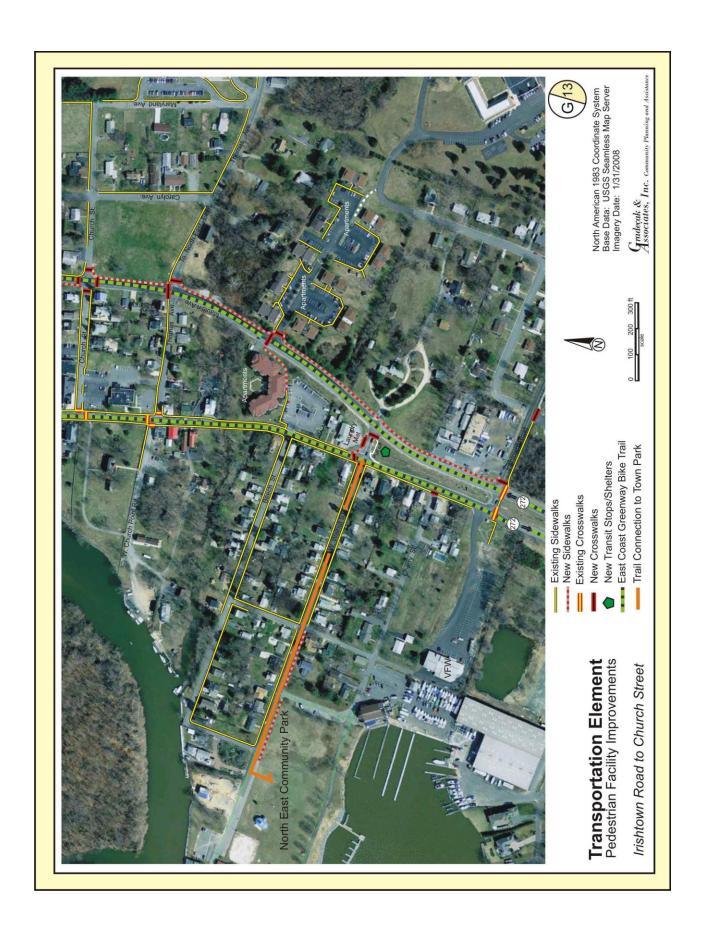


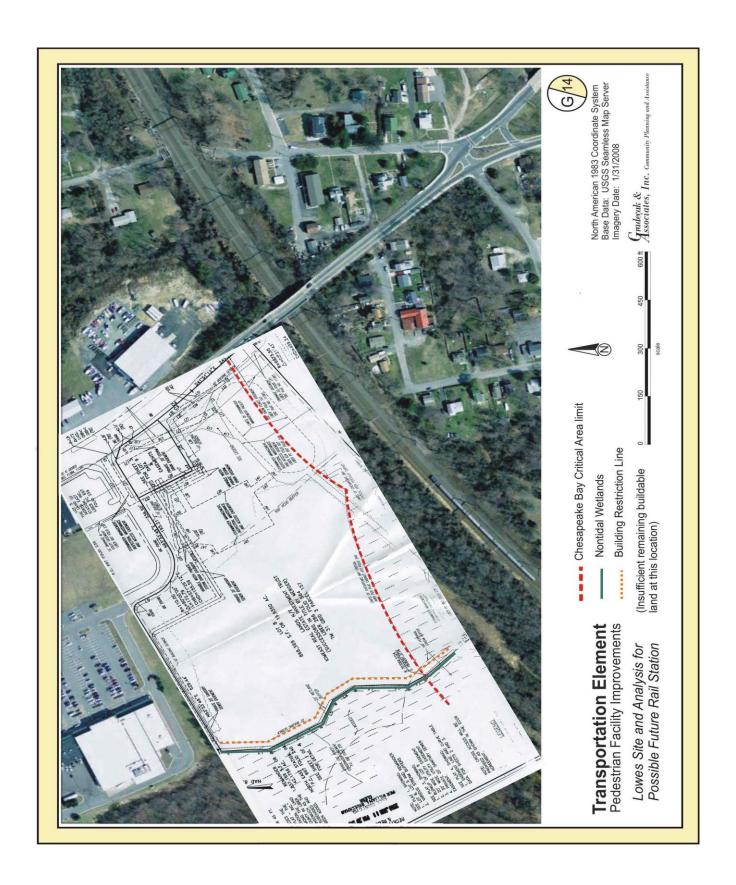


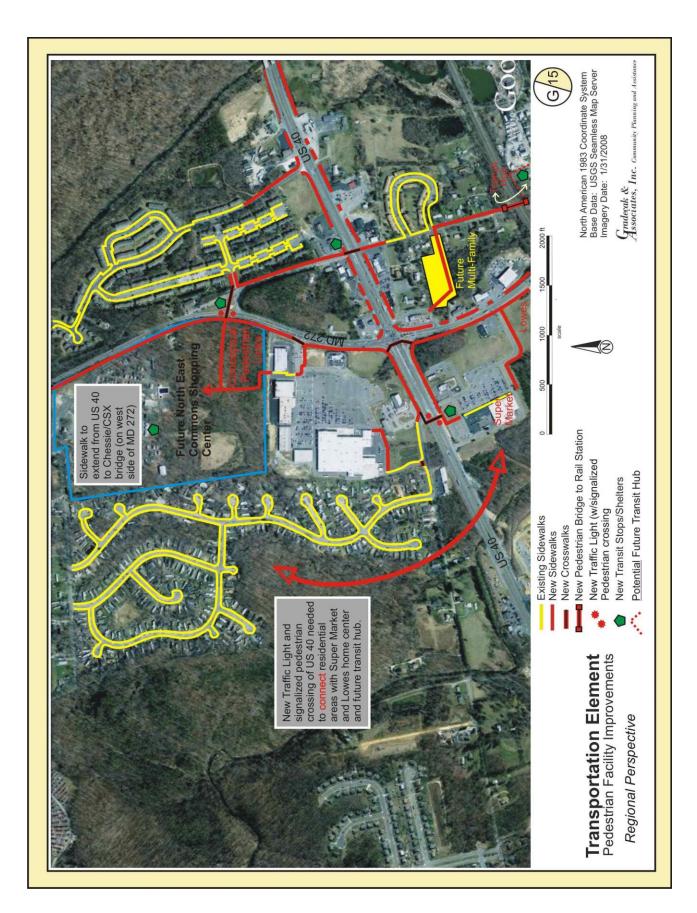


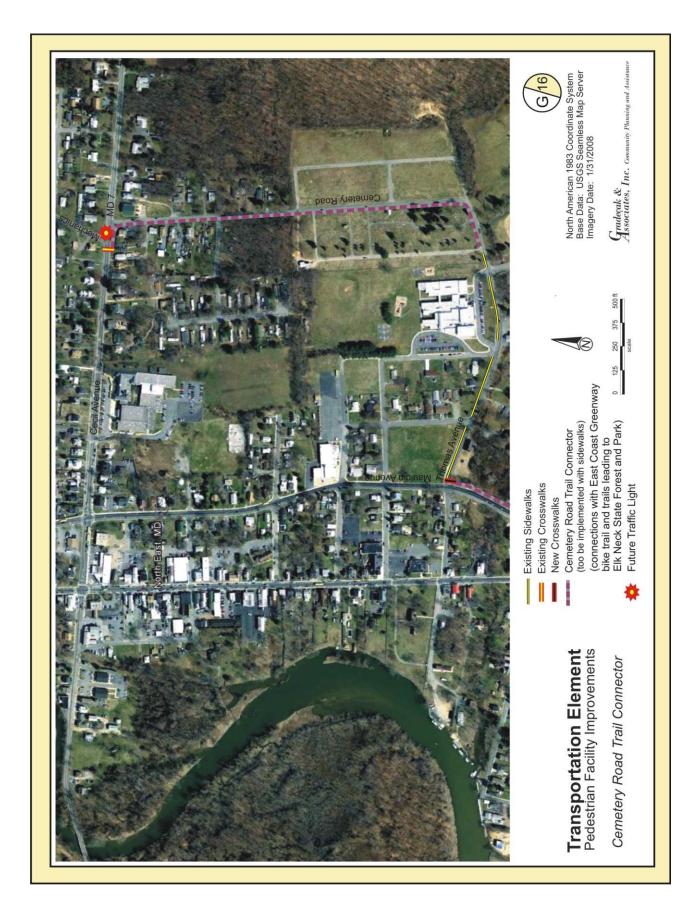












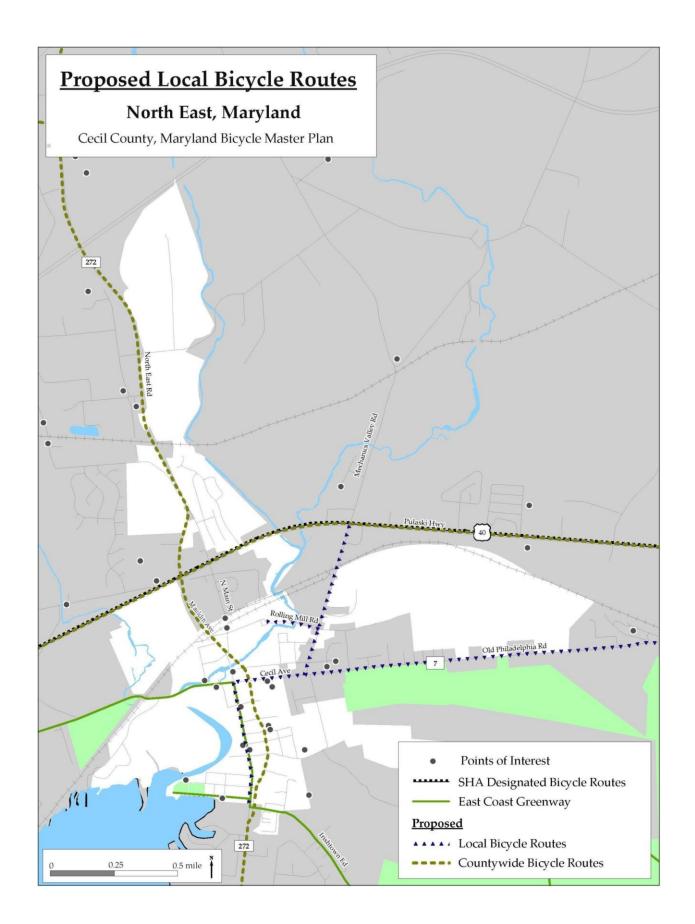
Cecil County Bicycle Master Plan



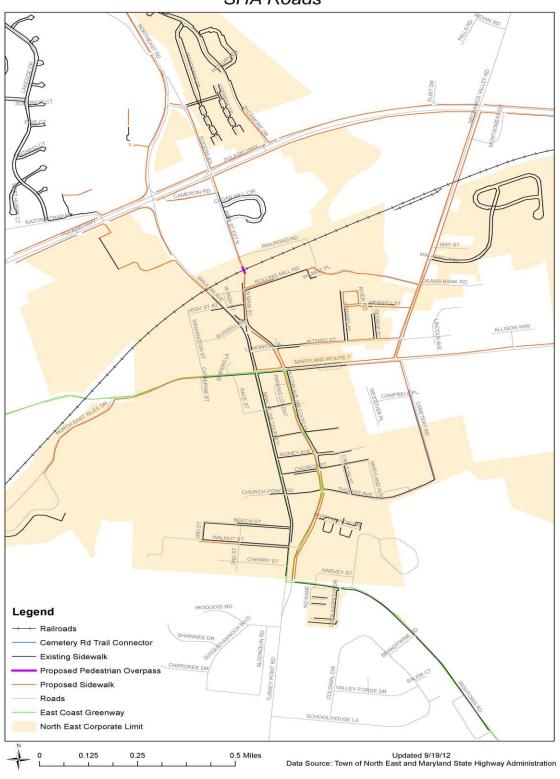
Regional and State Bicycle Networks



THE WILMINGTON AREA PLANNING COUNCIL • PARTNERS WITH YOU IN TRANSPORTATION PLANNING



Town of North East Pedestrian Improvements SHA Roads



Chapter 4

Community Facilities Element

Goals

- ◆ Provide adequate community facilities, public services, and utilities required to maintain the health, safety and welfare of the residents of North East.
- Provide adequate parks, open space, and recreational opportunities equitably distributed throughout the Town for existing and future Town residents.

Objectives

- ◆ Assure the continued expansion of public facilities and services commensurate with the local financial capabilities and the capacity of each system.
- Assure that the limitations imposed by the environmentally sensitive areas are considered when planning extensions of community facilities.
- ◆ Continue to require developers to pay for all road, water, and other community facilities and services extensions and additions needed as a result of new development.
- Certify that all existing, newly developed, and annexed areas of the Town are afforded adequate public services necessary to promote public health, safety, and welfare.
- ◆ Examine the pattern and direction of future growth and possible annexation and impacts on community facilities systems.
- ◆ Encourage the development of a Community Center and/or more recreational and/or entertainment opportunities for North East's youth.
- Encourage use of public lands and buildings for a variety of public purposes.
- Identify a site or sites for regional parks in future annexation areas.
- Examine and refine, if necessary, the policy of requiring usable park/open space during development review and approval.
- Provide for the contribution of fees in lieu of parks in subdivisions where appropriate.

The adequacy and capacity of public services and facilities are important to the improvement of the quality of life for the citizens of North East. Services, schools, recreation, and other amenities are vital to a residential community (See Map 6). It is the purpose of this Element to evaluate the capacity of existing public facilities in order to determine if current needs are being met and if future growth can be properly served.

Existing Conditions

Water

The Town of North East presently operates two water treatment plants with a combined capacity of 1.2 million gallons per day maximum flow. The system presently provides water to a population of approximately 8,000 people and to the Maryland Transit Authority rest stop on I-95. Elevated and underground storage tanks provide a reserve of 1.4 million gallons.

Sewer

The Town of North East and the unincorporated areas around it are serviced by two sewage treatment plants operated by Cecil County, one located in Charlestown and a newer facility at Seneca Point near Charlestown. The Seneca Point plant has a capacity of 2.0 million gallons per day serving the Charlestown/North East region. This plant will allow for the area to accommodate the anticipated development.

The County constructed a large interceptor, extending eastward from the Seneca Point plant running along Stoney Run Creek to Bay View. Running approximately one-half mile north of North East, the interceptor provides service to existing developments that tie into the line and is intended to encourage development to the large area west of North East.

Gas

In 1996 the Town granted a non-exclusive franchise to the Baltimore Gas and Electric Company for a period of fifty years. However, the gas lines have not been installed to date.

Educational Facilities

Public educational facilities for North East are operated by the Cecil County Board of Education. In general, schools in Cecil County experienced a decline in enrollment from 1973 to 1984. Since 1985, however, enrollment has increased dramatically. The Board of Education seeks to provide adequate space for students as enrollment increases. Schools in North East are facing these enrollment pressures which should continue as the Town is designated as a growth area in the County's Comprehensive Plan.

Bay View Elementary and North East Elementary serve students from pre-K to 5th grade. North East Elementary was built in 1951 and Bay View Elementary was built in 1961. Bay View is operating above capacity while North East is operating at 90 percent capacity. Instructional and support space is limited for both facilities due to the fact that the lunch program and the physical education program must share the same area. North East Elementary and Bay View Elementary have recently been renovated.

North East Middle School, serving grades 6-8, was built in 1932, but only became a middle school after renovations to the former high school in 1970 and 1973. The school is operating at capacity and serves the needs of middle school students currently.

North East High School was built in 1970 and serves 9th-12th grade students from both North East Middle School and a local private school. The school has been operating under capacity, but projections expect student enrollment to surpass capacity within the next decade.

Private education facilities include the Tome School. The Tome School is an independent, coeducational, college preparatory school founded in 1889. The school's curriculum provides a broad liberal arts education for students from kindergarten through twelfth grade. Tome School has capacity for up to 500 students and has a faculty of 34.

Library Services

The North East Community is served by the North East Branch of the Cecil County Public Library system. The library was built in 1991. The North East Branch is one of the busiest branch libraries in Cecil County and its usage continues to grow. Hours have been expanded to accommodate and maximize use of the present facility. The North East Branch is 2,800 square feet, and includes a public meeting room that seats 30. It houses a small but up-to-date collection of 10,000 books, in addition to videos, books-on-tape, and compact discs. The library also provides children's and adult educational programs. Free internet access and training are also available. Library materials and programs are provided to children and adults without charge.

Fire and Police Protection

The North East Town Police department is located on West Cecil Avenue in a 2,500 square foot building built in 1991. The forces consists of seven full time patrolmen and support staff providing 24 hour police protection within Town boundaries. Additional personnel would be necessary to serve the needs of the Town as population increases.

The North East Volunteer Fire Company provides fire protection, ambulance and rescue services for North East and a wide surrounding area. Consisting of approximately 180 volunteers, the Company expanded its fire house on Mauldin Avenue and has purchased

additional property in Town. Future growth plans for the Volunteer Fire Company include establishing sub-stations north and south of Town.

Refuse Collection

The Town of North East utilizes the services of a private contractor for residential trash collection. The County is required to recycle.

Town Hall

Until February 1988, a single structure served as the Town Hall and housed the police station, library, and municipal government offices. In February 1988 the municipal government offices were relocated to a building on Cherry Street shared by the Parks Administration. The Town recently purchased property on Main Street and relocated the municipal government offices to this new location in the fall of 2000.

Recreation

North East is a recreation and tourism center in Cecil County. Recreational opportunities are found within and adjacent to town with school playgrounds, athletic facilities, and public park areas, like Turner Park, a 3.3 acre facility with a baseball diamond, tennis courts, basketball courts, and roller hockey area, and the North East Community Park, a 10 acre facility on the water with recreation amenities. The Elk Neck State Park and State Forest lie within a ten mile drive of the Town. The headwaters of the North East River and the Chesapeake Bay have allowed for several private marinas and beaches. The area offers an array of active and passive recreational activities attracting visitors from Cecil and Harford counties, Baltimore, Delaware, Pennsylvania, and New Jersey.

The following describes in greater detail some of these recreational facilities:

Elk Neck State Park. The State Park is a large State owned recreational facility located along Route 272 approximately ten miles south of Town. The land was first dedicated for the Park in 1937 and has grown to its current size of 1,764 acres and is expected to increase. The Park offers a wide range of activities, both active and passive, and has ample facilities for picnicking, camping, hiking, and outdoor sports. Containing 10 miles of shoreline, the park has portions equipped with boat slips. In addition, the Park provides hiking trails, nature trails, and an open air pavilion, as well as boat launching facilities and boat rentals.

Elk Neck State Forest. The State Forest consists of several large parcels totaling 3,147 acres. The largest portion lies just east of Cemetery Road east of Town with another large section at MD 272 and McKinneytown Road south of Town. It offers a variety of passive recreational opportunities such as camping, hiking, and hunting in the appropriate season. The State Forest also contains a rifle firing and archery range which have gained popularity in recent years.

Greenways

Greenways are protected corridors of open space, maintained in a largely natural state for a variety of purposes, including water protection, wildlife habitat enhancement, aesthetic relief, recreation, non-motorized transportation, and environmental education. All greenways serve at least one of these primary functions, and most offer some combination. Greenways are often associated with a linear natural feature like a stream, a coast or the ridge of a mountain. Ideally, they incorporate or link larger open spaces. (Maryland Greenway Atlas, Introduction)

Greenway development offers the opportunity to achieve multiple plan objectives that include providing:

- alternative means of travel (walking or bicycle);
- open space;
- recreation:
- environmental protection; and
- tourism/ economic development.

Greenways act as a major component of heritage tourism, providing a linkage between the physical and cultural features of a particular area and adjacent heritage areas. They are part of a total marketing plan that connects the places tourists visit, shop, eat, and sleep. North East would be one piece of the Mid-Shore heritage area linked by a greenway. Cecil County, as a whole, can provide linkages with Delaware, Pennsylvania, and other regions in Maryland.

It is recommended that North East work with the County to establish a county-wide greenways development program. The proposed County greenway would run along the east side of Town adjacent to Mechanics Valley Road and would continue to the north along North East Creek. The Town should extend the existing bikeways, paths, and sidewalks to the greenways, increasing the connectivity between activity centers. The greenways should be a place to walk, jog, and bike for residents and visitors. It should provide an alternative means to go between neighborhoods, travel to school, and reach recreation areas, tying in with North East Isles and the North East Community Park.

An important factor will be connecting the Central Business District to the greenways. The sidewalk and path system along Cecil Avenue should be extended east to meet with the County greenways. Similar measures should be taken to connect the Middle School and High School to the greenways.

The Town and County zoning ordinances and subdivision regulations should provide that the Planning Commission may require that development of properties which include portions of a designated greenway provide a public easement, dedication-to-public-use, or a cross-use easement along the greenway or along any 100 foot perennial stream buffers that feed into designated greenways.

There are currently a number of greenway initiatives and groups in Cecil County with which the Town should coordinate planning for local links. These include the Lower Susquehanna Heritage Greenway, the East Coast Greenway and the Elk Neck Trail Association. A multi-faceted greenway system throughout the County presents many opportunities for increased tourism activity as well as protection of natural resources. Linkages with other towns and activity centers, e.g., a water shuttle, excursion cruises, or bikeways, should be explored as a means of increasing overall attractiveness of the area and improved economic activity in the traditional town and village centers.

Social and Health Services

Although there have been in the past, there are no state or county service, health, or other "human resource" agencies that maintain an office in North East. It is unlikely that branch offices will be established in the Town because of its relative closeness to Elkton. The nearest hospital is also in Elkton. Social Services and other agencies provide limited transportation to those unable to drive.

Other Services

The electric power and street lighting for the Town is provided by the Conectiv Power Delivery. Cable television is provided by Comcast. Telephone service is provided by Verizon. Street repairs and cleaning as well as snow removal are completed by a Town work force or contracted out.

Recommendations

Based on the amount and rate of growth envisioned in this Comprehensive Plan, most of the existing Town community facilities and services such as fire, library, and recreation, are capable, with minor adjustments and improvements, of servicing the planned growth areas. Other community facilities and services will need expansion or significant improvement to accommodate anticipated growth.

Future economic development, especially growth in the industrial sector, will become increasing dependent on high speed communications. Fiber optic cable presents the opportunity to significantly lower telecommunication expenses and help attract new businesses to the area at a time when high-speed, high-bandwidth communication is an important part of the business infrastructure. The Town should work with the County and other communities to encourage installation of advanced communication infrastructure to serve the area.

Water and Sewer Service

Adequate water and sewer service facilities are a necessity to development. Although North East has identified an alternative water supply the Town should remain willing to work with the County and other towns if alternate sources arise that meet the needs of the Town and are economical.

The Town is currently in the process of designing upgrades to the Rolling Mill Water Treatment Plant (WTP) to accommodate growth over the next 20 years within the Town and service area. Improvements to the Rolling Mill WTP include the addition of two 2.0 million gallons per day maximum daily flow modules (1 redundant) with room for a third. In order to meet the maximum flow-by requirements in the North East Creek, the Town will withdraw raw water from the tidal portion of the North East Creek and pump to the raw water reservoir located at the Rolling Mill WTP.

Upgrades to the Leslie WTP include the installation of flocculators and settlers ahead of the existing filters, which will increase the plant maximum daily capacity to 830,000 gallons per day. Construction of these improvements are underway and are scheduled to be completed by September 2004. During the period of low-flow, the Leslie WTP will not operate. Improvements to the Rolling Mill WTP will allow transfer of water to the higher pressure zones served by the Leslie WTP during periods the Leslie plant is temporarily shut down.

The Town is planning to erect two elevated storage tanks, one to replace the aging and undersized Mauldin Avenue tank, and one to serve Zone 2 NE, which is currently served through a pressure reducing valve.

Gas

It is recommended that North East should pursue the extension of the proposed gas line to the Highway Commercial area and north to the North East Commerce Center.

Educational Facilities

The school system in the Town of North East will need to be expanded as growth occurs in the area. Population increase in North East will place continued pressure on the Town's schools. The Town needs to assess the effects of the projected population increases on the schools and plan for such an increase before major problems occur. North East needs to consider the expansion of existing schools and the possibility of building new schools to the west of Town, closer to the areas of potential development.

The Town should participate in the school planning process. North East should be aware of all school planning efforts being conducted by the County and State insuring that local staff, elected officials, and private citizens take an active part in all planning efforts affecting the Town.

Library Services

The North East Branch is one of the busiest branch libraries in the Cecil County Public Library system, and its usage continues to grow at North East grows. The present size of the North East Branch is 2,800 square feet. A 2,800 square foot public library can provide only basic library services. Its collections are of necessity very small and its educational programs and services are very limited. The Cecil County Public Library Board of Library Trustees plans to increase the size of the North East Branch to enable it to provide a full range of library services. A full-service library includes a children's room with a children's collection capable of serving children of all ages, a children's educational programming space, children's computers, and children's seating, as well as a young adult reading area, a quality adult collection with sufficient breath and depth to be of lasting interest, internet computers, a quiet study room, and a community meeting room capable of seating 70 to 90 people. The size for a library branch capable of providing full-service is 15,000 to 25,000 square feet. The population and projected growth for the North East area justify a library of 20,000 to 25,000 square feet. The library will require 5 acres of land located near and visible from a well traveled road. The present site will not support an adequate expansion. The CCPL Board appreciates the community's strong interest in a library location that is easily accessible to the downtown area. The CCPL Board seeks to locate this new facility within close proximity to the downtown area. The Board of Library Trustees has proposed to the County Commissioners that a new or expanded library be constructed in approximately 2008.

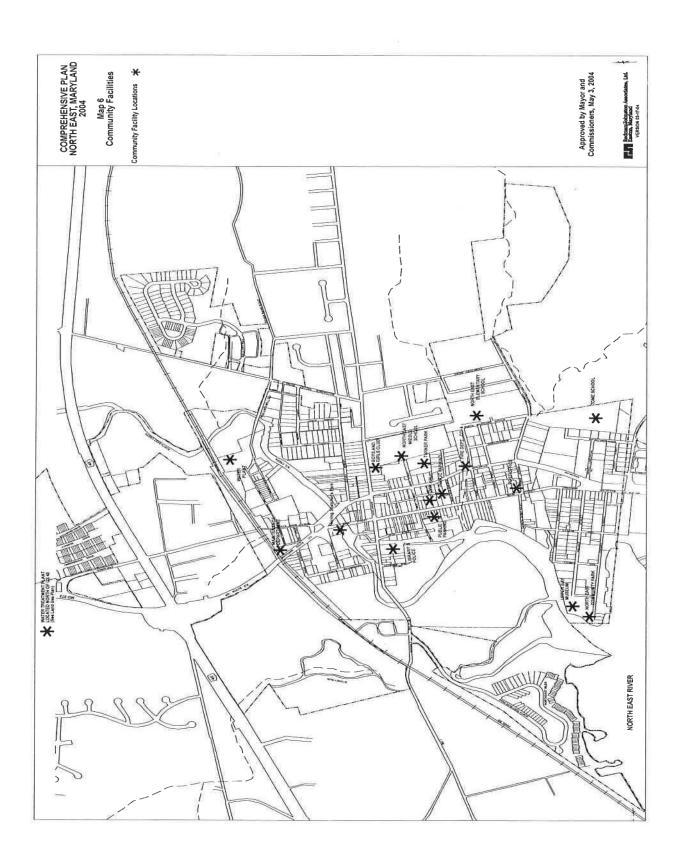
Other Services

The Town should attempt to expand the social services to its residents, concentrating on services catering to the elderly. North East has a significant portion of the population that is above 60 years old and that percentage is expected to continue to rise.

Construction of a community center should be considered by North East. It would provide a meeting place for senior citizens, civic organizations, and children's group's while also providing programs for all residents.

The Town intends to manage the cost of future development and annexation so as not to adversely impact the economy and finances of the Town and existing residents. New development will be required to pay for extensions of community facilities and a fair share of capital investments in community facilities systems.

Map 6 Community Facilities



Chapter 5

Natural Resource and Sensitive Areas

Goals

- ◆ Direct intensive activities away from natural area corridors.
- Respect the significant natural environment of the North East area.
- Preserve and protect the important natural features of the Town including streams, wooded areas, wildlife habitats, and other sensitive natural areas.
- Preserve environmentally sensitive areas along the Town's waterways.
- Establish specific development policies for reviewing all development activities within natural corridors, and with respect to impact upon and protection of ground water.
- Preserve natural drainage ways and to provide public access points for maintenance purposes.
- ◆ Encourage preservation and restoration of properties, structures and places in North East, which are historically and architecturally significant.

Objectives

- Assess future development proposals in light of the site's physical suitability to accommodate development while protecting natural resources, historic features and the quality of the Town's groundwater.
- ◆ Provide specific protection measures for the following areas: 1) Streams and stream buffers, 2) 100-year floodplain, 3) endangered species habitats, and steep slopes (Note: These areas are already afforded adequate protection under the terms of the Town's Critical Area Program and implementing provisions).
- ◆ Identify wetlands and flood plains in order to provide appropriate levels of protection.
- Preserve and protect fragile groundwater resources.
- Protect wildlife and to conserve those natural features that make a significant contribution to the character of each zone and the Town in general.
- ♦ Identify historic sites and maintain the integrity of these areas of the Town.

The Town of North East cherishes its rural character and clean environment with vast surrounding land areas in natural states. The area is rich in wildlife and is ideal for providing an enjoyable rural lifestyle. These irreplaceable natural assets are most important to the health and well being of the Town and to humanity as a whole. The impact of growth and development on the natural resources and environmental quality of the area is an issue of increasing public concern. As a whole, Cecil County is blessed with an abundance of valuable natural resources, which contribute to the County's pleasant quality of life. Human settlements built across these landscapes will disturb and alter this fragile natural environment. The Town desires that future building development be conceived and designed in ways which recognize sensitive natural features and support systems and provide measures to protect and minimize disturbance and damage to these important natural areas.

The Maryland Economic Growth, Resource Protection and Planning Act of 1992 also added the requirement that the comprehensive plan contain a Sensitive Areas Element which describes how the jurisdiction will protect "sensitive areas." Sensitive natural features (see Map 7) and systems of particular interest to the Town include:

- Streams and Stream Buffers;
- Wetlands:
- Woodlands and native vegetation;
- Threatened and endangered wildlife habitats;
- Surface and ground water systems;
- Floodplains;
- · Open space; and
- Highly erodible and permeable soils

The Town will continue to require that major subdivision and development proposals incorporate design measures which will identify and reduce, to the extent practical, impacts on sensitive natural features. The clustering of development on a portion of the development site and reserving the remainder of the site in open space serves to reduce the amount of infrastructure and its associated impacts and allows sensitive natural areas to be placed in much less disturbed open space areas. To the extent practical, wetlands, woodlands, and other sensitive natural areas will remain in open space areas. Building and clearing activities in floodplains, wetlands, steep slopes and highly erodible soils will be avoided, wherever possible. Storm water runoff from impervious surfaces will be properly managed and infiltrated. Sediment and erosion control during and after construction will be practiced. Maintaining and enhancing wildlife corridors and habitat will be encouraged.

Chesapeake Bay Critical Area

The Chesapeake Bay Critical Area Protection Program (Natural Resources Article 8-181-8-1816) was passed by the Maryland General Assembly in 1984 because of concern for the decline of the quality and productivity of the waters of the Chesapeake Bay and its tributaries. The decline was found to have resulted, in part, from the cumulative effects

of human activity that caused increased levels of pollutants, nutrients, toxins, and also from the decline in more protective land uses such as forest land and agricultural land in the Bay region. The General Assembly enacted the Critical Area law for the following purposes:

- 1. To establish a Resource Protection Program for the Chesapeake Bay and its tributaries by fostering more sensitive development activity for certain shoreline areas so as to minimize damage to water quality and natural habitats; and
- 2. To implement the Resource Protection Program on a cooperative basis between the State and affected local governments, with local governments establishing and implementing their programs in a consistent and uniform manner subject to State criteria and review.

To achieve these two purposes the law specified the creation of a 27-member Commission (now 29 as a result of the addition of Coastal Bays), appointed by the Governor and representing the local jurisdictions, State agencies, and diverse interests. The Commission was charged with developing a specific set of criteria to regulate land use in the Critical Area, and the General Assembly approved these criteria during the 1986 legislative session (COMAR 27.01.01 – 27.01.11). Subsequently, "the Criteria" were used by each of the affected local jurisdictions to prepare their own local Critical Area programs, ordinances, and regulations to manage and regulate land use within the Critical Area. The Critical Area includes the Chesapeake Bay, its tributaries to the head of tide, tidal wetlands, plus all land and water within 1,000 feet beyond the landward boundary of these waters and wetlands.

The goals of the Critical Area program are to accomplish the following:

- 1. To minimize adverse impacts on water quality that result from high nutrient loadings in runoff from surrounding lands or from pollutants that are discharged from structures;
- 2. To conserve fish, wildlife, and plant habitats; and
- 3. To establish land use policies for development in the Critical Area which accommodate growth and address the fact that even if pollution is controlled, the number, movement, and activities of persons in that area can create adverse environmental impacts.

History of the North East Critical Area Program

In accordance with the Critical Area Act, all affected jurisdictions were required to develop and implement a Critical Area Protection Program to control the use and development of that part of the Critical Area within its territorial limits. The Town of North East adopted a Critical Area Program along with a series of implementing provisions contained in the North East Zoning Ordinance and Subdivision Regulations in June, 1988. The policies and goals included in the Critical Area Program and the specific requirements and standards included in the North East Zoning Ordinance and Subdivision

Regulations were developed in accordance with the Critical Area Act and Criteria to accommodate future growth of the Town while addressing the associated environmental impacts.

In this update of the Comprehensive Plan, some of the provisions included in the Critical Area Program are being incorporated into the Sensitive Areas Element of the Town's Comprehensive Plan and some are being incorporated into the North East Zoning Ordinance in order to more effectively implement the Town's Critical Area Program and to ensure consistent and uniform application of the Critical Area regulations.

Critical Area Designations and Policies for Future Growth

In recognition that the Critical Area has great diversity in existing land use, the State's criteria for local programs and ordinances is based on three different land use classifications. At the time of the original Critical Area Program adoption, each jurisdiction identified and mapped land with the Critical Area as one of the three classifications. This designation allowed jurisdictions to either use existing zoning classifications or to use overlay zones to effectively implement different performance standards for development and redevelopment in those areas. The land within the Critical Area was mapped as one of these categories based on existing land use as of December 1, 1985 and based on mapping criteria described below for each category.

- Intensely Developed Area (IDA)
- Limited Development Area (LDA)
- Resource Conservation Area (RCA)

There are two hundred and fifty-five and a half acres (255.5) within the Critical Area.

Intensely Developed Area. IDA's are the most intense land use classification in the Critical Area. In accordance with the Criteria, IDAs are areas where residential, commercial, institutional and/or industrial development is predominant and relatively little natural habitat occurs. At the time of initial mapping these areas had to have one of the following characteristics:

- 1. Housing density greater than four dwelling units per acre;
- 2. Industrial, institutional, or commercial uses concentrated in the area; or
- 3. Public sewer and water collection and distribution systems currently serving the areas and housing density greater than three dwelling units per acre.

In addition, these features had to be concentrated in an area of at least 20 acres or the entire upland portion of the Critical Area within a municipality.

At the time of Program approval, about one hundred fifteen and a half acres (115.5) were classified as IDA.

Limited Development Area. LDA's are those areas developed in low or moderate intensity uses and contain areas of natural plant and animal habitats. The quality of runoff from these areas has not been substantially altered or impaired. At the time of original mapping, these areas had to have one of the following features:

- 1. Housing density between one dwelling unit per five acres or up to four dwelling units per acre;
- 2. Areas not dominated by agriculture, wetland, forest, barren land, surface water or open space;
- 3. Areas having the characteristics of the IDA, but less than 20 acres in extent; or
- 4. Areas having public water or sewer or both.

At the time of program approval there were approximately one hundred forty acres (140) acres classified as LDA.

Resource Conservation Area. RCA's are areas characterized by nature-dominated environments such as wetlands, forests, and abandoned fields and areas where resource utilization activities (agriculture forestry, fisheries activities, and aquaculture) take place. At the time of original mapping, these areas had to have one of the following features:

- 1. Existing density less than one dwelling unit per five acres; or
- 2. The dominant land use in agriculture, wetland, forest, barren land, surface water or open space.

The Town does not have any RCA land within their Corporate Limits.

Habitat Protection Areas (HPA's). Maps illustrating the general location, extent and configuration of Habitat Protection Areas in the Town are on file at the Town Hall. They will be used to assist the Town, property owners, developers and any person proposing development when reviewing development projects. While these maps give a general indication of the area, they do not excuse any property owner or operator from establishing, to the satisfaction of the Town Planning Commission, whether or not the property or activity will affect the element of habitat to be protected. During site plan review, the applicant will be responsible for providing a more detailed site analysis and inventory of the following Habitat Protection Areas:

- 1. The 100-foot Buffer;
- 2. Threatened and Endangered Species and Species in Need of Conservation;
- 3. Colonial water bird nesting sites;
- 4. Historic waterfowl staging and concentration areas in tidal waters, tributary streams or tidal and non-tidal wetlands;
- 5. Existing riparian forests;
- 6. Forest areas utilized as breeding areas by forest interior dwelling birds and other wildlife species;
- 7. Submerged aquatic vegetation (SAV's)
- 8. Designated Natural Heritage Areas; and
- 9. Non-tidal wetlands.

The Town's Critical Area boundary is mapped as part of this document. Other elements of land use development that are addressed in the Critical Area Program are:

- Buffer areas;
- Land cover;
- Impervious surfaces;
- Water access:
- Wildlife Habitat;
- Setbacks;
- Open Space and
- Recreation areas

Many of the Critical Area requirements are performance standards that developers and other land uses are required to achieve. These standards affect such things as impervious surface area, forest clearing, and density. These standards and implementation regulations are part of the Town's Zoning Ordinance and Subdivision Regulations.

Surface Mining in the Critical Area. Surface mining is not a permitted use in the Town of North East. Should the Town amend its Zoning Ordinance to allow surface mining in any zone within the Critical Area, the Town shall amend its Critical Area Ordinance to include appropriate language.

Agriculture in the Critical Area. The Town does not include any areas that are currently undergoing or are proposed for agricultural use. At such time in the future that an area within the Town would be proposed for this type of use through annexation or a change in current land use, the Town shall amend its Critical Area Ordinance to include appropriate language.

Recommendations

Tree Preservation and Forest Conservation

The Town of North East has extensive forested lands within the Town and adjacent to the Town (see Map 7). To preserve the Town's forested areas, developed woodlands, and street trees, the Town should develop an Urban Forestry Plan and implement tree preservation requirements as part of the new Zoning Ordinance. As part of the zoning requirements, the Town should provide that when a developer is unable to meet forest preservation or other landscaping requirements that a fee in-lieu will be assessed. Fees inlieu collected by the Town could be used to fund public enhancement projects identified in the Town Urban Forest Plan, e.g., landscape improvements at major community gateways, maintenance of street trees, etc.

All land development should be required to limit clearing of natural vegetation and retain specimen trees to the extent possible. The Maryland Forest Conservation Act requires that clearing of forest be regulated as of December 1992 to insure that certain forest

conservation measures are implemented. North East is currently part of the County Forest Conservation Program.

The Forest Conservation Ordinance requires that applicants proposing development activities that will disturb 40,000 square feet or more must submit a forest stand delineation and a forest conservation plan. The ordinance establishes forest conservation thresholds for all land use categories. The forest conservation threshold sets the percentage of the net tract area at which the reforestation requirement changes from a ratio of 1/4 acre planted for each acre removed above the threshold to a ratio of 2 acres planted for each acre removed below the threshold.

After reasonable efforts to minimize the cutting or clearing of trees and other woody plants have been exhausted in the development of a subdivision, site plan or project plan, grading and sediment control activities, and implementation of the forest conservation plan, the forest conservation plan must provide for reforestation, or payment into the forest conservation fund.

The actions must be consistent with the following forest conservation threshold for the applicable land use category:

Category of Use	Threshold Percentage
Agricultural and resource areas	50 percent
Institutional development areas	20 percent
High density residential areas	20 percent
Mixed use and planned unit development areas	15 percent
Commercial and industrial use area	15 percent

Each acre of forest retained on the net tract area above the applicable forest conservation threshold will be credited towards the total number of acres required to be reforested. All existing forest cover cleared on the net tract area below the applicable forest conservation threshold, must be reforested at a ratio of 2 acres planted for each acre removed below the threshold.

If no forest exists or it exists in a small amount on the site the applicant must conduct afforestation on the lot or parcel. An agriculture or resource area tract having less than 20 percent of the net tract area in forest cover must be afforested up to at least 20 percent of the net tract area. Institutional development areas, high density residential areas, mixed use and planned unit development areas, and commercial and industrial use areas with less than 15 percent of its net tract area in forest cover must be afforested up to at least 15 percent of the net tract area.

Streams and Stream Buffers

Streams and their buffers are important resources, especially to North East with many stream corridors within its boundaries (see Map 7). The Town has the North East Creek running through the middle, which serves as a source of water supply for the Town, and is served by other smaller streams like Stoney Run and Fords Run. Streams support recreational fishing and serve as spawning areas for commercial fish stock. Development near stream areas subject to flooding can result in the loss of life and property. Streams and their adjacent buffers are home to countless species of animals and plants and transport valuable nutrients, minerals and vitamins to rivers and creeks and, in turn, the Chesapeake Bay. The floodplains, wetlands, and wooded slopes along streams are important parts of the stream ecosystem.

As development activity consumes large amounts of land, forest cover and natural vegetation along streams are diminished. The cumulative loss of open space and natural growth reduces the ability of remaining land along streams to buffer the effects of greater stormwater runoff, sedimentation, and higher levels of nutrient pollution. Buffers serve as protection zones when located adjacent to streams and reduce sediment, nitrogen, phosphorous and other runoff pollutants by acting as a filter, thus minimizing stream damage. The effectiveness of buffers to protect stream water quality is influenced by their width (which should take into account such factors as contiguous or nearby slopes, soil erodibility, and adjacent wetlands or floodplains), the type of vegetation within the buffer (some plants are more effective at nutrient uptake than others), and maintenance of the buffer.

Buffers also provide habitat for wetland and upland plants which form the basis of healthy biological communities. A wide variety of animals use the natural vegetation as a corridor for food and cover. A natural buffer system provides connections between remaining patches of forest in the area to support wildlife movement.

Due to the importance of the North East Creek as a potable water supply in the region, it is important that the County and Town take steps to protect water quality. Minimum stream buffer requirements may not be enough to insure that development and other land disturbing activities do not adversely impact water quality in the stream. A more prudent approach to insure a sustainable water supply for the area may be to initiate a watershed wide planning effort for the purpose of identifying best management practices to apply in the watershed, including alternative stormwater management techniques, larger stream buffers, limitations on development in critical areas and vigorous enforcement efforts.

Floodplain

The floodplain areas in North East are determined by the Flood Insurance Rate Maps developed by the Federal Emergency Management Agency (FEMA). These maps are part of the regulatory program administered by the Town. In addition the Town has adopted and enforced a Floodplain Ordinance since February of 1981.

Tidal Wetlands

Public and private (tidal) wetlands are important natural areas protected by state law (Title 9, Sections 9-101/9-301 of the Natural Resources Volume, Maryland Annotated Code) which sets forth strict licensing procedures for any alteration of wetlands. They are also within the protective jurisdiction of the federal government through the U.S. Army Corps of Engineers. Town policies and regulations regarding wetlands require compliance with State and Federal wetland regulations.

Steep Slopes

The Town should require that the same provisions regulating steep slopes in the Critical Area be applied Town-wide. This means that clearing, grading and placement of structures and other impervious surfaces on slope 15 percent or greater would be strictly limited.

Endangered Species Habitat

To ensure the protection and continued existence of endangered species within the Town's jurisdiction, Zoning Ordinance and Subdivision Regulations should include the following protective measures:

- 1. Require that anyone proposing development activities must address protection of state and federally designated endangered species. The developer must determine through contact with the Town and the Maryland Wildlife and Heritage Service (MWHS) whether proposed activities will occur within or adjacent to identified endangered species habitat and whether the activities will affect the area.
- 2. If it is established that an activity will occur within or adjacent to an endangered species habitat, the Town should require that the developer provide protection measures in the project design. A written environmental assessment including site design plans and a description of measures to be taken to protect the endangered species should be submitted to the Town as part of the development review process. The developer must work with the MWHS in establishing species/site-specific protection measures. Protection measures may include:
 - a. Designation of protection areas around the essential habitat of the designated species. Development activities or other disturbances shall be prohibited in the protection area, unless it can be shown that these activities or disturbances will not have or cause adverse impact on the habitat. The protection area designation will be made with input from the MWHS.
 - b. Implementation of design strategies that work to protect the species and essential habitat. These strategies should include (but are not limited to) restrictions on siting of structures, use of cluster design, establishment of

undisturbed open space areas, restrictive covenants, and restrictions on noise levels and timing of construction activities.

Historic Features

History can be kept alive through education and preservation, both of which can take many forms and vary in intensity. Old homes can be restored such that they are comfortable homes of today or they could be refurbished as an office. Historic sites can honor the past while providing a place for leisure activities. An old church can still hold worship services similar to those held one hundred years ago. A number of programs exist to help individuals and groups temporarily or permanently protect sites and structures considered significant. The past is a building block for the future and, if a plan is to be comprehensive, it must incorporate that past as a key element of planning for the future.

Historic preservation is a program which involves the inventorying, researching, restoration, and ongoing protection of sites and structures having a significant local or national historic interest. Continued historic and cultural resource preservation and enhancement through sensitive land use planning and other administrative means would provide North East with a number of benefits including:

- Promotion of a strong sense of community pride for Town residents;
- Community revitalization through the renovation or adaptive reuse of older structures;
- Increased property values and tax revenues as a result of renovation and restoration; and
- Increased revenues generated from tourism.

There are a number of structures and sites within the Town that are of historic, cultural, or architectural significance. These structures, given proper concern and recognition, have tremendous potential to serve as physical reminders of the history and heritage of our past.

In recent years, there has been considerable public concern that the vestiges of our heritage will be irretrievably lost. It has been found that an active historic and architectural preservation program could have beneficial social, economic and aesthetic impacts on the area. Therefore, rather than permit demolition, destruction, or abandonment of our rich heritage, an active historic preservation program is recommended. Such a program should permit the continued use of the identified sites and structures while simultaneously discouraging inappropriate exterior alterations. The development of a Historic Preservation Program for the Town should be the result of a cooperative effort between the public and private sectors of the community.

Inventory

The following are historic structures of concern to the Town of North East:

- Bryson House
- Old Town Lockup
- West Log Home
- Andy Anderson's Home
- Mill House
- 5&10 Antiques (formerly Cramer's 5&10)
- Old Post Office
- Simcoe House
- Reynolds/South Main Street
- The William Roney House
- Hannum House
- St. Mary Anne's Episcopal Church
- England's Colony on the Bay (formerly Roney and Wells)
- Upper Bay Museum (formerly Harvey's Fish Market)

Recommendations

The following programs and strategies are designed to facilitate achieving this Plan's goal of preserving and enhancing the Town's rich cultural and historic heritage.

Protection and Preservation Programs

A number of existing programs provide assistance in protection or preservation, offer tax benefits, provide professional historical/architectural consulting, and so forth. More detailed information on programs including the National Historic Landmark, National Register of Historic Places, Maryland Historic Site Survey, Conservation and Preservation Easements, and Historic Overlay Districts can be found from various historic preservation organizations such as the Maryland Historical Trust.

National Register of Historic Places. In 1966, Congress established the National Register of Historic Places as the Federal Government's official list of properties, including districts, significant in American history and culture. In Maryland, the Register is administered by the Maryland Historical Trust. Some benefits resulting from a listing in the National Register include the following:

- National recognition of the value of historic properties individually and collectively to the Nation.
- Eligibility for Federal tax incentives and other preservation assistance.

- Eligibility for a Maryland income tax benefit for the approved rehabilitation of owner-occupied residential buildings.
- Consideration in the planning for federally and state assisted projects.
- Listing does not interfere with a private property owner's right to alter, manage or dispose of property.

Maryland Historical Trust. The Maryland Historical Trust (MHT) surveys historic buildings, structures and archaeological sites to determine eligibility of being listed on the state register. As with being on the National Register of Historic Places, listing does not limit or regulate the property owner in what can or cannot be done with the property. In order to be considered for listing on the National Register or having an easement on the property to be accepted by the MHT, the site usually must first be listed on the Maryland Historical Trust Register.

Maryland Historic Preservation Easement. A state-held historic preservation easement monitored by the MHT is an excellent means of perpetually preserving a historical structure and property for future generations. Regulations state that easements may be assignable to other parties or run with the land. The benefits for a property owner to donate his land to the MHT include income, estate, inheritance, gift and property tax benefits. In exchange, the owner gives the MHT the final word regarding proposed alterations. However, for properties whose fair market value is largely based on the value of development rights, this method of preservation may not be the most financially expedient for the property owner or for the MHT.

Local Historic District Overlay Zone. A third, but separate, type of designation is the locally-zoned historic district which is an overlay on the existing zoning ordinance of a specified area. This district, legally allowed by Section 8.01 of Article 66B in the Annotated Code of Maryland is designed in order to maintain the visual character of the community. It may allow an appointed Commission to monitor changes, alterations and demolition of buildings and structures of architectural or historic significance. The main purpose of such zoning is:

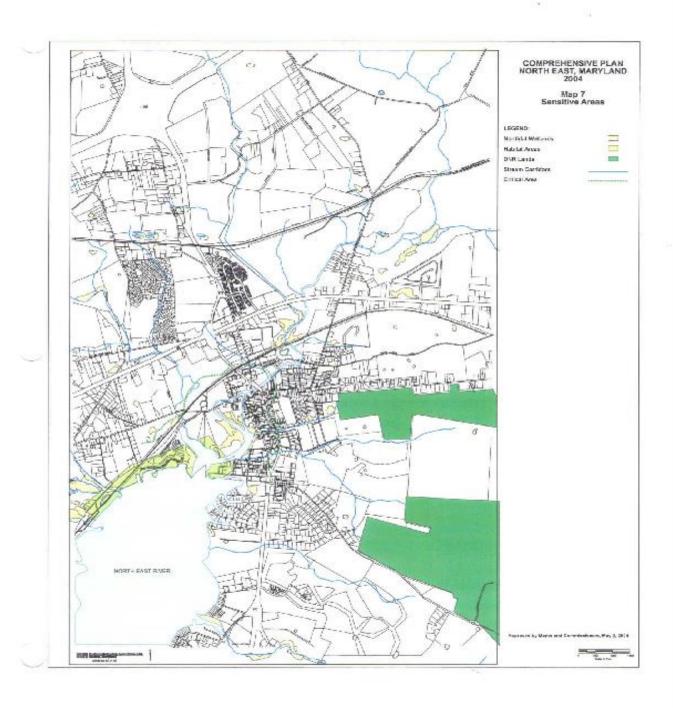
- to safeguard the heritage by preserving the Districts that reflect elements of its cultural, social, economic, political or architectural history;
- to stabilize or improve property values in such a District;
- to foster civic beauty;
- to strengthen the local economy;
- use and preservation of Historic Districts for the education, welfare and pleasure of the residents of the county or municipal corporation.

Adaptive Re-Use. The Town should adopt zoning provisions that promote the adaptive reuse of historic structures for public and private uses including, but not limited to, bed and breakfast establishments, craft/gift shops, museums, and studio space for artisans, when such uses minimize exterior structural alteration.

Support Owners. The Town should encourage, through the use of various incentives, the preservation of historic structures. Include tax incentives for major structural or exterior renovation or the donation of protective historic easements.

Local Historic Districts. The Town may, through the use of various incentives, encourage the establishment of local historic districts in the Town. Incentives may include tax incentives and recognition through the awarding of plaques.

Development Proposal Review. The Zoning Ordinance and Subdivision Regulations for the Town should require developers to identify cemeteries/burial grounds/archaeological sites/historical structures on a property prior to any disturbance of the site and support archaeological and historical research through preservation of significant sites.



Chapter 6 Housing Element

Goals

- Provide a variety of housing types within the Town's land use controls.
- Encourage the use of innovative programs to provide a suitable mix of housing types in affordable price ranges.
- Insure high standards of quality in new construction, but with sensitivity to housing affordability.
- Encourage, through both private and public actions, the renovation or removal of substandard housing.
- Encourage, through both private and public actions, an opportunity for families to live in adequate homes in price ranges that are affordable.

Objectives

- Encourage continued maintenance and upkeep of existing housing and stimulate the replacement of housing that becomes unfit for human habitation.
- Protect residential zones from incompatible activities and land uses to create comfortable and safe living environments.
- Discourage non-resident thru-traffic in predominately residential neighborhoods.
- Provide a balanced housing stock with housing opportunities for all Town residents.
- Continue to encourage greater housing opportunities for the Town's growing elderly population.
- Encourage increased home-ownership, particularly among the lower-income segments of the community.
- ◆ Improve housing conditions for all the Town's residents.
- Protect and preserve existing neighborhoods from encroachment of incompatible land uses and activities.

- ◆ Continue to require site plan and planning review for all major developments to ensure a functional design, quality living environment, and compatibility with overall town character. Conditions, exactions and dedications may be required by the Planning Commission so that the development serves the public interests as fairly and fully as possible, consistent with the Comprehensive Plan.
- ◆ Ensure that multi-family residential development provides adequate community open space, landscaping and parking. Minimum parcel size for multi-family development should be of sufficient size to accommodate this use.

The quality of North East's neighborhoods is determined by the cumulative impact of the Town's housing supply and living environment. Since major community goals are to improve the quality of life and to promote the availability and affordability of decent, safe, and sanitary housing for all Town residents, housing ranks as an important local concern. Important factors to be considered in forming Town policy toward the public function of housing in the Comprehensive Plan are:

- Housing is a durable, physical product in a neighborhood setting.
- Housing is a major user of the Town's land.
- Housing is the object of local real estate taxes.
- Housing is a major influence on the Town's physical and social environment.
- Housing is an essential requirement for continued economic development.
- Housing construction is a major source of employment.
- Housing is a major investment or expenditure for individual families.
- Housing is a major investment for the private financial community.
- Housing is a major ingredient in family satisfaction or dissatisfaction and in a community's sense of well-being.

Current Housing Programs

As federal housing and other related programs have disappeared, cities and counties have sought to aid the would-be homeowner. Maryland mounted an ambitious housing program in 1986 in response to federal cutbacks. Most of the state housing programs are administered by the State of Maryland's Community Development Administration which offers a variety of housing programs that fall under the general categories of home ownership, rental housing, special loans and housing subsidy programs. The current programs are briefly described below:

Current Home Ownership Programs

Maryland Mortgage Program (MMP) - The purpose of the MMP is to enable low- and moderate-income households to purchase homes by providing below-market interest rate mortgage financing through private lending institutions. The MMP, which targets first-time home buyers, is available to individuals and households with incomes at or below 85 percent of the State median income.

Maryland Home Financing Program - Home Purchase (MHFP - PIRL) – The purpose of MHFP is to provide low-interest rate mortgages for lower-income households. The MHFP, which targets first-time home buyers, is available to individuals and households with incomes at or below 55 percent of the State median income.

Maryland Home Financing Program - Reverse Equity Mortgage Program (MHFP – REMP) — The purpose of the MHFP-REMP is to enable elderly families of limited income to access part of their accumulated equity in order to pay for housing and other personal expenses to continue to occupy the home. For eligible applicants and properties, the Community Development Administration (CDA) will establish a line of credit up to a program maximum of \$50,000 from which funds may be requested on a monthly basis. No repayment of loans is required until the death of the last surviving borrower, after the borrower voluntarily moves out, or after the sale or transfer of the property.

Settlement Expenses Loan Program (SELP) – SELP provides financial assistance in the form of low interest loans to pay settlement expenses.

Rental Housing Programs

Multi-Family Bond Program (MBP) – This program is designed to increase the construction and rehabilitation of Multi-Family rental housing for families with limited incomes. Tax exempt bonds and notes provide below-market rate construction and permanent financing to profit and nonprofit developers. A certain percentage of units in the project must be made available to low-income persons and households.

Rental Housing Production Program (RHPP) – The purpose of the RHPP is to increase the supply of rental housing for low-income families by providing below-market rate and deferred payment loans to developers. The program is designed to be used in conjunction with tax-exempt, private, local and federal loans.

Elderly Rental Housing Program (ERHP) – The purpose of the ERHP is to increase the supply of rental housing for low-income elderly households by providing below-market rate and deferred payment loans to developers. The program is designed to be used in conjunction with tax-exempt, private, local and federal loans.

Nonprofit Rehabilitation Program (**NRP**) – The purpose of the NRP is to provide low-interest mortgage loans to nonprofit organizations and local governments to rehabilitate housing for low-income households.

Partnership Rental Housing Program (PRHP) – The PRHP is intended to expand the supply of affordable housing for poor families through State and local government partnerships. Eligible projects include new construction and acquisition or rehabilitation of rental housing.

Maryland Housing Rehabilitation Program - Multi-Family (MHRP-MF) — The purpose of the Multi-Family Program is to provide loans to assist owners in bringing their multi-family units up to applicable building codes and standards.

Multi-Family Home and Energy Loan Program (HELP-MF) – The purpose of the HELP is to finance rehabilitation and energy conservation of existing Multi-Family properties using the proceeds of tax-exempt bonds.

Construction Loan Program (CLP) – The CLP provides low-interest, construction financing loans to nonprofit and local governments to acquire, rehabilitate, or construct certain types of housing and for bridge loans to profit motivated developers.

Transitional Housing and Emergency Shelter Program – The THESP provides grants to improve or create transitional housing and emergency shelters for the purpose of reducing homelessness in the State.

Special Loan Programs

Maryland Housing Rehabilitation Program - Single Family (MHRP SF) - The purpose of the program is to preserve and improve existing small residential properties by bringing the properties up to applicable codes and standards. In 1990 this program was merged with the Livability Code Rehabilitation Program.

Accessory, Shared and Sheltered Housing Program (ACCESS) – The purpose of ACCESS is to expand low cost housing opportunities for low-income households and low-income elderly, handicapped or disabled persons by financing the creation of accessory, shared, and sheltered housing facilities.

Indoor Plumbing Program (IPP) – The purpose of the IPP is to provide indoor plumbing in residential properties. Loans are made to income eligible households in owner-occupied single family units.

Residential Lead Paint Abatement Program (RELAP) – Loans are provided through the RELAP to reduce instances of lead poisoning of children by financing the abatement of lead paint in residential buildings.

Group Home Financing Program (GHFP) – The purpose of this loan program is to assist individuals and nonprofit organizations to construct or acquire and modify existing housing to serve as group homes or temporary and emergency shelter for income-eligible persons and households with special housing needs.

Special Housing Opportunities Program (SHOP) – The purpose of the Special Housing Opportunities Program (SHOP) is to assist non-profit organizations and local development agencies construct and acquire and modify existing housing to provide shelter and service individuals with special housing needs.

Special Targeted Applicant Rehabilitation Program (STAR) – The purpose of the STAR program is to preserve and improve single family properties. STAR was designed to bring properties up to applicable building codes and standards or a minimum housing quality standard.

Housing Subsidy Programs

Rental Allowance Program (**RAP**) – This program provides grants to local governments to provide flat rent subsidies to low-income families who are homeless or have emergency housing needs. The purpose of the program is to help these families to move from temporary housing to permanent housing and self sufficiency.

Section 8 Existing Certificate/Voucher Program – A U.S. Department of Housing and Urban Development Program (HUD), Section 8 Existing is a rental assistance program which subsidizes the rent of low income families through the use of federal grants. This program is administered through the Maryland CDA and the Cecil County Department of Housing.

Low Income Housing Tax Credit Program

The Federal Low-Income Housing Tax Credit, created by the Tax Reform Act of 1986 and extended by the Revenue Reconciliation Act of 1989, is designed to encourage private sector investment in the construction and rehabilitation of housing for low- and moderate-income families. The law gives states annual tax credit allocation based on population. CDA is the agency which allocates the state's tax credits on a competitive basis.

Infrastructure Program

The purpose of this program is to provide an efficient and economical means of access to capital markets in order to finance infrastructure projects to local governments. This program is administered through the Maryland CDA.

Recommendations

There are alternatives available to local governments for the provision of affordable housing. The extent to which these alternatives are used, either singularly or in combination, depends on the particular needs of the community. Each approach to providing affordable housing has varying degrees of success.

Efficiency Apartments

Efficiency apartments may be permitted under certain conditions with adequate safeguards to protect the character of the existing residential neighborhoods. Both the homeowner and the community can benefit from the presence of accessory apartments, if they are carefully managed. The most obvious public benefit of efficiency apartments is

that they offer a source of inexpensive housing units in the community with virtually no conversion of land use to produce them. Efficiency apartments are moderate-cost housing and can reduce the need for some new development.

The following guidelines should be used to address some of the concerns about the impacts that single family housing conversion to efficiency apartments may have on the character of a neighborhood:

- 1. Require Owner Occupancy require that the owner of the building continue to reside in one of the units to ensure that the appearance of the structure will be maintained.
- 2. Restrict the Age of Homes to Be Converted these provisions will limit conversion to existing structures to discourage builders from taking advantage of an efficiency apartment provision as a backdoor route to two-family development.
- 3. Provide for Parking and Traffic these provisions will mandate that the existing parking pattern not be altered and that off-street parking be provided.
- 4. Guarding Against Visual Change in the Neighborhood these provisions will generally restrict the owner from making external alterations to the structure such as adding a second entrance on the front of the house.
- 5. Specifying Minimum Apartment Sizes these provisions should limit the size of the efficiency apartment as it relates to the main unit to ensure that the accessory unit is clearly secondary. Minimum size of apartments will be specified.
- 6. Providing Opportunities to Control the Scale of Change these provisions should allow conversions under a special exception rather than as a "by right" in any zone, thereby allowing neighborhood residents a chance to respond.

Cluster Development

Cluster development is a method of grouping housing units together to reduce street and utility costs while retaining the same density as regular housing types (see Illustration 1). The Town permits cluster development within the Zoning Ordinance.

Traditional Neighborhood Development (TND)

Traditional neighborhood development is a development pattern that reflects the characteristics of small, older communities of the late 19th and early 20th centuries. Emphasis is placed on the layout of the streets, the building of a variety of housing types with smaller front yards, the more judicious use of open spaces to serve as community focal points, and the appearance of clearly defined streetscapes (see Illustration 2). TND communities are characterized by:

- mixed land uses;
- grid street patterns;
- pedestrian circulation;
- intensively-used open spaces;
- architectural character and
- a sense of community.

It is recommended that the Town revise existing regulations to establish a TND overlay zoning district for infill development, as well as for use in Designated Growth Areas. Traditional neighborhood development concepts are particularly relevant to vacant areas in and immediately adjacent to the Town. In the overlay zone, design standards should be created that encourage compatible new construction and additions in traditional neighborhoods. New TND districts created under these provisions should establish specifications for building bulk, building setback, yard requirements, building height and scale, and/or parking requirements. The overlay zone should provide that exceptions to existing development standards can be made where appropriate.

Enforcement of Building and Housing Codes

Building codes are designed to assure that new structures are of good quality, and housing codes are aimed at obtaining quality in existing housing. Both are worthwhile even though they necessitate the added burden of time and staff to enforce them. Building inspection and enforcement in the Town of North East is provided by Cecil County.

Livability Code

The Livability Code applies to minimal safe and sanitary conditions of rental properties only and is intended to insure that all rental units meet basic standards for such things as bathroom facilities, electrical systems, etc. Cecil County enforces the Livability Code in the Town of North East.

Other Recommendations

The Town should encourage the construction of housing for the elderly such as Victoria Park. If located near the downtown area, as recommended, such a project will provide for convenient access to shopping and other downtown facilities.



CONVENTIONAL SUBDIVISION

The entire site is subdivided into lot of 1/2 acre or more. An extensive road system is required for access to lots, and the dispersed lay-out increases the cost of utility installation and maintenance. Open space is minimal thus forcing pedestrians and vehicular traffic to utilize the same travel corridors. Privacy is limited and the landscape is often montonous.

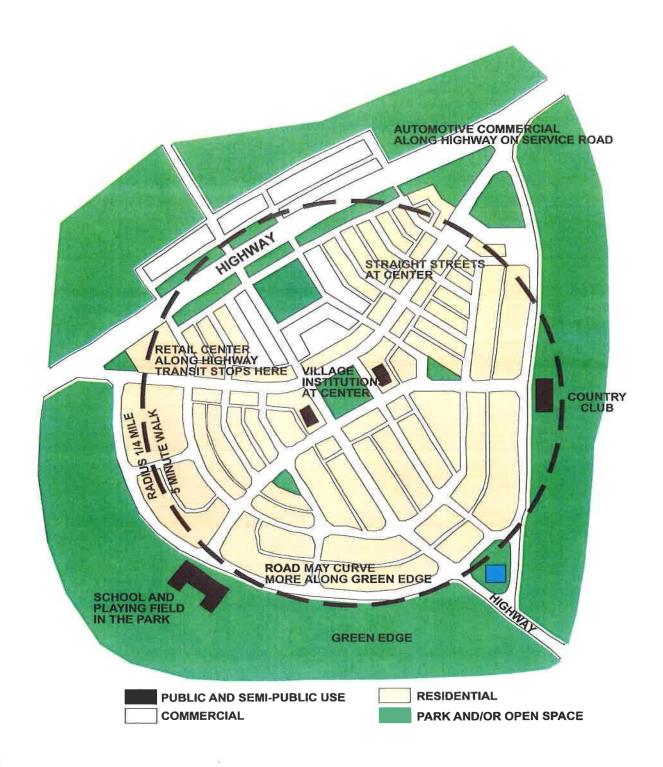


CLUSTER

Lot size is reduced, with the balance provided as open space. Clustering allows for the utilization of the best building sites, while preserving environmentally sensitive areas. In addition, utility and road costs are reduced as is maintenance costs. More open space can be provided and utility can be achieved with attached units, such as townhouses and multi-plex units.



Illustration 2 - Traditional Neigborhood Development Concept



Chapter 7

Economic Development Plan

Goals

- ◆ Create a healthy balanced economy which provides necessary goods and services for North East's population, sufficient job opportunities for its residents, and sufficient tax base to finance necessary municipal improvements and services.
- ◆ Diversify and expand the Town's economic base to provide a broad range of employment and commercial opportunities within the framework of the Town and County's overall growth management goals and objectives.

Objectives

- Encourage select employers providing skilled job opportunities commensurate with the abilities of the Town's local work force.
- Upgrade, expand and preserve the Central Business District so that it remains a viable economic unit.
- Protect the historic character of North East and support projects and efforts which enhance that character.
- ◆ Encourage the growth and diversification of the tourism industry in North East, and promote additional tourism and travel related development which compliments the scenic and historic qualities of North East.
- Expand the Town's tax base.

The Economic Development Plan establishes objectives and policies for preserving and strengthening retail service and industrial activities of North East. Well-planned diversification and expansion of the Town's and region's economy provides North East and its residents a more stable and secure economic base. A successful economic development program creates jobs and income and also bolsters the Town's tax base thereby providing funds for needed community facilities, services, and improvements.

The economy of North East, and Cecil County as a whole, is strongly influenced by developments in the Wilmington/Newark area, Baltimore, Harford County and New Jersey. One indicator of this relationship shows that there is a strong commuter-shed between North East area and Wilmington, Harford County, and Baltimore, as evident from the 2000 Census data.

Within North East, the commercial and employment base is concentrated in the central business district along Main Street. These businesses are small retail and service outlets

catering to the local population and summer tourists. In addition, North East Station and North East Commerce Center also serve as an employment base.

The commercial area to the north of Town along US 40 is geared towards travelers and offers a broad and extensive shopping corridor and consists of strip development. An industrial park is located north of the MD 272/US 40 intersection and south of I-95.

To the south of Town, privately owned marinas and beaches provide jobs locally while attracting customers from all of Cecil and Harford counties, Baltimore, Delaware, New Jersey, and Pennsylvania.

Recommendations

Promoting local businesses should be a cooperative public/private undertaking. Further cooperation with the County Office of Economic Development and Maryland Departments of Planning and Economic Development will help attract suitable industry to expand and diversify the economic base. Industrial prospects should be screened and evaluated to ensure the activity will be compatible with the Town character.

Tourism

The economic well-being of the local businesses, and particularly the central business district, is strongly dependent on the summer tourism trade. Tourist information is provided at the Town Hall, Santa House, the Chamber of Commerce and all along Main Street. These centers provide pamphlets, maps, calendars of events, and other information describing the various types of public and private recreational activities and facilities in and near North East.

From retail to tourism, the Central Business District plays a vital role in many aspects of the Town making it key that this area remain a viable economic center. The Town should continue to participate with Cecil County in their promotional programs.

Heritage Tourism

Heritage Tourism is an economic development strategy that attempts to increase visits by persons from outside the area who are interested in the historical or lifestyle offerings of the community. Heritage Tourism emphasizes the linkages and interconnections between the area's physical features (rivers, streams, forests, and wildlife) and its cultural features such as roads, buildings, towns, history, art, etc. Nationwide studies have determined that cultural landscapes and regions with special natural and historic qualities are among the most important attractions to tourists (Lower Susquehanna Heritage Greenway Resource report, 1994.

Recognizing the potential benefits of "eco-tourism," the Maryland Legislature passed House Bill 1, entitled "Heritage Preservation and Tourism Areas," in April 1996. Among other things this legislation authorizes grant and loan funds for planning, design,

development, preservation, restoration, interpretation, marketing, and programming of certified heritage areas. In addition, the legislation expands the local jurisdiction's authorized income tax credits for qualified rehabilitation of properties included in the boundaries of a certified Heritage Area. These heritage areas are identifiable and significant landscapes that are the focus of cooperative public and private efforts to recognize, organize, and communicate a community's natural, cultural, recreational, and economic attributes to stimulate the local economy and improve the quality of life.

It is recommended that the Town discuss including North East in the Lower Susquehanna Heritage Greenway area with the Board of Directors of Lower Susquehanna Heritage Greenway. The heritage area designation has many tangible benefits, some of which include:

- Increased visitor spending. Heritage tourism projects attract more visitors, with higher incomes, for longer trips, making more repeat visits.
- Shared resources. Heritage tourism projects increase the amount of funds available to accomplish projects. They increase a community's ability to compete more effectively for outside money.
- Alternatives to homogenizing tourism. Heritage tourism offers alternatives to sprawl-types of tourism, instead focusing on a "sense of place," allowing North East to preserve its social character and environmental resources.

The focus of heritage tourism will be on the Central Business District with the shops and restaurants which attract such tourists. Heritage tourism will bring business to the heart of the local economy and possible funding for rehabilitation of the area.

Heritage tourism can be facilitated and enhanced by greenways. The combination will allow North East to capitalize on its recreational opportunities and small town charm. Heritage tourism and greenways have the potential to strengthen revitalization efforts in the Central Business District, while at the same time providing a service for the Town's residents by giving them a place to walk and bike.

Chapter 8 Implementation

The Town Comprehensive Plan is intended to capture a vision of the future of North East. As such, it provides a basis for a wide variety of public and private actions and development decisions which are to be undertaken in the Town. It provides general guidelines to the local community in order that piecemeal improvements or day-to-day decisions can be properly evaluated against their long-range impact upon the community and their relationship to existing settlement patterns. The Plan, and in particular the Land Use Element indicates the proposed general or conceptual development pattern of the community expected through 2020. It is not a detailed blueprint. It is, however, a guide which delineates and encourages patterns of development which permit orderly and economical growth of the community in a manner which can be more efficiently served with a variety of governmental services and facilities.

Sections which follow identify methods to implement plan proposals. Implementation involves the concerted actions of both Town elected officials and certain appointed boards. The responsibilities of these parties and their respective roles in the implementation of the plan are summarized.

Roles of the Participants

Implementing the recommendations of this Comprehensive Plan will require development of a coherent broad-based planning process involving numerous participants. The roles of these participants are briefly described below.

Citizens

Planning in the form of comprehensive plans, topical plans, area plans, and special studies, establishes general development philosophies influencing the lives of the citizens of the Town in many ways. Meaningful citizen participation in planning, as in all government processes, should be encouraged in order to insure that plans, programs, and policies reflect the attitude and wishes of the general public. The Town and its agencies should establish effective means of disseminating information to the public and generating interest in Town planning to the point that any interested person feels that he has an opportunity to provide input in developing plans and policies.

Elected Officials – Mayor and Commissioners

The Mayor and Town Commissioners are the final authority concerning decisions to adopt or revise and amend the Comprehensive Plan for North East. They are also involved in implementing Plan proposals. As chief elected officials of the community, they are responsible for directing public concern into a public policy and addressing community needs through public action. The Plan is designed to assist the community in improving both the environmental atmosphere of the area and the quality of life for people. To accomplish these goals, the Mayor and Town Commissioners will be

primarily responsible for undertaking the following actions to make the Plan adopted public policy.

The Mayor and Town Commissioners must, under Maryland law, review and adopt the Comprehensive Plan. This procedure is necessary for the community to have a foundation for adopted Zoning and Subdivision regulatory controls, or to serve as a basis for their revision.

The Mayor and Town Commissioners must review specific Town policies, programs and improvement projects in accordance with the Comprehensive Plan. They will coordinate with the County government as well as various State and Federal agencies to alert them to the Town planning objectives.

The Mayor and Town Commissioners will provide advice, coordination, and direction on development activities and proposed programs.

Recommendations

Officially adopt the North East Comprehensive Plan after appropriate public review and discussion.

Subsequently revise North East Zoning Ordinance and Subdivision Regulations to implement the land use policies of the Comprehensive Plan.

Establish and maintain appointments to the Town's Planning Commission, Board of Zoning Appeals, and other committees which may be required from time to time in Plan-related actions or activities.

Planning Commission

Appointed by the Mayor and Town Commissioners, the Planning Commission is instrumental in directing the Comprehensive Planning efforts of the Town of North East. One of the most significant roles for the Planning Commission in the Town development process is to serve as a coordinating body. Article 66B of the Annotated Code of Maryland provides the Planning Commission with broad authority to review, study, and recommend solutions to various local development issues.

Recommendations

The Planning Commission shall approve the Plan and recommend its adoption by the Mayor and Town Commissioners. The Plan shall conform to the basic elements required by State law.

The Commission should promote public understanding of the Plan and what it seeks to accomplish and to incorporate citizen participation in the planning process.

The Commission should recommend appropriate public officials programs for construction of public structures and improvements which are necessary to implement the Plan.

The Commission should prepare and file an Annual Report with the Mayor and Town Commissioners. The report is the method through which the Planning Commission identifies changing conditions within the Town and brings these Conditions to the attention of the Mayor and Town Commissioners.

In addition to the duties generally identified by Article 66B, the Planning Commission is charged with a variety of specific administrative functions which are more directly related to day to day decisions which cumulatively effect implementation of the Plan. These functions include:

- Review and approval of all major subdivision proposals consistent with the Comprehensive Plan, Zoning Ordinance and requirements and authority established by the Town Subdivision Regulations.
- Review, report and recommend to the Mayor and Town Commissioners on all rezoning requests brought before the Town. The Commission reviews each proposal for consistency with the Town Comprehensive Plan as per standards for review contained in the Town Zoning Ordinance.
- Review and comment upon various requests for special exceptions which are ultimately decided by the Town Board of Appeals.
- Review and approve site plans and design sketches for substantial new development and redevelopment proposals.

Board of Appeals

The Board of Appeals members are appointed by the Mayor and Town Commissioners of North East in accordance with Article 66B. The Board of Appeals has the following powers and duties:

- Hear and decide appeals where it is alleged there is error in any order, requirement, decision, or determination made by an administrative official in the enforcement of the ordinance.
- Hear and decide special exceptions to the terms of the ordinance upon which such board is required to pass under such ordinance.
- Authorize upon appeal in specific cases a variance from the terms of the ordinance.

In addition, the Town may assign other responsibilities to the Board of Appeals. For example, when a use is proposed that is not listed in the Table of Permitted Uses in the Zoning Ordinance, the Board may be authorized to determine in what zoning district, if any, the use should be permitted.

Administrative Variance

In order to streamline the development review process, to the extent possible, the Town has already established administrative review procedures for minor subdivisions. The concept of the administrative level review and approval may also be applied to other actions, including critical area and non-critical area variances of a minor nature. The Town should consider adding administrative variance provisions to the Zoning Ordinance.

Plan Implementation Tools

Many of the recommendations for land use and sensitive areas protection are best implemented through the land development regulations of the Town. The primary methods to be used to give direction to the growth and development of North East include zoning, subdivision regulations, annexation, codes, and a Capital Improvements Program.

Zoning Ordinance

A most important concern of North East is the control of land use. To avoid, erratic, untimely and incompatible development practices which have seriously jeopardized the environment of other communities, the Town has adopted land use controls which are consistent with the Town's development character. The Plan's Land Use Element identifies land use policies which will govern the zoning ordinance preparation.

The Zoning Ordinance is the regulatory device adopted by the Mayor and Commissioners which implements the Comprehensive Plan. The Zoning Ordinance involves the establishment of specific regulations governing the development and use of a particular parcel or parcels of land. The ordinance defines and describes various zones which can be applied and specifies detailed procedures governing a change of zoning.

Conventional zoning is the most commonly used device for guiding development at the local level in Maryland and many other parts of the country. It is usually employed to control the use of land and structures thereon, as well as to establish more detailed regulation concerning the area of the lot that may be developed (setbacks and separation of structures), the density of the development (minimum lot sizes, etc.) and the height and bulk of buildings and other structures. The general purpose of zoning is to avoid undesirable side effects of development by segregating incompatible uses and by maintaining adequate standards for individual uses.

The Town of North East should revise the existing zoning ordinance to reflect the types of land use and community character that the Town wants to achieve for each of the Planning Districts established in the Land Use Plan element. Existing and stable residential neighborhoods of low, medium, and high density should be protected through the use of neighborhood conservation zoning classifications that recognize the pattern of land use already established and provides for infill and redevelopment where appropriate. In addition, the Zoning Ordinance should permit commercial and business uses, a Highway-Oriented Commercial District, a Village Commercial District, and an Industrial District. Other provisions that should be included in the Zoning Ordinance are discussed below.

In addition, the Town should amend the Zoning Ordinance to incorporate a new zoning classification that implements the Planned Neighborhood District recommended in the Land Use section. The intent of this district is to encourage the development of compact mixed-used development ("smart neighborhoods") in appropriate areas that exhibit the following characteristics:

- integrated mix of uses, including residential, commercial, employment/office, civic, and open space;
- a range of housing types and densities;
- compact design;
- interconnected streets designed to balance the needs of all users, with sidewalks and on-street parking;
- open spaces integral to the community and
- location adjacent to and extended fabric of existing development.

Performance Standards

The Town of North East should consider performance standards as a means to achieve sound, quantifiable planning standards. The term performance standard implies the existence of a firm standard that can quantitatively be determined. Instead of seeking to protect the environment to the maximum extent possible, it sets a standard for protection (floodplains 100 percent, woodlands 70 percent). There is no room to debate the achievement of a standard. If 32 percent of a woodland is to be disturbed, then the standard has not been met. It is clear that this type of planning means more work in developing the ordinance. The standards have to be tested, and the equity issues over the impact of the standard have to be carefully weighed before the standards are adopted. Once in place, however, there is a much lower demand on staff, since each review is a question of checking to see if the plan conforms to measurable standards. consuming debates, position papers, and reports that characterize ad hoc reviews dependent on arm twisting can be eliminated. The major difficulty with adopting performance standards is that it requires solving problems up front rather than postponing them to a later date and not every potential issue can be anticipated and resolved with quantitative standards. However, a better effort to quantify standards than is presently in place is clearly possible.

Community Design and Appearance Standards

Community design and appearance are important public concerns, whether proposed development involves infill and redevelopment in existing neighborhoods or "greenfield" development in newly annexed areas. In the first instance, emphasis should be on conserving the positive visual and functional qualities of established neighborhoods (neighborhood conservation). In the latter instance, emphasis should be on insuring "smart development" that enhances the community.

Establishing community expectations concerning the quality of new development, including infill and redevelopment, is an important aspect of the Comprehensive Plan policies for land use. North East expects new development and redevelopment to contribute positively to the overall visual and functional qualities of the Town.

The Town has the ability to regulate appearance, including establishing appropriate standards and design review processes for new developments to insure that whatever is built does not adversely affect adjacent properties or detract from the quality of life of existing residents. The U.S. Supreme Court in Berman v. Parker, 348 U.S. 26, 33 (1954) wrote, "The concept of the public welfare is broad and inconclusive.... The values it represents are spiritual as well as physical, aesthetic as well as monetary. It is within the power of the legislature to determine that the community should be beautiful as well as healthy, spacious as well as clean, well balanced as well as carefully patrolled."

The Town should adopt standards and guidelines that help insure that development projects are attractive, with good site planning, including structures, circulation, and landscaping, and well thought out in terms of how they relate to all surrounding properties.

The design of all development should adhere to the following general "rules" that express the Town's intent concerning community design:

- Natural features and site constraints should suggest "natural" common sense design solutions. Development design should accommodate nature, not fight, control, or dominate natural and ecological processes.
- The automobile should not be the dominant force that dictates the layout and design of residential communities. New residential streets should be narrow, discourage through traffic, be well landscaped with shade trees, and recognized as the principal public spaces that they are. In view of their visual and functional importance, thought, deliberation, and investment in landscape and streetscape design should be evident.
- Substantial landscaping should be included in common open spaces that may be proposed. Landscaping should provide shade, shelter from wind, provide visual screens or buffers from unsightly elements on adjoining properties or such on-site things as parking lots, loading areas, dumpsters, or utility

structures. Landscaping also separates and buffers incompatible land uses such as the rear of commercial buildings and loading areas from adjoining residential lots. Landscaping can also provide wildlife habitat and linkages to forested and natural areas, greenways, and walking paths.

- Parking should not be a dominant site feature. Parking areas should be small scale, highly landscaped, attractive and inviting. Many examples exist of highly successful shopping areas where paved parking spots were reduced in favor of shade trees, landscaped berms, shrubs and flowers. Whenever possible, it is better to give preference to green space over asphalt and paved parking.
- Signage should be informative without being intrusive. Signs should not dominate the visual landscape. Signs should be compatible with their purpose, be clear, concise, and as small as reasonably possible. Small signs slow traffic, and low level pedestrian scale signage that is attached to its parent structure is preferred.
- The architecture and styles proposed should be in keeping with the best examples of building types and styles that have evolved in our region. We strongly encourage traditional designs and materials so that new developments blend seamlessly with the old. Modern materials and layouts need not conflict with the character of our Town if developers and builders are sensitive to the overall appearance of their creation.

Neighborhood conservation is often a matter maintaining the quality of existing structures and sites and controlling the quality of new development and redevelopment. The Town may want to consider applying appearance standards or guidelines to new development in residential, commercial, office and industrial areas. The purpose of appearance standards or guidelines is the enhancement or preservation of property values through the application of sound design principles. Design standards or guidelines would address such topics as:

- Relationship of buildings to site;
- Relationship of buildings and site to adjoining area;
- Landscape and site treatment;
- Building design;
- Signs;
- Miscellaneous structures and street hardware; and
- Maintenance planning and design factors.

Appearance standards may be included as part of the Zoning Ordinance, established as separate code administered by a Design Review Authority or Appearance Committee and/or included in a design guidance manual that supplements other development codes.

Strategies for addressing development design and appearance of infill and redevelopment is especially important along highway corridors (e.g., US Rte 40), in the central business district and at town gateways. In the case of highway corridors, the Town should consider adopting a special highway corridor overlay zone. This would be a mapped zone that imposes a set of requirements in addition to those of the underlying zoning district. A highway corridor overlay zone would establish appropriate supplemental design standards and guidelines for new development and redevelopment and should be considered for commercial areas along the US Rte. 40 and MD 272 corridors. The objectives of the highway corridor zone would be to improve traffic operations and safety and enhance the visual qualities of the corridor.

Large-scale development projects should be required to adhere to the following additional design parameters:

- Architectural harmony, including compatibility in styles, materials, colors, and building size and setbacks;
- Variety in housing types, density, and cost;
- Parks, squares, and other common open spaces for residents to interact and recreate, and to provide a setting for the architecture of the development;
- Neighborhood centers and civic spaces, which, depending on the scale of the development, can include places to shop, work, learn, or worship;
- An interconnected street system which is based on a modified grid system;
- Sidewalks, street trees, and substantial on-street parking, providing distinct separation between pedestrians and traffic;
- Streets and sidewalks that are spatially defined by buildings in a regular pattern, unbroken by parking lots;
- Traffic calming, including more narrow streets with shorter turning radii than suburban streets, and medians, circles and related features along prominent streets:
- Lighting which is designed for safe walking and signage which has a pedestrian orientation; and
- A system of land subdivision and development which links one neighborhood to another and can logically be extended.

Infill and Redevelopment

Making the most efficient use of existing community infrastructure is in the best interest of all residents of the Town. Encouraging appropriate infill and redevelopment is one way the Town can take advantage of existing public investment in infrastructure. A good example is the redevelopment of an existing Western Auto store into the Town Hall. This building, which is located in the Central Business District, provides administrative office and public meeting space at a central location in the community adjacent to an existing municipal parking lot.

Infill refers to new development on vacant, bypassed and underutilized land within Town, where infrastructure is already in place. Infill includes redevelopment of lots in these areas.

There is opportunity for infill and redevelopment in North East. As shown in Table 1 there are approximately 251 acres of vacant land within the Town limits and an additional 12 acres of agriculture land that could be developed. Any one of a number of reasons may account for the fact that these properties are currently undeveloped, including physical constraints, economic reasons or regulatory constraints. In order to encourage infill and redevelopment, the Town should identify which, if any, of these constraints may be impeding development of these sites and initiate actions to address identified issues.

In addition, the Town should consider adopting special infill provisions (ordinance and/guidelines) that encourage and facilitate infill and redevelopment and at the same time insure that such development is done in a context sensitive manner. Infill projects should enhance the design and function of the neighborhood. This includes insuring that proposed infill and redevelopment projects are designed to address:

Connectivity – Infill should achieve connectivity between on-site and off-site transportation systems and open space networks.

Circulation – Each project should be judged on how it impacts traffic circulation. Infill development should make a positive contribution to community-wide circulation, including non-motorized travel modes.

Parking – Parking requirements should be adequate, but not excessive. The Town should work with prospective developers to address parking demand where possible.

Compatibility – Infill development should be designed and built with consideration for the local context. Design guidelines and a design review process can be used to address this aspect of infill development.

Bufferyard Performance Standards

One of zoning's most important functions is the division of land uses into districts that have similar character and contain compatible uses. All uses permitted in any district have generally similar nuisance characteristics. In theory, the location of districts is supposed to provide protection, but in North East this is not always the case because uses as diverse as residential and commercial can occasionally be found adjacent to one another. Bufferyards will operate to minimize the negative impact of any redevelopment or future use of vacant land on neighboring uses.

The bufferyard is a combination of setback and a visual buffer or barrier and is a yard or area together with the planting required thereon. Both the amount of land and the type

and amount of planting specified for each bufferyard requirement of this Plan are designed to minimize nuisances between adjacent zoning districts to ensure the desired character along public streets and roads. The planting units required of bufferyards can be calculated to ensure that they do, in fact, function as "buffers".

Bufferyards are required to separate different zoning districts from each other in order to eliminate or minimize potential nuisances such as dirt, litter, noise, glare of lights, signs, and unsightly buildings or parking areas, or to provide spacing to reduce adverse impacts of noise, odor, or danger from fires or explosions. Bufferyards are also required along the perimeter of commercial and industrial uses that abut major highway corridors, scenic routes, and less intense land uses.

Street Trees

A new awareness of the importance of streets to the quality of life in our growth centers is needed. We must plan for streets that are pleasant to walk along. Development can and should create an exciting, attractive and vibrant community. New concepts using the successful communities of our past should be permitted, encouraged and preferred. As part of this philosophy, street tree planting should be required and specimen trees should be saved where possible. The Town should continue to require that street trees be planted or retained along both sides of all newly created streets. All plantings should be done in conformance with the Forest Conservation Ordinance. At a minimum developers should be required to either plant or retain sufficient trees so that for every 35 feet of street frontage there is at least an average of one deciduous tree that has or will have when fully mature a trunk at least 12 inches in diameter.

Open Spaces

A minimum common open space (spaces designed and intended for the use and enjoyment of all residents of the development) should be set aside in residential developments and improved with such complimentary structures, improvements as are necessary and appropriate for the use, benefit and enjoyment of residents of the development. Common open space areas should be exclusive of tidal wetlands, road right-of-ways, parking areas, stormwater management areas, forest retention areas, and only a limited amount of those areas designated as non-tidal wetlands.

Common open space may serve recreational purposes, preserve significant site features, and preserve open space. The uses authorized should be appropriate to the purposes intended to be served. Open space designed to serve recreational purposes should be appropriate to the scale and character of the cluster development, considering its size, density, expected population, and the number and type of dwelling units proposed.

At least 20 percent of any residential site should be set aside as permanent open space. Where possible, this open space should encompass streams and stream buffers. Stream buffers that are part of the pedestrian trails and/or bikeway system shown in this Plan should be dedicated to public use. The Planning Commission may allow payment in-lieu

of open space in whole or in part. Planned and cluster communities should be required to set aside 25% to 35% of the site in permanent open space. In addition, at least 20 percent of a development site should be landscaped with tree species native to Cecil County. Stormwater management areas should not be considered as open space areas.

Landscaping

The Town should continue to require all minor and major subdivisions, planned residential developments (PRD), and commercial and industrial development to provide minimal levels of landscaping on the site. Landscaping of parking facilities should be required to reduce the visual and environmental impacts of large expanses of parking areas. Landscaping in parking lots breaks up paved parking areas with plantings and provides improved aesthetics and micro-climatic benefits by reducing heat and glare. These provisions should apply to new sites and parking areas that are to be expanded, moved, or removed and/or reconstructed. Property line landscape buffers between adjacent land uses and buffers along adjacent roads or public rights-of-way should be required as well.

For any parking lot containing more than 6,000 square feet of area or 15 or more spaces, interior landscaping should also be provided in addition to required perimeter landscaping. Interior landscaping should be contained in peninsulas or planting islands.

Town Entryways

The visual identity and character of the Town is a collection of images, most often seen from a moving vehicle. For most people, the Town portrays a distinct identity and is differentiated from its non-incorporated edges by the predominantly rural land uses which abuts the community or by the apparent entrance into the "Old Town" section. An opportunity exists to strengthen the image of the community by using the major vehicular entry points as gateways to the Town and/or its neighborhoods. A "gateway" is much the same as a front door to a home. It serves as the symbolic entry and provides an introduction to what is within the areas. Gateways should receive special design attention including:

- Improving the appearance and prominence of the Town gateway through the use of appropriate signage, landscaping, setbacks, and building design to signal transition into the town and its core areas.
- Requiring sites located at gateways to provide additional landscape treatments and possible special design amenities, such as public art.
- Requiring Town designed projects to create a sense of entry by the use of improvements such as landscaping, building corner setbacks, special lighting, public art, or other design amenities. The placement of traffic controls

- (transformers, traffic lights, etc.) and other utility equipment should be carefully considered. Utility installations should be underground where possible or located in well-screened or non-prominent locations.
- Requiring that rear service yards, product storage areas and parking lots adjacent to the highway be totally screened to improve the appearance of sites at the gateway from the highway.
- Requiring buildings be designed with a continuous architectural finish on all sides of the structure when they are visible and/or prominent from a number of street vantage points.

The Town has identified its gateways and is participating in the State Highway Administration's Neighborhood Conservation Program to develop and implement these design standards for these locations. In addition, the Town should plan public projects that will enhance (e.g., public signage, landscaping and public art) these areas. Special planting projects could be included in an Urban Forestry Plan and financed through forest conservation, critical area and other appropriate fee in-lieu payments.

Neighborhood Parks

In order to implement the Open Space and Recreation objectives for the Town, all residential subdivisions should be required to provide recreation opportunities. The Town shall require that all residential developments in the Town shall provide, at a minimum, (through dedication or reservation) recreational areas in the form of neighborhood parks at the rate of 0.005 acres per residential unit, with a minimum area of not less than 5,000 square feet.

Although the first priority is to achieve compliance on the actual site, the Planning Commission may permit payment of a fee in-lieu, dedication, reservation or a combination when appropriate. The fee in-lieu should be on a per-dwelling-unit basis as established by the Town. Fees collected should be deposited only in a designated account with funds expended only for planned park and recreation facilities.

The purpose of the neighborhood park is to provide adequate active recreational facilities to serve the residents of the immediately surrounding neighborhood within the development. The following are illustrative of the types of facilities that should be deemed to serve active recreational needs and count toward satisfaction of the neighborhood park requirements of this article: tennis courts, racquetball courts, swimming pools, sauna and exercise rooms, meeting or activity rooms within clubhouses, basketball courts, swings, slides, and play apparatus.

Each development should satisfy its neighborhood park requirement by installing the types of recreational facilities that are most likely to be suited to and used by the age bracket of persons likely to reside in that development. However, unless it appears that less than 5 percent of the residents of any development are likely to be children under 12,

then at least 15 percent of the neighborhood park must be satisfied by the construction of "tot lots" (i.e. areas equipped with imaginative play apparatus oriented to younger children as well as seating accommodations for parents).

Neighborhood parks should be attractively landscaped and shall be provided with sufficient natural or man-made screening or buffer areas to minimize any negative impacts upon adjacent residences. Each neighborhood park should be centrally located and easily accessible so that it can be conveniently and safely reached and used by those persons in the surrounding neighborhood it is designed to serve. Each neighborhood park should be constructed on land that is relatively flat, dry, free of non-tidal wetlands, and capable of serving the purposes intended.

As a concluding policy statement relative to the Town's proposed Open Space and Recreation System, it should be recognized that such a system can make a significant contribution toward improving the quality of life.

Subdivision Controls

The second major implementation tool available to the Town is a Subdivision Regulations. Under Maryland law, the Town has the authority to regulate the subdivision of land within North East. After local adoption, subdivision regulations provide the local legislative body with regulatory powers to assure that land is developed in a manner which will best promote the public health, welfare, and safety, consistent with the Comprehensive Plan. Local regulations provide for the control of land development practices, establish uniform standards of development and recording, establish erosion control measures, guide the arrangement of streets, and establish the relationship between subdivision access routes and the existing transportation routes of the community. Local subdivision regulations provide a regulatory tool for coordinating the private division of land into lots or parcels consistent with public policy established by the Plan.

The primary purpose of the subdivision regulation is to coordinate private development practices with public policy. To this end, the regulation establishes basic standards and design principles for constructing community facilities. Although these facilities are normally paid for and installed by the private developer, the ultimate goal is to dedicate these facilities to the public body for maintenance and ownership. Therefore, it is necessary to establish standards in advance of installation by the developer in order that the Town is assured of developing a uniform system of public facilities.

The subdivision regulations will provide a valuable tool to accomplish the following objectives:

 Assure that building sites are of suitable size to support human habitation and accommodate residential, commercial, or industrial activities with sufficient land area for normal operations and accessory uses.

- Coordinate planned streets with existing public street pattern and capabilities.
- Insure adequate on-site space for parking and recreation and the free movement of light and air, in addition to providing ample room to serve as a natural buffer against fire and other disasters.
- To provide methods for coordinating and facilitating the provisions of public facilities necessary to protect the health, safety, and welfare of existing and future residents of the area.

Capital Improvements Program

The Planning Act of 1992 provides that the State and local funding decisions, e.g., capital improvements, must be consistent with the Plan and the eight visions contained in the Act. This means that local government construction projects in the Capital Improvements Program that include State funds must be consistent with the comprehensive plan.

As a result of recent and anticipated growth, the town of North East will ultimately have to provide additional public facilities and services to its residents. This will create a substantial public expenditure for the maintenance of streets, sidewalks and water service. The primary role of the capital improvements program is to provide a framework for evaluating these projects in accordance with local needs and for programming them in an efficient manner. Also, as various community needs are identified and cost data are accumulated for these projects, fiscal impacts can be ascertained.

As a growth management tool, capital improvements programming also must be taken into account Priority Funding Areas (PFAs) requirements. The "Smart Growth" Areas Act of 1997, Chapter 759 of the Laws of Maryland, requires the State to target funding for "growth related" projects to 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 related facilities. Currently, the North East Priority Funding Area (PFA) is limited to the incorporated area of North East. Approved annexations may be included in the PFA if they meet the following criteria for designation:

Mixed Use and Marine Commercial Area (Industrial and Employment Areas):

- The area was zoned for industrial use as of January 1, 1997;
- The area was zoned for industrial use after January 1, 1997 and is served by existing public or community sewer and water;

• The area is designated for employment uses and is served by existing sewer and water or is included in a planned area for water and sewer service.

Planned Neighborhood Area (newly annexed areas) proposed for the North East PFA must have a permitted net residential density of 3.5 dwelling units per net acre.

Existing Settlement Areas must be within the County designated PFA and have an average net density of 2.0 units per acre.

Municipal Growth Element

Introduction

A Municipal Growth element is required as a result of legislation enacted in 2006 (House Bill 1141). The primary goal of the Municipal Growth element is to develop a plan for future territorial growth around the Town of North East. The new element must be integrated with the Land Use element of the Comprehensive Plan and developed in coordination with Cecil County.

Under House Bill 1141, the Municipal Growth element must include the consideration of eleven basic land use issues. In addition, an un-codified section of HB 1141 encourages the Town and County to enter into Joint Planning Agreements on municipal growth. The eleven issues are paraphrased below and organized according to the planning process.

Vision

- Future municipal territorial growth (comprehensive and long-term view of annexation potential and land supply)
- Relationship of long-term development policy to the vision of future municipal character

Background

Past growth patterns (in terms of territorial and population growth)

Needs

- Population growth projections
- Municipal land capacity (must be considered in determining land needed for growth)
- Land needed to satisfy demand consistent with the long-term development policy

Land constraints

- Rural buffers and transitions
- Sensitive areas protection

Public Services

- Services needed for growth
- Infrastructure and service financing
- Any extra-territorial service responsibilities

Interjurisdictional Cooperation and Support (encouraged)

• County-Town Joint Planning Agreement on municipal growth and development

Planning Background

The Town of North East adopted plans for growth, including a Growth Area Map, in the 2004 Comprehensive Plan; that Plan also discussed many of the same issues that must now be considered under House Bill 1141. In March, 2008, the Town adopted a new Growth Area Map, placing the Town in a good position to further advance its municipal growth planning under this new Growth Element. The Town has been a steady advocate of planning for possible Town expansion. The 2008 Map will benefit from a fresh evaluation in light of the issues listed in the Introduction, and also needs an evaluation from a water resource perspective. (A separate Water Resources Element is also required by HB 1141.)

The following process was used in preparing this Element:

- Examine the Town's Vision of the future; refine or expand it as needed.
- Test the suitability of the 2008 Growth Area Map under HB 1141:
 - Land demand
 - o Development capacity, including infill and redevelopment potential
 - o Sensitive areas, transition areas, and greenbelts
 - o Community character
 - o Services and infrastructure
 - Water supply, wastewater, and point and non-point source pollution (addressed in the Water Resources Element, and used as an input to the Growth element)
- If needed, change the Map and/or identify policies or conditions that address HB 1141.
- Prepare a series of goals, policies, or recommendations for municipal growth.
- Amend the Comprehensive Plan to:
 - o Add the new Municipal Growth Element as a new chapter.
 - o Incorporate the Growth Area Map into the Land Use Element of the Comprehensive Plan.
- Future Action: Use the Map for review of annexation petitions, rezoning requests, service extensions, and other planning and zoning matters.

The new Map and overall Growth Element that resulted from this process is a reaffirmation of the Town's desire to function as an economic hub and rural population center, suitable for growth under Maryland's statutory planning visions and Cecil County's Comprehensive Plan. It builds on the cooperative efforts between the Town and Cecil County to plan for development, municipal annexation, establishment of urban boundaries, protection of rural community character, and provision of safe and adequate services, particularly water and sewer. The new Growth Area Map appears at the end of this Element.

Following is a summary of how House Bill 1141, State growth policy, Cecil County's adopted plans, and North East's adopted plans were used to prepare this Element and update the Growth Area Map for the Town.

The Town's Vision of Future Municipal Growth

Town Vision

The Town's current vision is:

To preserve North East's rural community character while expanding the economic base of the Town by capitalizing on the local tourism, industry, planned employment growth and area commerce.

Under HB 1141, the Town is required to consider the relationship of plans for growth on future municipal character. The Town has identified two additional vision components in this regard:

Vision for Future Growth and Annexation:

The Town of North East will pursue implementation of its growth area map consistent with the ability of the Town and County to provide adequate services and protect sensitive areas, water quality, and community character.

- o The new Growth Area Map and the Comprehensive Plan will guide:
 - The location, rate, and requisite conditions for annexation
 - The character of new development
 - The effect of new development on existing neighborhoods and Town character

Vision for Infill, Redevelopment, and Adaptive Re-use.

The Town of North East will ensure that the planning and zoning program does not unnecessarily impede development, and will work with the County to establish water and sewer service priorities and capacity reservations or allocations for in-Town lots-of-record and vacant parcels.

- o The new Growth Area Map and the Comprehensive Plan will guide:
 - The design and character of development
 - The effect of development on existing neighborhoods and Town character
 - The establishment of capacity reservations or priorities for infill development
 - The use of streamlined, flexible, and innovative regulations

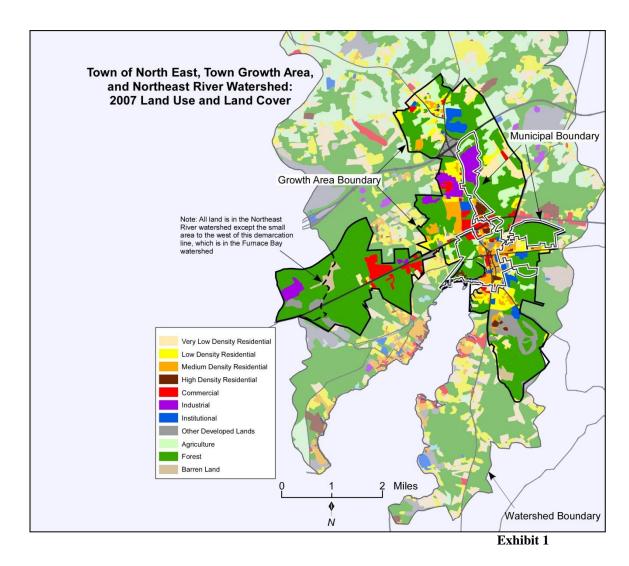
Characteristics of the 2008 Growth Area

The majority of the Growth Area (7,675 acres, including the Town) is located in the Northeast River watershed. Approximately 634 acres, located at the western-most edge of the Growth Area, are located in the Furnace Bay watershed. The Town's growth area boundary encompasses approximately 8,309 acres, of which 1248 acres are already part of the Town's incorporated area. Land uses for the Growth Area and the Town of North East are shown in the table and map below. Land use data are also organized by watershed.

Table 2
Land Use/Land Cover and Acres in the Growth Area:
By Town, Outside Town, and Watershed

Land Use/Land	Acres in	Acres in	Total Acres:	Acres in	Acres in
Cover in the North	Town	Growth Area	Town and	Northeast	Furnace
East Growth Area		(outside	Growth	Watershed	Bay
		Town)	Area		Watershed
Very low density	4.14	336.54	340.68	340.68	0.00
residential					
Low density	32.53	510.06	542.59	542.59	0.00
residential					
Medium density	105.12	341.94	447.06	447.06	0.00
residential					
High density	67.83	49.70	117.53	117.53	0.00
residential					
Commercial	25.80	350.30	376.10	376.10	0.00
Industrial	102.00	232.62	334.62	264.67	69.95
Institutional	49.24	222.55	271.79	271.79	0.00
Other Developed	41.51	397.49	439.00	383.48	55.52
Agriculture	58.48	518.32	576.80	576.80	0.00
Forest	477.58	2594.52	3072.10	2684.26	387.84
Open Water	26.88	0.00	26.88	26.88	0.00
Roads	257.00	1405.10	1662.10	1566.98	95.12
Barren land	0.00	101.83	101.83	76.15	25.68
TOTAL AREA	1248.11	7060.97	8309.08	7674.97	634.11

Note: The land use data and maps used elsewhere in the Town's Comprehensive Plan are derived primarily from State tax parcel data. The Growth Element uses, instead, Cecil County's "Land Use/Land Cover" classification system to ensure consistency for analytical purposes over a large area that includes both Town and County territory. The County's system also provides land cover data, while State parcel data does not. Land cover data gives insight to the extent of forest, farmland, and barren land. Land cover data is needed for land capacity analyses within this Element, and for non-point source pollution estimates in the Water Resources Element.



Land Supply of the 2008 Growth Area Map

Areas planned for future growth on the 2008 Growth Area Map were reviewed for wetlands, 100 year floodplains, streams, recent development, and restricted open space. The following estimated land supply exists within the unincorporated portion of the Growth Area.

Planned Residential:	1,703 acres
Planned Economic Growth	2,206 acres
Existing Settlements (mostly low density residential)	1,716 acres
Roads	1,436 acres
All Land Beyond Town Limits	7,061 acres

Relationship of Long Term Development Policy to Community Character

Under the Town's long term development policy, the character, visual cohesiveness, and bounded edges of existing neighborhoods and the older Town core will stay intact. New development must be compatible with adjacent existing neighborhoods in terms of scale, land use, design, and connectivity. Suitable transition areas may be identified at the outer limits of the growth area,

depending on planned land uses in the County. The Town supports the County's efforts for rural land conservation around the edges of the growth area.

Building Support for the Growth Area Map

The Town proposes the following steps to build support for the new Growth Area Map:

- Coordinate with Cecil County and nearby municipalities to develop the Map.
- Encourage the County to adopt the Growth Map into the County Comprehensive Plan and County Master Water and Sewerage Plan.
- Encourage the County to adopt zoning tools that discourage development before annexation can take place. (Needed to address a consequence of the new annexation rules in House Bill 1141)
- Use a Joint Planning Agreement to solidify Town and County cooperation (see Recommendations section for possible components of a JPA).
- Encourage the County to adopt the "Greenbelt Growth Scenario" as the official long-term growth policy for Cecil County.

The New Growth Area Map

By reference, and as required under House Bill 1141, the Growth Area Map developed under this element is officially part of the Land Use Element of the Comprehensive Plan. The new Map differs from the 2008 Map in the following ways:

- 1) Areas for growth are now organized into Two Tiers
 - Tier One (growth planned within 20 years)
 - Areas for infill and redevelopment (in Town)
 - Areas outside Town and
 - adjacent to existing (2009) Town boundaries
 - with existing or planned water and sewer service
 - identified by the County as suitable for annexation
 - identified by the County as suitable for developed land uses
 - identified independently by the Town as suitable for annexation and growth
 - Tier Two (beyond a 20 year horizon): all areas within the Growth Boundary which are not included in Tier One.
- 2) The Map includes consideration of:
 - Major infill parcels (vacant or significantly under-developed)
 - State population projections and growth scenarios, and transportation analysis zones
 - County-designated Urban Growth Boundary site
 - Planned service categories for water and sewer (W/S-2 and W/S-3)
 - Growth scenarios under review by Cecil County
 - Water resource issues (water supply and water quality)

Long Range Planning Context

Cecil County's statutory role in long range planning and annexation, the County's control of sewer service, and other formal County-municipal ties (e.g., Water Service Agreements and the Urban Growth Boundary Study) form an important context for the Town's long range planning. The Town's first step in developing a new Growth Area Map was to create a composite of the official plans from Cecil County that affect land in the Town's 2008 Growth Area. This composite map appears on the following page.

An inspection of Town and Cecil County official plans and maps shows that there is significant agreement between the Town and County about future land uses around North East. This common understanding is a function of the Town's location within the I-95 and US Rte. 40 corridors, and Town and County plans for public water and sewer. There is also considerable agreement about future annexation potential and planning for water and sewer.

In preparing this element, the Town of North East and Cecil County have designated areas for municipal growth based on the following considerations:

- Adequate acreage for the long term that allows comprehensive inter-jurisdictional planning for municipal growth, as opposed to case-by-case annexation.
- Adoption of a growth plan within the Northeast River watershed that reduces pressure for rural sprawl by accommodating growth, preserving greenbelts, and minimizing the impacts of growth on water quality.
- Municipal accommodation of a higher-than-trend share of County population growth as a strategy to further reduce sprawl within the rural environs beyond the Town.
- Compatibility with Cecil County's long term growth scenarios

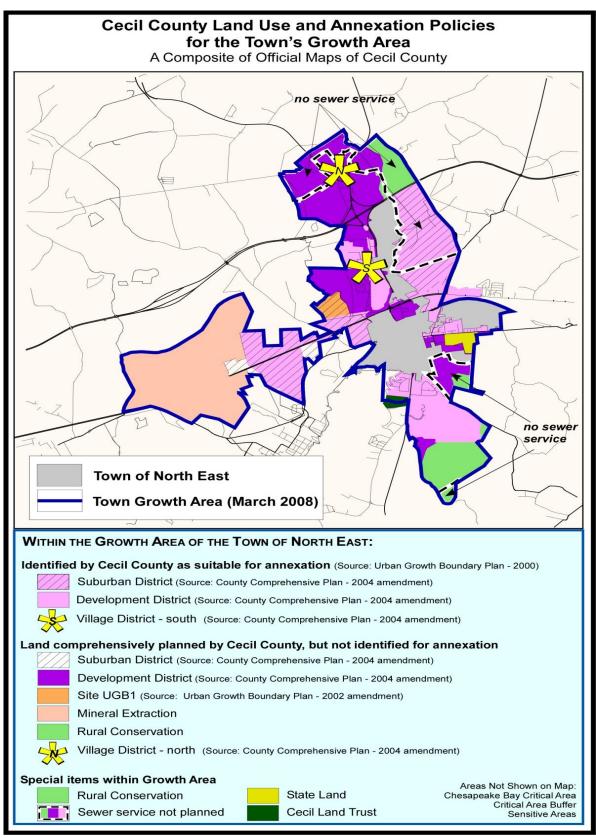


Exhibit 2

Background: Past Growth Patterns

Physical and Territorial Growth Patterns

The Town of North East was settled prior to 1700 and incorporated in 1850. The Northeast River was the primary focus of early settlement. Mills were constructed along the river banks, farming expanded, and fishermen plied their trade in the plentiful waters. Excerpts from the following historical maps show the early formation of the Town, its built environment, and its ties to the Northeast River.

Note the railroad tracks and early roads on the 1898 map below; no town boundaries are indicated. Several short streets with homes and businesses head to the waterfront off the major north-south axis (future MD 272).

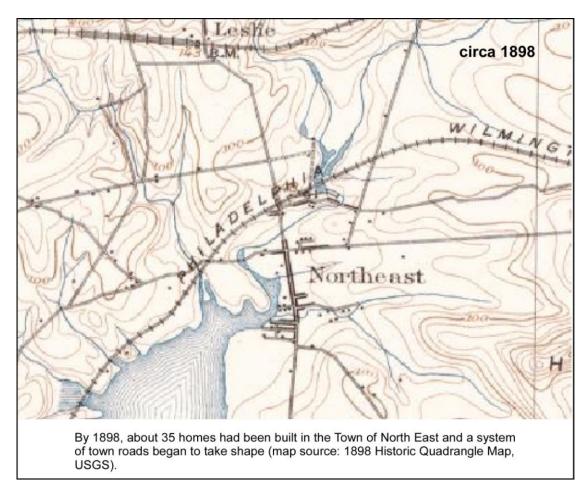


Figure 1

The USGS quadrangle map from 1942 (below) is an early representation of corporate boundaries for the Town. The number of buildings in Town grew 500% between 1898 and 1942.

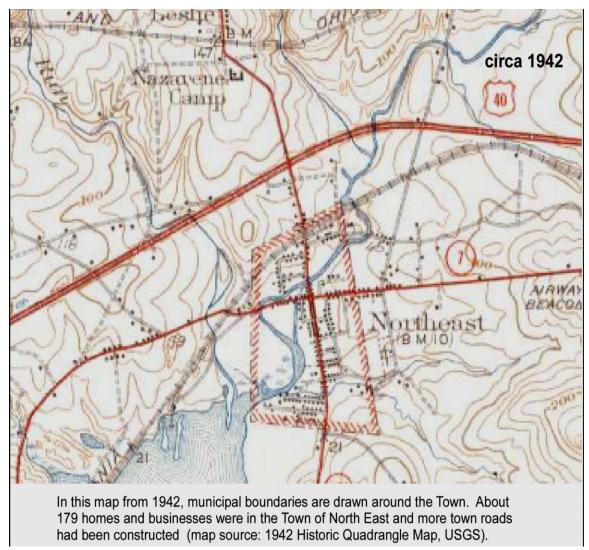


Figure 2

Over the years, North East has pursued annexation northwards, in a logical progression towards US Route 40, and thereafter, to Interstate 95, in order to capitalize on economic growth within the major US Rte. 40-I 95 corridor. In addition, there has been significant territorial growth to the east and west, all of which has remained south of US Rte. 40. The original Town boundaries are gone, except in the southeast corner of Town, where a few segments of the original boundary line still exist today.

North East has been successful in attracting new jobs and economic growth. For example, the North East Commerce Center, located directly off I-95, is the home of the Flying "J" Travel Plaza and regional headquarters for Delmarva Power Company. A short distance past the Commerce Center is the main campus for Cecil College. North East is also home to the Upper Bay Museum which displays one of the area's largest collections of hunting and fishing memorabilia. The Town is well positioned for continued growth when the economy recovers from the current downturn, provided that water and sewer service is available.

The map on the next page shows the current municipal boundaries of North East, encompassing around 1200 acres. The form of both traditional and contemporary neighborhoods can be discerned, and overall, the form of development is compact and consistent with State smart growth principles.

Population Growth Patterns

The Town's population growth is fully covered in Chapter One of the Comprehensive Plan. Growth that took place after the Plan's original adoption, however, signals a change in the rate of growth. Based on the Maryland Department of Planning's "Population Estimates for Incorporated Places" (April 2000 to July 2007) growth noticeably increased in the Town after 2004.

Between 2004 and 2004, North East only gained an average of 5.5 people per year. However, between 2004 and 2007, the Town has seen a steady average annual growth of 21 people per year (2004-2005: 14 people; 2005-2006: 31 people; and 2006-2007: 18 people). Over the period 1980 to 2007 the Town's share of total County population has averaged 3.1 percent. Cecil County's recent population growth is an important consideration for the Growth Element. Between 2000 and 2007, Cecil County grew 16 percent, which was the highest rate of growth for all Maryland Counties over the same period, with the exception of counties in Southern Maryland. The Town's location near the US40-I95 corridor makes it a potential beneficiary of some of the population growth and economic development planned by the County. Past patterns of population growth in the Town may be weak indicators of future potential, especially if water and sewer capacities can be increased to handle the planned growth. Future population growth is discussed below (Land Needs).

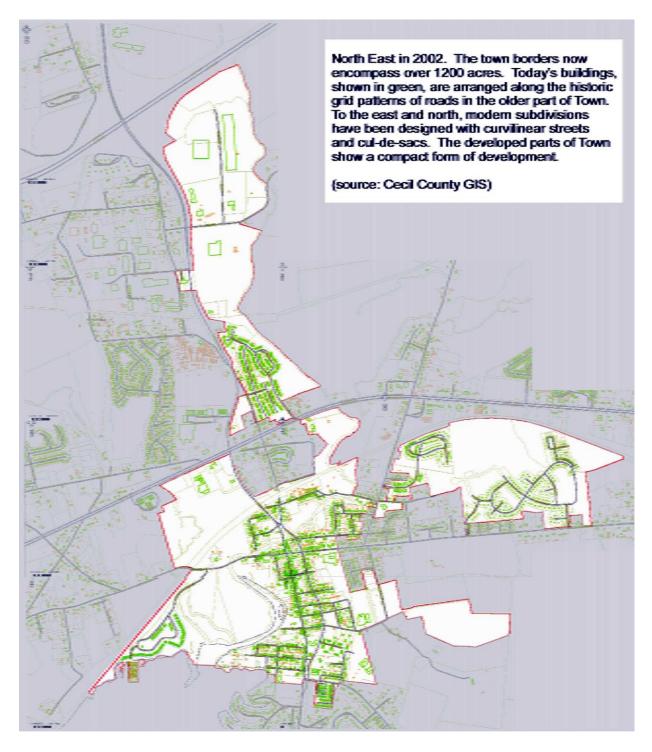


Figure 3

Land Needs

This section examines future land needs as a function of population growth and development policy. Growth is estimated on the basis of past trends, current MDP projections, and in light of the Town and County's long term growth policies. Consideration is also given to current municipal land capacity, based on two methodologies.

Population Growth Projections

Population growth projections are used to ensure that an adequate supply of land is comprehensively planned and zoned to meet residential land demand and to provide an extra measure of supply for market flexibility and private choices. For purposes of this Element, population growth is reviewed using two methods: 1) growth is assumed to remain a constant 3.2 percent of County growth (based on the average percentage for the overall period 1980 to 2007), and 2) growth is based on a high development pressure scenario. The projections below also take into account that the State's population projections for Cecil County have been revised significantly upwards since the North East Comprehensive Plan was adopted.

Table 3
Population Projections:
Constant Share Method (3.2 percent of County population)
and High Development Pressure Scenario

	2000	2010	2015	2020	2025	2030
Cecil County	85,951	108,100	121,650	134,500	147,350	159,950
North East:	2,744	3,455	3,888	4,299	4,709	5,112
Constant Share						
Method						
North East: High	2,744	3,566	4,246	5,030	5,942	6,969
Dev. Pressure						
Scenario						

Sources: Historical and Projected Total Population for Maryland Jurisdictions (Revisions December 2008, MD Dept. of Planning). Cecil County Municipal Populations Projections: High Development Pressure Scenario (March 2009, MD Dept. of Planning)

Residential Land Needed for Growth

Constant Share

The year 2030 is used as a target since it approximates the 20-year horizon of the Municipal Growth Element. Under the constant share method, the Town is projected to have 5,112 people by 2030. As of 2007 (the date of the latest Town population estimates from MDP), the Town's population was 2,829. Residential land is therefore needed for an additional 2,283 people by the year 2030.

The County's household size in 2010 is projected to be 2.67 people per household, and this will decline to 2.58 by 2030 (Source: MDP). At 2.6 people per household, the Town will have an estimated 878 new households by 2030.

Eight hundred seventy-eight new housing units will require 251 acres devoted solely to residential lots (at 3.5 dwelling units per acre). Additional land will be needed for roads, community open space, protected sensitive areas, and for meeting the State Forest Conservation Act. Total land needed for residential purposes is:

878 Lots: 251 acres Streets: 92 acres Open Space: 114 acres Total: 457 acres

<u>High Development Pressure</u>

A "high development pressure" analysis by MDP indicates that the Town will have 6,969 persons and 2,689 households by 2030. Residential land is thus required for 4,140 new persons and 1,592 additional households by 2030.

An additional 1,592 new households will require 455 acres devoted solely to residential lots (at 3.5 dwelling units per acre). Additional land will be needed for roads, community open space, protected sensitive areas, and for meeting the State Forest Conservation Act. Total land needed for residential purposes is:

1,592 Lots:455 acresStreets:165 acresOpen Space:207 acresTotal:827 acres

Land Needs for the Town's Long Term Growth Policy

The Town believes that the high development pressure scenario is a more accurate predictor of future growth than the constant share projections. This is based on several factors:

- The Town's location in the I 95/US Rte 40 growth corridor
- The Town's excellent supply of potable water resources
- The County's plans to upgrade the wastewater treatment plant to 9.1 million gallons per day
- Cecil County is the fastest growing Maryland County (with the exception of counties in Southern Maryland)
- Support from the comprehensive planning and zoning programs of Cecil County and the Town of North East

Overall, there has been a high level of Town and County coordination on annexation potential, urban growth boundaries, and water and sewer services. As part of its on-going comprehensive planning program, Cecil County is examining three Growth Scenarios: Growth Corridor, Growth Center, and Greenbelt. The scenarios are compatible with the Town's 2008 Growth Area Map, adding another layer of confidence in the Town's long range planning to date. A review of the three scenarios suggests that the Greenbelt Scenario would be the most beneficial to the Town of North East: there is no harm to the Town's growth area map, greenbelts are created, major stream valleys are protected, and planned growth is not reduced, but rather is channeled and concentrated towards North East (and other municipalities).

The Town's Growth Policy is:

To pursue implementation of the Town's new 2009 Growth Area Map, and support the County's Greenbelt Growth Scenario, consistent with the ability of the Town and County to provide adequate services and protect sensitive areas, water quality, and community character.

In order to satisfy County and Town long range plans for municipal growth and development in and around North East, the Town will use the new Growth Area Map to guide the amount and location of land needed under its long term growth policy. The new Growth Area map is also based on consideration of existing municipal capacity for growth (see following discussion).

Municipal Residential Land Capacity in the Town of North East

An estimation of land capacity within the Town has been addressed using two sources of data:

- 1) Land use and land cover data from recent aerial images of the Town were analyzed in order to identify areas of farmland, forest land, and open land zoned for development. Acreage adjustments were made for Critical Area habitat protection areas, wetlands, and development occurring since the date of the imagery. Areas affected by the 100 year floodplain were also identified.
- 2) State parcel data was analyzed to identify vacant residential lots-of-record and parcels for infill subdivision. Because this source of data does not indicate land cover or sensitive areas, the results of this analysis were adjusted in accordance with relevant data gathered in 1 above.

Analysis of Aerial Images

Vacant land was identified in Town on the basis of County land use data and recent aerial images (source: Cecil County GIS). This land included 346 acres of forest, farmland, and open land with some type of residential zoning. The land is concentrated at 12 locations in the Town. In addition, 32 small vacant lots were identified with residential zoning.

These properties were then reviewed for recent growth, sensitive areas, 100 year floodplains, and ownership. Approximately 74 acres were found to be inadequate as a reliable source of land for future residential growth due to:

- A combination of 100 year floodplain, wetlands, and habitat protection areas;
- Public or semi-public ownership; and
- Deed restricted community open space associated with modern subdivisions

There are 272 acres of land suitable for in-fill development. Based on zoning density and land required for streets and open space, this land will yield about 651 lots. With the addition of the 32 small vacant lots, total municipal capacity is estimated at 683 lots (or capacity for 683 households).

(Note: Capacity of the Ridgely Forest property is accounted for in this analysis as growth on forest land. In the following tax parcel data analysis, Ridgely Forest is accounted for as small lots of record, most of which are vacant. This explains why only 32 parcels are listed above, and many more are factored below in the parcel analysis.)

Analysis of State Tax Parcel Data

Another potential source of lots can be identified by reviewing State tax parcel data. Two areas were examined:

- 1) Parcels in Town listed as vacant, with residential zoning, under private ownership, and one acre or larger in size (263 acres on 14 parcels).
 - Based on zoning density, land required for streets and open space, and avoidance of environmentally sensitive land, these parcels will yield about 618 lots.
- 2) Small vacant lots-of-record, zoned residential.

There are an estimated 201 vacant residential lots free of mapped sensitive areas.

Total municipal development capacity based on parcel data is estimated at 819 lots (or capacity for 819 households).

Total Municipal Land Capacity

For purposes of this Element, the Town is estimated to have a residential land capacity for 751 households (the average of the aerial analysis and the parcel analysis).

Non-Residential Land Needs

If the market supports economic growth, it will most likely be located where comprehensive plans and adequate incentives are already in place to support the growth. For purposes of the Municipal Growth Element, it is advantageous and efficient to forecast these land needs in accordance with current County and Town plans for such growth (given the years of steady progress towards this goal). Thus, the new Growth Area Map will account for future economic growth as already shown on the 2008 Growth Map. As mentioned, the County's Greenbelt Growth Scenario is viewed as desirable for enhancing the Town's prospects for attracting new growth.

Total Land Needs for Long Term Growth and Development Policies

The estimate of land needed to meet the Town's long term growth and development policies are based on population projections and build upon specific areas of agreement between the Town and the County.

Residential land (based on the high development pressure scenario) is needed for 1,592 new households. Municipal residential land capacity is 751 new households. Thus, the calculated need, based on population projections, less municipal capacity, is for 841 households. This requires about 437 gross acres.

Residential land supply based on the 2008 Growth Area Map (Planned Neighborhoods) is 1,703 gross acres. The estimated household yield is 4080 households. This is based on development of

55 percent of gross acres, developed at an average density of 4.35 units per acre (this density is used to account for a mix of single and multi-family development in accordance with the current ratio of single-to-multifamily homes in Town). This works out to a multiplier of just under five (supply of 4080 households, divided by a need for 841 households).

The Town should reduce land supply in order to enhance the orderliness and management of future growth. The following describes an approach for doing so. It is based on the principal that locations about which the Town and County have agreement as to future land use, annexation potential, and sewer service, should form a first tier within the Growth Area. "Tier One" would be areas planned for possible annexation and growth within the 20-year horizon of the Growth Element.

It is important that areas of agreement be clearly represented on one official map (these areas now appear separately on several maps). That map should be the Town's 2009 Growth Area Map, produced under the Growth Element, and it should be officially recognized by the County in a number of ways:

- Incorporation into the Cecil County Comprehensive Plan
- Implementation through the County Water and Sewerage Plan
- County and State support for annexations that are consistent with the Growth Area Map (in terms of services, infrastructure, financing, and zoning under the new annexation statute) Use of the Growth Area Map to guide development of a Town-County Joint Planning Agreement

Earlier in this element, a composite map indicated two types of areas where county planning was not consistent with the Town's 2008 Growth Area Map:

- 1) Certain areas where the County did not identify land as potentially suitable for future annexation (from the Urban Growth Boundaries Plan) and
- 2) Certain areas not planned for sewer service by the County (from the Water and Sewerage Plan).

The inconsistencies and the estimated land demand are useful tools for placing the Growth Area into one of the two tiers. For purposes of this Element, areas on the Town's 2008 Growth Area Map that show inconsistency with County plans on future land use, annexation, and sewer service are placed into a "second tier". Areas where there is agreement are identified as "first tier".

This methodology results in capacity for 2,326 households (on 971 acres) within that portion of the Town's "Planned Neighborhoods" that have existing or planned sewer service (i.e., Tier One). This supply is about 2.75 times the projected need, and represents a substantial tightening of land supply.

There is a household capacity of 1,703 in planned neighborhoods that do not have sewer or planned sewer. (See the Maps on the next page.) Thus, additional planning coordination with

and cooperation from the County would be needed to develop these areas. A revised Growth Area Map (with two tiers) reduces planned growth for the Town, but on the other hand, it does bring the growth area into conformance with County planning policy and helps to focus planning on those areas where the Town and County are largely in agreement.

Under the new annexation law, the Town still retains the unilateral right to rezone annexed land after five years. But even then, the County controls the sewer needed for growth at Town densities. While the Tier Two areas reflect an absence of necessary County support, these areas are retained in the Growth Area for longer term planning, and to account for future changes in County policies and service arrangements, and for other changed conditions.

Land Supply for Economic Growth

Supply is estimated at 2,206 acres per the 2008 Growth Area Map. Areas planned for future Employment (Mixed Uses) have existing sewer.

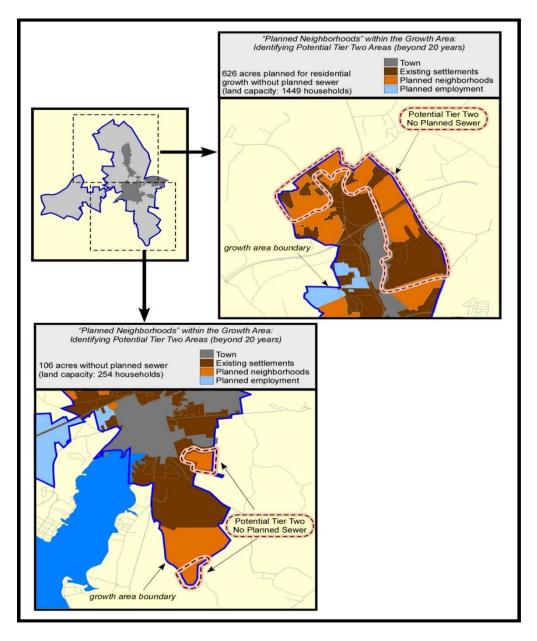


Figure 4

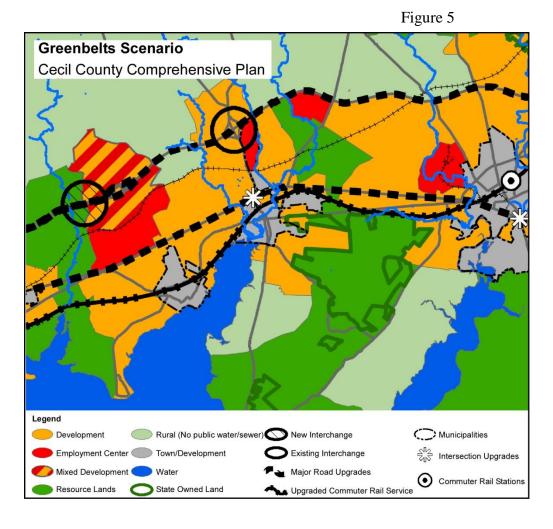
Land Constraints

Rural Buffers and Transitions

The Town encourages and supports the County's designation of Greenbelt Areas for conservation and preservation in the watershed. These areas include stream corridors. Especially important are the Northeast Creek and the Little Northeast Creek, which are used for the Town's water supply. Greenbelts could be designated as sending areas for the voluntary transfer of development rights to the Town or to the Town's Growth Area. Below is a map of the County's Greenbelt Growth Scenario (Not an official map. Source: Cecil County Comprehensive Plan Committee, Map by ERM). This scenario map is compatible with the Town Growth Area Map.

Sensitive Areas Protection

Sensitive Areas will be avoided and point and non-point sources of pollution will be reduced. There are tidal and non-tidal wetlands that fall within the Growth Area and these areas should be avoided; development rights could be transferred to other parts of a parcel, or to other parcels



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within the Growth Area. The Greenbelt Area encompasses forested stream corridors and buffers. Steep slopes, habitat of threatened or endangered species, and wetlands will be avoided. Stream buffers will be protected from development and will be afforested where needed. Water quality impacts will be minimized. (See also, the Sensitive Areas element.)

Public Services

Services Needed for Growth

Water, Sewer, and Stormwater Management:

Within the 2008 Growth Area, 90 percent of the area has either existing sewer service (which includes all of the Town of North East), or planned sewer. About 57 percent of the total area indicated for "planned neighborhoods" has sewer or planned sewer, and 43 percent has no planned sewer service.

The most significant area planned for residential development, but without planned sewer, is a broad swath of land, running from the northern end, to the north-eastern edge of the Growth Area (see Composite Map on page 8 and the illustration on page 18). There are 732 acres of planned neighborhoods with no planned service within the 2008 Growth Area, and 86 percent of it is located in this section.

The Town operates its own water distribution system, and extends water service to nearby areas of the County under an agreement with Cecil County. The Town's policy is to not extend water service in the future unless the property is annexed into the Town.

Major development projects are required to have common open space (the amount determined by zoning), and these open areas provide room for stormwater management on a case-by-case basis. The area also contains surface mines (or borrow pits) which could possibly provide areas for managing stormwater as part of future reclamation efforts.

Additional information on water, sewer, and stormwater management are included in the Water Resources Element of the Comprehensive Plan.

Other Services:

The Comprehensive Plan includes a thorough report on services including schools, libraries, public safety and EMS, and recreation. Services are adequate at present. A determination of service adequacy will be required for new development and may result in deferral of project approvals. Annexation proposals will be referred to the County and State for input on the adequacy of services that fall under County or State jurisdiction.

Paying for Infrastructure

The Town has both public and private sector sources for infrastructure financing. As an incorporated municipality, the Town has the authority to enact excise taxes and impact fees. These tools exact infrastructure funds from developers as a condition of project approval; excise taxes are by far the more flexible tool in terms of how the funds can be used. The Town can also enact a tax increment financing district to charge homeowners in a defined area to help pay for infrastructure.

Developer Rights and Responsibilities Agreements (DRRA) can be used to legally bind the Towns and a developer for specific development projects. Infrastructure responsibilities are often an important part of these agreements.

The Town will continue to compete for federal and State funds that support growth. The Town will review its Priority Funding Area (PFA) maps, and annexation proposals, and establish the necessary criteria, if possible, to achieve PFA status. Priority will be given to acreage within the Growth Areas that has municipal adjacency.

The Cecil County Growth Study submitted to the Cecil County Office of Economic Development and prepared by the Sage Policy Group, Inc. (January 2007), had the following information and observations about infrastructure financing:

Impact Fees

An impact fee is most commonly assessed on the construction of new structures to pay for the expansion of the service capacity of government, including by supporting the construction of fire stations, police stations, sewer/water supply systems, parks, libraries, etc. Impact fees are designated for specific uses and funds are not to be intermingled with the general fund.

In places lacking impact fees (e.g., municipalities, counties), jurisdictions must either generate funds for infrastructure expansion from the existing tax base or through the issuance of bonds. One can imagine a circumstance under which the existing community would see their taxes raised in order to finance new infrastructure and then eventually see their taxes dropped again once new taxpaying development formed around the infrastructure. The problem with this structure is that raising taxes is rarely politically convenient, and therefore communities end up in an equilibrium characterized by moderate taxes, permanently inadequate infrastructure and stunted development.

Impact fees would allow for projects to move forward within the growth corridor, thereby siphoning off much of the residential development pressure from the county's rural areas. Impact fees should be set considerably higher in the county's agricultural regions than within the growth corridor and presumably reinvested in water/sewer infrastructure, schools and other government controlled facilities.

Excise Taxes

Excise taxes represent another approach. These are sales taxes and can be levied on real estate transactions. Excise taxes are not as constitutionally limited as impact fees, which is typically viewed as an advantage from the perspective of local government, but funds generated from these taxes may be diverted for non– infrastructure purposes. If excise taxes are adopted, the study team recommends that the use of these funds be largely limited to infrastructure build—out within the county's growth corridor.

Tax Increment Financing for Re-development

Tax increment financing (TIF) permits jurisdictions to create special districts and to make public improvements within those districts that will generate private sector development. During the development period, the tax base (assessed value) is frozen at the predevelopment level. Though property taxes continue to be collected, taxes derived from increases in assessed values (the tax increment) resulting from the new investment either head toward a special fund created to retire bonds issued to accommodate the development or to promote additional economic expansion in the district.

The study team envisions impact fees as the way to help accelerate new development within the growth corridor, while TIF districts could be defined to promote redevelopment of already developed areas that suffer from an unacceptably low average quality of development. Whichever financing mechanisms the County opts to pursue, it must be immediate... The County is already behind the infrastructure build-out curve and the impact of the latest round of Base Realignment and Closure (BRAC) will mean additional stress on the infrastructure base. Without a dramatic acceleration in infrastructure build-out, Cecil County will not be positioned to accommodate the opportunities BRAC will create for economic development later this decade and early into the next. The longer the community is forced to wait for the availability of these financing mechanisms, the greater the loss of productive farmland to development.

Extra-Territorial Service Obligations

Cecil County provides sewer service within the Town of North East, and North East provides water service to specified properties adjacent to the Town. Formal agreements between the two jurisdictions date back to the 1970's and several revisions have since occurred. The Town now requires annexation as a condition to receiving water service.

Interjurisdictional Cooperation and Support

The following objectives will be used to enhance Town and County coordination and cooperation for municipal growth:

- Incorporation of the Growth Area Map into the County Comprehensive Plan
- Incorporation of the Growth Area Map into the County Master Water and Sewerage Plan
- County-town Joint Planning Agreement on municipal growth and development
- County-town zoning cooperation

Recommendations

Following are a series of recommendations for the Growth Area Map. Included are useful components for a Town-County Joint Planning Agreement.

Land Use Plan Element

The Growth Area Map should be adopted into the Land Use Plan Element, per House Bill 1141. The Growth Area Map should have the following features:

1) Growth Areas

- These areas are the locations that the Town may annex in the future.
- The County agrees to provide the appropriate zoning in a timely fashion or to grant zoning waivers if needed.
- The County agrees to incorporate these areas in its Comprehensive Plan and Water and Sewer Plan during the next update.
- The order of annexation will be determined by adjacency, landowner choices, and availability of services.
- Forest conservation practices and 100 foot steam buffers will be required for new development.
- Annexation plans must be consistent with the Land Use Element including the Growth Area Map.
- Developers will be required to estimate project impacts on water quality, water supply, and waste water treatment capacity.
- Project design will reflect traditional town or village character.
- Until annexed, the County will refer proposed land use changes in these areas to the Town for review and comment.
- The County, in cooperation with the Town, will develop two-tiered zoning (or an alternative) that permits higher density only if the subject property is successfully annexed and water supply and sewerage treatment capacity are adequate.

2) Greenbelts

- These areas are planned for preservation or conservation by the County.
- The County and Town will explore the transfer of development rights from Greenbelts to areas within the Town and within annexed areas.
- The Greenbelts are part of the geographic setting of the Town and the Town has an interest in what happens on these sites.
- The County and Town will discourage growth and development.
- The County will refer proposed land use changes in these areas to the Town for review and comment.

3) Municipal Water and Sewer Plan:

A simplified wastewater and water supply capacity management protocol should be established; applicants for major projects should address capacities and other facility impacts.

4) Zoning Amendments and Zoning Coordination with the County:

As part of the process of annexation, the Town does not want the County to prematurely adopt zoning for implementation of the Growth Area. The Town should work with the County to develop two-tiered zoning (or an alternative) that allows higher density only upon successful annexation, and discourages or prohibits premature development (i.e., prior to annexation).

5) Annexation Plan:

House Bill 1141 requires an Annexation Plan for specific annexation petitions (which replaced the former requirement for a scope of the extension of services). The phasing of annexations, prioritizing of sites, site planning, and zoning coordination with the County should be addressed. Guidance should be developed for preparation of an Annexation Plan that is consistent with the Municipal Growth and Water Resources elements. This should include assessments by petitioners of wastewater treatment, water supply, and non-point source impacts on the watershed.

6) TDR's:

The Town should evaluate the practical value of developing an inter-jurisdictional TDR program with the County, whereby development rights under County zoning can be voluntarily sold and transferred for use in the Town, including annexed Growth Areas. One important goal is the creation of long term protection on Greenbelt sites.

7) Municipal Character Policy:

Under the Town's long term development policy, the character, visual cohesiveness, and bounded edges of the Town should stay intact. New edge development is permitted, but it must reflect traditional Town character in terms of scale, land use, and design. The Town should consider identifying patterns of housing styles, lot arrangements, setbacks, and other elements of design that can guide infill, redevelopment, and new growth in a manner that reinforces community character.

8) Development Review Policy:

Development projects and annexation proposals should include analyses of several key factors. Developers, landowners, and applicants should provide these analyses and the Town can refer these to the County and State Planning for review and comment (similar to the existing process for projects in the Critical Area). The key factors include:

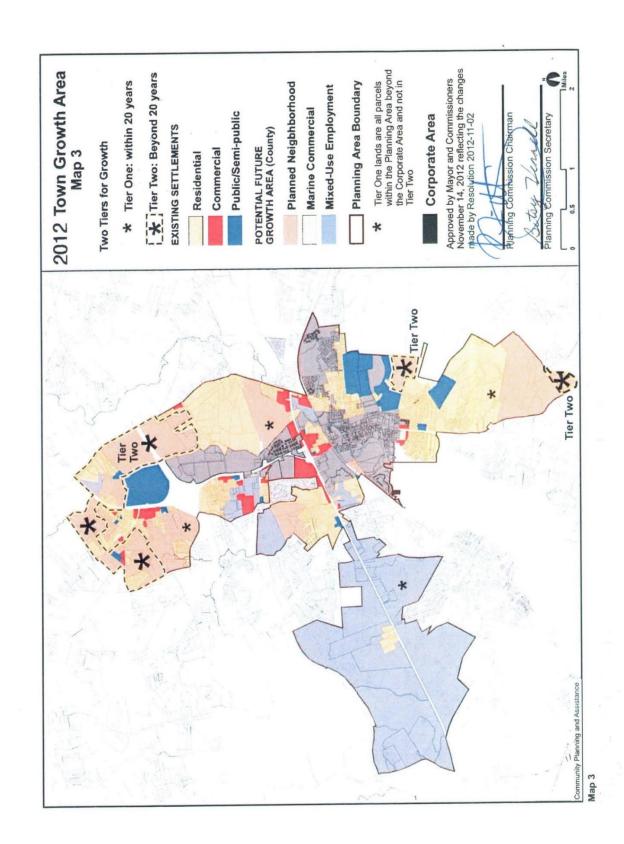
- Preservation of Community Character
- Protection of water quality (stormwater runoff)
- Adequacy of sewer treatment capacity and potable water supply
- Consistency with smart growth principles and the Comprehensive Plan
- Coordinated development plans for the Area

9) Planning Contracts:

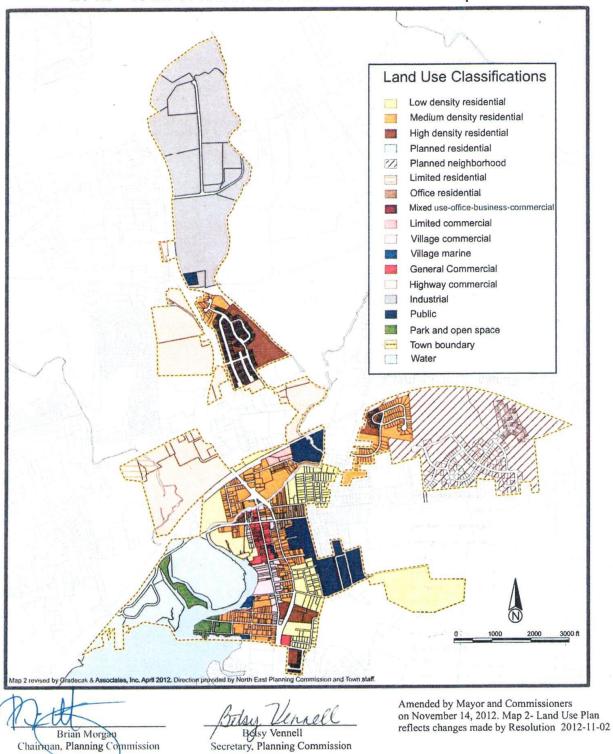
- a) Joint Planning Agreements: The law enables counties and municipalities to enter into contractual agreements as a means to solidify the inter-jurisdictional aspects of the new Comprehensive Plan (e.g., the Growth Area Map). A Joint Planning Agreement between the Town and Cecil County should be developed.
- b) Developer's Rights and Responsibilities Agreements: The DRRA is similar to the Joint Planning Agreement, but operates on a different level. The DRRA is a contract between the municipality and the developer that spells out rights and responsibilities of the parties. The tool was developed as a response to complaints from the development industry that Maryland's vesting law is too severe, and that developers need some assurance that their projects will not be abandoned under pressure to ignore the local Comprehensive Plan, zoning laws, and project approvals. The Town should develop a standardized DRRA that can be adapted to suit particular projects.

2012 GROWTH AREA MAP

Below is the revision of the 2008 Growth Area Map into a Two-Tiered system followed by an amended Land Use Map.



2012 - Town of North East Land Use Plan - Map 2



North East Comprehensive Plan-2012 Town of North East, Maryland

Water Resources Element

Purpose of Element

Article 66B of the Maryland Annotated Code, as amended by House Bill 1141 (2006 Session), requires a Water Resources element in the Comprehensive Plan that addresses the adequacy of water supply and the suitability of receiving waters for point and non-point discharges. The WRE must evaluate the adequacy and suitability of water resources on the basis of existing and future land use, both within the Town and within the Town's growth area. Thus, the WRE is based on the Land Use and Municipal Growth elements of the Comprehensive Plan. It is also tied to the Community Facilities element (for water and sewer), and to the Plan's environmental goals and policies for protecting water supply and water quality.

Water Supply

Setting

The Town of North East straddles the geographic fall line that separates the Atlantic Coastal Plain province (composed of unconsolidated sediments) from the Piedmont Plateau province (composed of crystalline rock). In terms of water resources, the Town's dual hydro-geological settings offer two advantages: 1) the potential for high-yield wells from Coastal Plain aquifers, and 2) the potential for raw water impoundments fed by rapidly flowing year-round non-tidal streams, coming out of the Piedmont. While the Town's water system relies on reservoirs of raw water, fed by North East Creek and Little North East Creek, the following review of groundwater supply may be useful for long term planning.

The potential for high-yield groundwater production in the Coastal Plain is substantial. Long term quantity is not a problem. The productivity is about ten times greater than wells in crystalline rock. The peninsula south of Town (between the Northeast and Elk Rivers) is a favorable location for wells, with potential well depths ranging from 30 to 500 feet (brackish water exists at depths greater than 500'). Some large wells in this part of the Coastal Plain can produce over 1000 gallons per minute.

In and around North East, groundwater is stored in the Potomac group aquifers. Wells that reach the bottom horizons of the aquifer can produce yields of 200 to 500 gallons per minute. Withdrawals of groundwater can cause a "cone of depression" in the immediate area (a lowering of groundwater levels), making the placement, depth, and adequate separation of wells important considerations for planning. Although the Potomac aquifers are confined, they can leak in places, causing shifts and exchanges over time. In general, estimates of groundwater yield in Coastal Plain wells are fairly accurate (and more so than in Piedmont wells).

The quality of the ground water in all of Cecil County is generally acceptable for all uses. The groundwater is soft; many Coastal Plain wells contain iron and have a low pH. All of these conditions can be treated. With properly constructed wells, pollution of groundwater poses little problem as the surface geology provides protective filtering of potential contaminants.

Town Water System

The Town has two water filtration plants; one is located at Rolling Mill Road and the other at Leslie Road. Northeast Creek feeds raw water impoundments at both facilities, and the Rolling Mill WTP also uses Little Northeast Creek. The Leslie Road reservoir holds 2.5 million gallons and the Rolling Mill reservoir holds 4.8 million gallons.

The Town recently obtained an MDE permit to withdraw water from the tidal portion of the Northeast River, which is then pumped to the Rolling Mill WTP. The permit is valid until May 1, 2016 and allows a daily average withdrawal of .559 MGD and a maximum daily withdrawal of 3.862 MGD.

During periods of low creek flows, the Leslie Road WTP shuts down, and the difference is made up by water from the Rolling Mill WTP. The Rolling Mill WTP is notable as the first surface water direct filtration plant approved for water supply in Maryland.

A reserve capacity of about 2 million gallons is stored in seven tanks, three of which are underground and four are elevated. Significant improvements to the system have been accomplished since 2000 and are on-going. A new Rolling Mill WTP came on-line in May 2009. Additional details are summarized below.

Table 4
Water System

Plant	Actual Avg.	Max Daily	Avg. Daily Flow	Design Capacity:
Name	Daily Flow	Flow	Permitted (mgd)	Avg. / Max. (mgd)
	(mgd)	permitted		
	(Apr 08 - Mar	(mgd)		
	09)			
Rolling	0.211	3.200	1.383	Phase One:
Mill				1.15 / 2.0
				Phase Two (future):
				2.3 / 4.0
Leslie	0.401	0.620	0.325	0.547 / 0.830
TOTAL	0.612	3.820	1.708	Current:
				1.697 / 2.830
				With Phase Two:
				2.847 / 4.830

Projected Water Demand for the Town and the Growth Area

The customer base in 2004 was reported to be 8,000 people. Based on the number of residential units served with water (in and out of Town), the current customer base is estimated to be 8,300. The Town of North East also serves the State's I-95 Rest Stop, which uses an average of 35,000 gallons per day, although usage varies widely from month-to-month. Slightly more than one-half of the 3,225 units served (residential, commercial, and mixed use) are in Town. In terms of only the residential units served, 47 percent (1304) are in Town and 53 percent (1446) are outside the Town.

According to the water service area map, approximately 38 percent of the area with service or planned service is located within the Town, and 62 percent of the service area is County territory (much of which is within the Town Growth Area and planned for annexation).

The following tables summarize the water needed to accommodate existing and future development under the North East Comprehensive Plan, including needs associated with the Town's Growth Area Map. Projections for the Town are based on population projections from the Maryland Department of Planning (MDP) and are expressed in five-year increments for the period 2010 to 2030. Table 5 includes two methods for projecting population: constant share and high development pressure. Need is expressed as a range, based on the two projection methods.

Table 5

Projected Water Demand for the Town of North East Based on Population Projections						
	2000	2010	2015	2020	2025	2030
Population (Constant percent of County method ¹)	2744	3455	3888	4299	4709	5112
Population (High development pressure method ²)	2744	3566	4246	5030	5942	6969
Housing units:	1020 to	1309 to	1495 to	1679 to	1861 to	2037 to
(range ³)	1215	1608	1947	2328	2768	3263
Water Needs (range ³)	.224 to	.288 to	.329 to	.369 to	.409 to	.448 to
	.267mgd	.354mgd	.428mgd	.512mgd	.447mgd	.718mgd
Percent of Average	13 to 16	17 to 21	19 to 25	22 to 30	24 to 36	26 to 42
Daily flow (range ³)						
Percent Maximum Daily flow (range ³)	6 to 7	8 to 9	9 to 11	10 to 13	11 to 16	12 to19

Data for each year represents 3.2 percent of MDP population projection for Cecil County (2009).
 Source: MDP growth modeling (2009). See also, Municipal Growth Element.

³ Data represents a range between "constant percent" and "high development pressure" and assumes each unit requires 220 gallons of water per day. Percent assumes Phase One status at Rolling Mill WTP.

Projections for the Growth Area are based on data from the Municipal Growth Element, including the number of households and net acres for development. These projections also include demand from Cecil County's Urban Growth Boundary Area 1 for North East. See Table 6. (For testing purposes, the population and number of households were also projected using TAZs. The results were within the "constant-to-high pressure range" derived from MDP data.)

Table 6

Projected Water Demand for the Growth Area				
Based on Net Acres for Development ¹				
Land Use	Households (Residential)	Water Needed		
	Acres (Commercial,	(gallons per day)		
	Industrial)			
All Planned Residential (Tiers 1 and 2)	4080 households	897,600		
Tier 1 Planned Residential (20 year horizon)	2377 households	522,940		
Commercial, Industrial (Planned Economic Growth)	1655 net acres	1,655,000		
Cecil County Urban Growth Boundary site (Econ. Growth) ²	224 net acres	224,000		
TOTAL (includes Tier 1 and 2)		2,776,600		
TOTAL (includes Tier 1 only)		2,401,940		

 $^{^{1}}$ Assumes 220 GPD per household and 1,000 GPD per net acre for commercial and industrial.

² Cecil Co. UGB Study, 2002 amendment, reports a total of 1700 acres in this site, but that figure appears to be a typo error. The total area measures to be 350 acres, of which 298 acres are outside the Town growth area. This area yields 224 net acres for development and represents an additional source of future demand for water.

The total amount of water needed for existing and future development under the Comprehensive Plan and Growth Area Map is provided in Table 7.

Table 7

Total 2030 Water Needs* for the Town and the Growth Area: 1) Constant and High Pressure Population Growth Scenarios and						
2) Growth Area Map (Tiers One and Two)						
	(gallons per day)					
Needs Based on Pop Growth	Constant Growth	High Development Pressure				
Town Customers	448,064	717,860				
Existing County Customers	299,880	299,880				
Total	747,944	1,017,740				
Needs Based on Land Area						
Growth Area: Tier One	2,401,940					
Growth Area: Tier Two	374,660					
Town Infill	165,220					
Usage in 2009	612,000					
Total	3,553,820					
Total without Tier Two	3,179,160					

^{*}Assumes 220 GPD/Household and 1,000 GPD/net acre of commercial and industrial

Summary of Water Supply and Demand

Based on Population Growth

Based on the 2030 population projections, the Town needs .748MGD of water for growth at the constant rate, and 1.02MGD of water for growth under the high development pressure scenario. This estimate assumes that there is no growth in non-municipal customers, and that all future County customers are annexed into the Town. The Town has adequate design capacity (without needing to implement Phase Two at Rolling Mill), and an adequate permitted daily flow to serve projected population growth.

Based on Land Area

The land for development in the Growth Area (Tiers One and Two), new infill development, and current Town and County customers, requires 3.6MGD of water. Without Tier Two, 3.2MGD of water are needed. The demand from full build out of the Growth Area would exceed the Town's average flow design capacity (even with Phase Two at Rolling Mill) by about 12 percent.

This is a long term and relatively modest shortfall, and the Town has adequate time and tools to plan for improvements as needed. Raw water supply for the WTP reservoirs does not appear to be a limiting factor. Facility improvements, if required, should likely be focused on the Rolling Mill plant. Modest adjustments to MDE permits may provide additional water to make up the long term shortfall. Finally, since the land supply in the Growth Area purposefully exceeds the amount needed for population growth to 2030 (to account for market choices), full build out of the Growth Area by 2030 is not likely.

The largest variable in projecting the supply of water needed in the future appears to be water usage by future industrial, commercial, and business uses. This element uses 1000 gallons per net acre, but this number is probably on the high end (and thus needs are overstated). Appendix C (located at the end of Chapter 10) is a table used in Cecil County for estimating the water needs of an array of non-residential uses. As specific uses are proposed in the future, the table should be used as part of a water supply capacity management system to track the impacts of new economic growth on available supply.

2008 Water Service Area Maps

The Master Water Plan on the following page (Figure 6) shows the service areas in and around North East. The Map includes the boundary of the Town's Growth Area. Nearly 100 percent of the Growth Area has public water, or is planned for water.

Conclusion

Ensuring an adequate supply of water for growth should not present difficult technical or regulatory obstacles, or higher than ordinary costs. Additional supply can be accommodated through continued improvements to the Town's two Water Treatment Plants and by using groundwater as a supplemental source. The Northeast River Wastewater Treatment Plant (and not the water plant) is the major constraint on growth

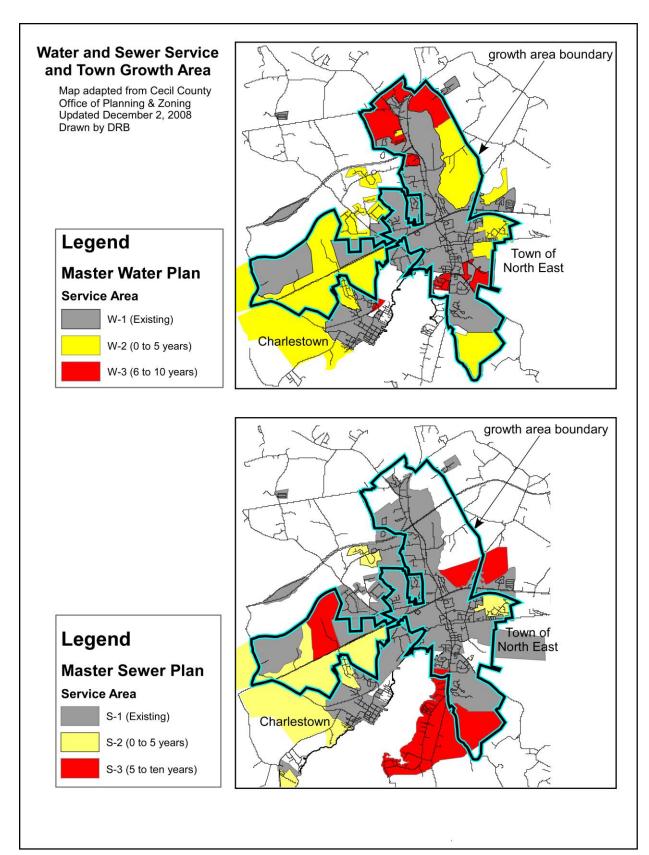


Figure 6

Water Quality

North East is wholly contained within the Northeast River watershed; the River receives pollution discharges from both point and non-point sources in the Town. Point sources, primarily the Town's wastewater treatment plant, are controlled by State permits. Non-point source impacts are not controlled directly via permit, but rather are a consequence of how land is used and how stormwater runoff is managed. North East has experience with water quality issues under its Chesapeake Bay Critical Area Program, where water quality plays a heightened role in the Town's decision-making.

Point Source Discharge to Northeast River

The Northeast River Advanced Wastewater Treatment Plant (WWTP) located at Seneca Point (just south of Charlestown) serves the Town of North East and most of the Town's Growth Area. The WWTP also serves the Town of Charlestown and areas in Cecil County proximate to North East (the I95 Rest Stop, several neighborhoods, institutions, industrial parks, and a shopping center).

Recent and Planned Improvements

In 2005, the County completed an upgrade of the WWTP for biological nutrient removal (BNR). As of 2009, the County is in the process of planning design modifications to improve the plant to meet enhanced nutrient removal (ENR) standards. This action, alone, would only increase maximum design (and permitted) capacity from the present 2.0MGD to 2.67MGD. Most important, the WWTP will still be grossly inadequate to handle planned County and municipal growth. A 2007 study by George, Miles and Buhr determined that the WWTP should be sized to handle 9.1MGD.

The WWTP's expansion is limited by an MDE-issued nutrient allocation (a cap) of 24,364 pounds per year of total nitrogen (TN), and 1,827 pounds per year of total phosphorous (TP). This is equal to operation at 4.0 mg/L of TN and 0.3 mg/L of TP.

In order to expand beyond the technical cap limit of 2.67MGD, the County plans to use a comprehensive program of credits and other mitigating actions that will require approval by MDE (see County Master Water and Sewer Plan, as amended April 7, 2009, p. 4-8). As planned, the County proposes to expand the WWTP in four phases up to a maximum of 9.1MGD, while maintaining the nutrient cap:

Phase One: from 2.0 to 3.7MGD Phase Two: increase to 5.0MGD Phase Three: increase to 7.5MGD Phase Four: increase to 9.1MGD The WWTP is planned to operate at 4.0 mg/L of TN and 0.3 mg/L of TP (note: this is below the nutrient cap for TP). Demand will trigger implementation of phases two through four. Design is expected to be completed in 2009 and construction of phase one completed by 2012.

WWTP Demand

In 2006, the WWTP was treating approximately .930MGD, which was already about one-third higher than the need projected by the State for the year 2020. Concern about capacity led Cecil County to adopt a resolution in 2006 that reserves .279MGD for residential growth and .120MGD for non-residential growth. As of 2008, the plant was treating about 1MGD of wastewater. It is estimated that current and allocated flows are at 1.6MGD, leaving about 400 to 500 gallons per day of treatment capacity.

Official studies prepared by, or for, Cecil County in recent years suggest that sewerage treatment capacity is a key constraint on growth; that absence of adequate sewer will result in lost economic opportunities, sprawl development in the rural environs, and greater environmental harm. See, for example: the County Growth Study, Sage Group (2007); BRAC Report (2007); and the Cecil County State of the County Report (2007).

Figure 6 shows areas of existing and planned sewer within the Town's Growth Area. Those areas without sewer (primarily at the north end, and two small areas at the south), are designated as Tier Two areas under the Town's Municipal Growth element.

The projected sewer demand for the Town and its Growth Area are summarized in the tables below:

- Table 8 presents data for the Town using the MDP high development pressure scenario. It shows that the Town will require more wastewater treatment than available before the year 2015, and this assumes that the Town is given all of the remaining allocation of .4MGD (which is unlikely). (For example, Charlestown is projecting sewer needs on the order of .16MGD by 2015.)
- Table 9 is based on land area within the Town's Growth Area.
- Table 10 summarizes the total demand for sewer from implementing the North East Comprehensive Plan including the Growth Area Map. It also shows the combined demands of the Towns of North East and Charlestown and of their respective Growth Areas.

Table 8

Projected Sewer Demand for the Town of North East Based on Population Projections									
	2000 2010 2015 2020 2025 2030								
Population ¹	2,747	3,566	4,246	5,030	5,942	6,969			
Households	1,081	1,431	1,733	2,072	2,463	2,904			
Nonresidential	n/a	38,940	47,080	56,320	67,100	78,760			
Sewer demand									
Residential Sewer	237,820	314,820	381,260	455,840	541,860	638,880			
Use (GPD) ²									
Total demand	n/a	353,760	428,340	512,160	608,960	717,640			
% of permitted	n/a	18	21	26	30	36			
capacity ³									
% of avail. Sewer ⁴	n/a	88	[107]	[128]	[152]	[179]			
			capacity						
			exceeded						
% capacity: Phase	n/a	n/a	12	14	16	19			
1 Upgrade ⁵									

¹Projections are based on MDP high development pressure scenario ²Assumes per household use of 220GPD

³Assumes WWTP is at 2.0MGD

⁴Assumes .4MGD available without competition from other jurisdictions

⁵Assumes WWTP is upgraded, and credits permitted, to handle 3.7MGD by 2012

Table 9

Projected Sewer Demand for the North East Growth Area Based on Households and Net Acres for Development ¹						
Land Use	Households	Se	ewer Needed			
	(Residential)	(ga	llons per day)			
	Acres (Commercial,					
	Industrial)					
All Planned Residential (Tiers 1 and 2)	4,080 households	897,600				
Tier 1 Planned Residential (20 year horizon)	2,377 households	522,940				
Commercial, Industrial (Planned Economic	1,655 net acres		1,655,000			
Growth)						
Cecil County Urban Growth Boundary site	224 net acres		224,000			
(Econ. Growth) ²						
			% Phase 1 upgrade ³			
TOTAL (includes Tier 1 and 2)		2,776,600	75			
TOTAL (includes Tier 1 only)		2,401,940	65			

¹Assumes 220 GPD per household and 1,000 GPD per net acre for commercial and industrial.

²Cecil Co. UGB Study, 2002 amendment, reports a total of 1700 acres in this site, but that figure appears to be a typo error. The total area measures to be 350 acres, of which 298 acres are outside the Town growth area. This area yields 224 net acres for development and represents an additional source of future demand for wastewater treatment.

³Assumes WWTP is upgraded to 3.7MGD under Phase 1 of the County's Water and Sewer Plan by 2012.

Table 10

Total 2030 Sewer Needs for the Town and the Growth Area¹: 1) Constant and High Pressure Population Growth Scenarios and 2) Growth Area Map (Tiers One and Two) (gallons per day) **Constant Growth** Need Based on Pop Growth High Development Pressure Total 448,064 717,860 Need Based on Land Area Growth Area – Tier One 2,401,940 Growth Area – Tier Two 374,660 165,220 Town Infill Usage in 2009 612,000 3,553,820 Total 3,179,160 Total (without Tier Two) **GPD** % Phase 1 upgrade Towns of North East and North East 3,179,160 86 Charlestown: Projected Charlestown 755,000 20 demand for both Towns and **TOTALS** 3,934,160 [106] exceeds capacity Growth Areas²

Based on Population Growth

Based on the 2030 population projections, the Town needs .448MGD of sewer for growth at the constant rate, and .718MGD of sewer for growth under the high development pressure scenario. The Northeast River Advanced WWTP should have adequate capacity under its phased upgrades of the plant, which will be triggered by demand and planned for a maximum of 9.1MGD. The County controls the allocation of treatment capacity, thus there are no concrete assurances as to how the WWTP will be shared between the County and the Towns of North East and Charlestown. However, based on mutual Town and County planning goals for growth and annexation (see the Municipal Growth element), it is reasonable to expect County support for the Town's Tier One Growth Area.

Based on Land Area

The land for development in the Town Growth Area (Tiers One and Two), new infill development, and current Town needs, require 3.6MGD of sewer. Without Tier Two, 3.2MGD of sewer are needed. The County's Phase One upgrade of the WWTP will handle 3.7MGD of treatment, but demands will also come from Charlestown and the County.

¹Assumes 220 GPD/Household and 1000 GPD/Net Acre of Commercial and Industrial

²Based on Charlestown Water Resources Element, Scenario 1, and North East MGE Tier One and assumes WWTP is upgraded to 3.7MGD under Phase 1 of the County's Water and Sewer Plan by 2012.

Table 10 indicates that within the 20 year time frame of the plans for North East and Charlestown, the Phase 1 upgrade will be exceeded. Thus, additional phased upgrades (as already planned) will be needed.

Except for the County's North East Urban Growth Boundary, the assessment does not account for growth on sewers in the County. The Towns of North East and Charlestown now use about 22 percent and 6 percent, respectively, of the WWTP capacity, and the remainder is used in the County.

However, it is not reasonable to assume that North East's current 22 percent share is a useful guide for the future; the Town's plan is for territorial growth and the annexation process will change the arithmetic significantly. All existing and planned sewer (as of 2009) consists of 9,657 acres. Land in the Town and the Growth Area, amounts to 78 percent of the acreage of all existing and planned service. (Note: this 78 percent is the same land designated as Tier One on the Town's Growth Area Map.) Therefore, it is clear that in the future the Town will be using a larger share of the sewer system.

Importantly, the County plans to move from Phase 1 to subsequent phases based on demand, thus the planning process is set up to change the Town's allocation as growth and development occur. The following discusses the implications of the Phase 1 upgrade (to 3.7MGD) in the context of the Town's plans for growth.

Phase One Upgrade to 3.7 MGD

Under the Phase 1 WWTP upgrade, North East would be allocated .814MGD out of a total 3.7MGD (22 percent, based on current trend). This amount would be adequate to serve population growth in Town to the year 2030 under the High Development Pressure Scenario. However, the remaining allocation (about .1MGD) would permit only about 100 acres of industrial and commercial growth within the Growth Area. This is about 6 percent of all planned economic growth in the Growth Area.

If the Town grows at a constant rate (trend growth), about .448MGD would be needed by 2030 and this would leave capacity for about 336 net acres of economic growth (about 22 percent of planned economic growth in the Growth Area).

In order to ensure adequate sewer capacity for North East, the County would have to advance to Phase 2 well before 2015. By 2015, the Town's population plus one-fourth of growth area (2015 represents one-fourth of the planning period to 2030) would need 1.2MGD of capacity (in excess of the Town's theoretical .814MGD share).

Full Upgrade to 9.1 MGD

Assuming the County is successful at implementing the full expansion of the WWTP to 9.1MGD, the North East Comprehensive Plan for the Town and Growth Area will ultimately use about 34 percent of the treatment capacity.

Tables 11 and 12 have been added to this element to provide additional information regarding available land use data for the Growth Area (Tier 1) and the Town of North East. Residential, commercial, and industrial land uses are already developed parcels that are served by a mix of onsite disposal systems and public sewers. Accordingly, forest and agricultural lands are considered to represent the primary development potential and the primary source of demand for sewage treatment capacity at the Seneca Point Wastewater Treatment Plant.

Table 11 [Added 4/28/10 by Resolution 2010-04-02]

North East Town and Growth Area Development Potential Summary								
Growth Area (tier 1)			Town of North East					
Land Use ¹	Acres	Development	WWTP	Land Use	Acres	Development	WWTP	
		Potential	gal./day			Potential	gal./day	
		$(DU)^2$				(DU)		
Agriculture	837	2,930	644,600	Agriculture	51	178^{3}	39,270	
Barren	20			Barren	0			
Commercial	148			Commercial	59			
Forest	$2,447^4$	n/a	2,447,000	Forest	530	$1,855^3$	408,100	
High	11			High	22			
Residential				Residential				
Med.	376			Med.	210			
Residential				Residential				
Low	611			Low	158			
Residential				Residential				
Industrial	112			Industrial	107			
Institutional	143			Institutional	21			
Other	247			Other	8			
Open water	0			Open water	27		-	
total	4,952			total	1,193			

¹Land use land cover calculations based on MDP 2002 LULC data set (as utilized by Cecil County in its analysis of the watershed)

²Dwelling Units (one per household) assumes Priority Funding Area (PFA) density is achievable on agricultural parcels that will be developed

³Assumes an average density of 3.5 du/ac (per PFA standard)

⁴Nearly all forest land within the Growth Area is in areas planned for nonresidential mixed use employment development

Table 12 [Added 4/28/10 by Resolution 2010-04-02]

	GIS Analysis of DAT 2007 parcel data ¹⁰									
Vacant Residential ⁵	2,102	9,459 ⁶	2,080,980 ⁷	3238	1,4539	319,770				
Vacant Commercial Industrial (buildable)	503	unknown	503,000 (est. 1000 gal/ac)	194	unknown	194,000 (est. 1000 gal/ac)				
Vacant Sewered Agriculture ¹¹	215	752	165,440							
Vacant Sewered Forest	1,571	n/a	1,571,000 (est.1000 gal/ac)							

Vacant parcels classified "residential" by DAT may be mapped "forested" LULC(from photointerpretation)

Agricultural land is assumed to have a base development potential equal to PFA status of 3.5 du/ac (if annexed)

⁵2007 Department of Assessment and Taxation records

⁶Based on average net yield for PRD of 4.5 du/acre (8 du/ac – 30% open space requirement + 10% for roads)

⁷assume 220 gpd/du

⁸Acreage total subsumed within Agricultural and Forested LULC

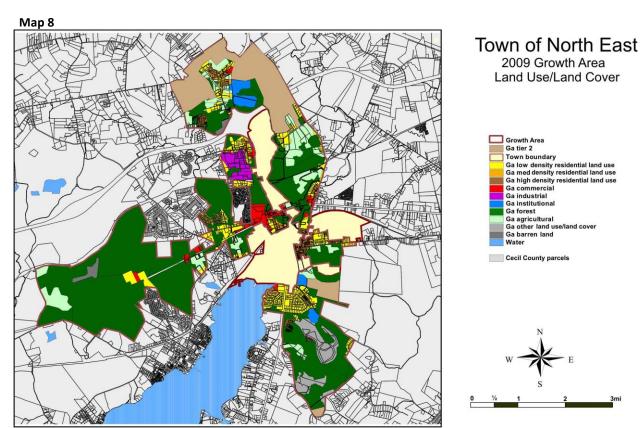
⁹based on actual individual lots and zoning and assumes nonconforming lots can receive development approval from Board of Appeals

 $^{^{10}}$ Large parcel boundaries extend beyond limits of designated Growth Area

¹¹Assumed (based on location and adjacent development patterns) that sewered vacant agricultural land will be a development priority and will reduce pressure on vacant "residential" lands

On Site Disposal Systems (OSDS) [Added 4/28/10 by Resolution 2010-04-02]

A study conducted for the Seneca Point WWTP found that there were approximately 1,690 septic systems in the WWTP's service boundary¹. Septic system loads can be estimated using the formula: 9.5 lbs. of N per person per year times the average household size times a soil transport factor of 0.4 yields an average annual load of 9.386 lbs. of nitrogen per year per system resulting in a service area load 15,862 lbs. per year. Table 6.8 in the draft 2010 Cecil County Comprehensive Plan presents a 42,183 lbs. nitrogen loading for the Northeast River watershed. That suggests an additional 2,800 septic systems in the watershed beyond the North East Growth Area. The Town will cooperate with Cecil County in efforts to limit and minimize OSDS impacts both within the Growth Area and within the watershed.



GIS analysis of DAT 2007 records was reconciled with 2002 land us land cover data mapped by the Maryland Department of Planning. This analysis is summarized in the following table: North East Town and Growth Area Development Potential Summary

¹ Source: Northeast Advanced Wastewater Treatment Plant Feasibility Study, 2008

Non-Point Sources: Stormwater Runoff

Non-point source pollution involves the pollutants that wash off the land and into the Northeast River and its Creeks. The watershed contains 40,400 acres, with an estimated 2010 population of 23,601 (Cecil County). Nearly 49 percent of the watershed is forested and nearly 31 percent is agriculture. Residential development is about 20 percent, with 85 percent of that acreage consisting of either low density or very low density development (sprawl growth on septic systems).

The Town of North East makes up only three percent of the watershed while accommodating nearly 15 percent of the watershed's population on public water and sewer. The Town's Growth Area (7,061 acres outside the Town limits) amounts to an additional 17 percent of the watershed. See map below of the Watershed, 2007 Land Use, and North East Growth Area boundaries (see also Municipal Growth element).

At the State level, goals for reducing non-point pollution are primarily established by the Department of Natural Resources (the Tributary Strategies) and MDE (TMDLs: total maximum daily loads). There are also programs designed:

- to protect the designated use classification of water (e.g., shellfish harvesting, swimming, drinking supply, and so on),
- to prevent the degradation of waters down to minimum quality standards,
- to protect Critical Area and Forest Conservation stream buffers, and
- to protect source water supplies and wellheads

Estimating Non-Point Pollution

There are two basic methods for estimating the non-point impacts of land use and land use change. One method consists of a set of equations that use impervious surface, rainfall, and pollutant concentrations to estimate pollutant loadings. The second method relies on land use acreages and corresponding land use coefficients as developed by the State and the EPA's Chesapeake Bay program.

The Town tried both methods for estimating stormwater pollutant loadings. The "impervious surface/rainfall" approach was selected for the Water Resources element. The "land use/pollutant coefficient" method was found to produce improbable results (for example, achieving MDE's TMDL literally required forestation of most of the watershed). This second method, however, is useful for understanding the dynamics involved when land changes (for example) from agriculture-to-urban, or from forest-to-agriculture.

Table 13 summarizes the non-point impacts of existing conditions for the Town of North East and for the Town's Growth Area for total nitrogen, total phosphorous, and sediment. The results of both estimation methods are included for information, but the impervious surface equations are the results used as a basis for the Water Resources element.

Table 14 summarizes the non-point impacts of post-growth and development conditions for the Town of North East and for the Town's Growth Area for total nitrogen, total phosphorous, and sediment. Again, the results of both estimation methods are included for information, but the impervious surface equations are used as a basis for the Water Resource element.

Impervious Surface/Rainfall Equation

This method involves three equations:

- Step 1: determine the watershed's runoff coefficient
- Step 2: use the coefficient, the annual inches of rainfall, and the runoff probability factor (0.9), to determine the annual runoff
- Step 3: use the annual runoff, pollutant concentration, acreage, and a metric conversion factor to determine the annual load of TN and TP

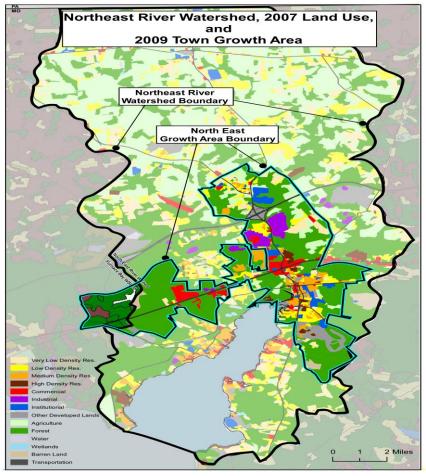


Figure 7

The equations were used to estimate pollutant loads for existing conditions and for post-growth and development conditions. Certain assumptions were made in assigning future land use. Basically 55 percent of agricultural and forest land (45 percent is saved for environmental and open space needs) is allocated to the following future land uses: 44 percent used for residential, 26 percent used for commercial, and 26 percent is used for industrial.

Land Use Coefficient Method

This method involves the land use loading coefficients developed by the Tributary Strategies (2006 data), and the acres of land use in the Town of Growth area (pre- and post-development). Future land use was assigned as described in the above paragraph.

Conclusions of the Impervious Surface Method

- Existing Conditions Town of North East:
 - o For Total Nitrogen, the Town produces about 419 pounds per month. This is about 7 percent of the non-point TMDL (6229 pounds per month)
 - o For Total Phosphorous, the Town produces about 54 pounds per month. This is about 17 percent of the non-point TMDL (314 pounds per month)
- Existing Conditions Town and Growth Area
 - o For Total Nitrogen, the area produces about 2502 pounds per month. This is about 40 percent of the non-point TMDL (6229 pounds per month)
 - o For Total Phosphorous, the area produces about 325 pounds per month. This is about 104 percent of the non-point TMDL (314 pounds per month).
- Post Growth and Development Town of North East:
 - o For Total Nitrogen, the Town produces about 567 pounds per month. This is about 9 percent of the non-point TMDL (6229 pounds per month)
 - o For Total Phosphorous, the Town produces about 74 pounds per month. This is about 23 percent of the non-point TMDL (314 pounds per month)
- Post Growth and Development Town and Growth Area
 - o For Total Nitrogen, the area produces about 3212 pounds per month. This is about 52 percent of the non-point TMDL (6229 pounds per month)
 - o For Total Phosphorous, the area produces about 418 pounds per month. This is about 133 percent of the non-point TMDL (314 pounds per month)

As the major Town and Growth Area within the watershed, comprising 20 percent of the watershed, the Town of North East can reasonably claim a large share of the TMDL. Based on the above results, the Town can fully develop within today's corporate limits (through infill and redevelopment) and produce a very low 9 percent of the TMDL for nitrogen, and a low 23 percent of the TMDL for phosphorous.

The non-point problem is primarily with the Growth Area, where a large of amount of forest will be used for growth. This land use change will have a high impact on non-point phosphorous and nitrogen loadings in the watershed. Still, with full development in the Town and its Growth Area, the nitrogen loads will be only 52 percent of the TMDL. Phosphorous, on the other hand, will rise to 133 percent of the TMDL.

This suggests a two-fold strategy for the Town to achieve water quality goals in the Growth Area:

- 1) Encourage preservation of as much forest as possible. For residential development, higher net densities can result in significant forest retention on each development site. For commercial and industrial uses, a program for reforestation within the watershed (or for payment of fees for tree planting) could be used to offset loss of forest land on developing sites. Site design could also be used to save on-site trees.
- 2) Maximize efforts to control sediment during and after construction, and follow through with timely inspection and enforcement actions. Since most phosphorous enters the waterways attached to sediment, sediment controls will help minimize phosphorous loadings.

Urban best management practices include a variety of methods for controlling non-point sources of pollution. The success of preventing runoff pollutants from entering waterways depends on selecting the right practice, making sure it is properly constructed in the proper location, and following up with maintenance over the long term. Controls for sediment and phosphorous can be very effective. Up to 100 percent of suspended solids and 30 to 80 percent of phosphorous can be eliminated, depending on specific circumstances.

A program for requiring state-of-the-art BMPs for new development on forested sites may be able to bring development of the Growth Area within the limits of the TMDL for phosphorous. If a 50 percent reduction is achieved, the post-development phosphorous loadings for the Town and Growth Area will fall to about 67 percent of the TMDL.

Table 13, Non-Point Nutrient Loading, provides non-point nutrient load summaries for total nitrogen and total phosphorus for the Northeast River watershed, the Growth Area, and the Town of North East.

Table 13 [Added 4/28/10 by Resolution 2010-04-02]

Non Point Nutrient Loading ¹									
Total	Nitrogen				Nonpoi	nt TMDL			
2009	Septic	nonpoint	TN total	TP	TN	TP			
² Watershed	42,183	412,346	454,529	32,841	74,749	3,763			
Growth Area	15,862	37,991	53,853	4,015					
North East	0	7,477	7,477	917					
GA + NE	15,862	45,468	61,330	4,932	74,749	3,763			
2	030 Projected	Non point Nu	utrient Load	ling					
Watershed	33,298	261,600	294,898	23,421					
Growth Area	03	35,592	35,592	3,899	1				
North East	0	7,511	7,511	1,003					
GA + NE	0	43,103	43,103	4,902	74,749	3,763			

¹ all loads in lbs/yr

² figures are from 2010 Cecil County Draft Comprehensive Plan reflecting 2007 data

³ The Growth Area is scheduled for sewer service and existing OSDS will be retired achieving net gains in nonpoint loads

Table 14, Seneca Point WWTP Loads, provides point source nutrient loading summaries at the Seneca Point Wastewater Treatment Plant for total nitrogen and total phosphorus for the Growth Area, the Town of North East, and a combined total. A combined point and non-point load summary is also provided.

Table 14 [Added 4/28/10 by Resolution 2010-04-02]

	Sen	eca Point WWT	P Loads (ope	rating at ENR	levels 11 out o	f 12 months, 2	009)¹	
2009 Demand	_	utrient load s/yr)		Load Cap ² s/yr)	2030 North East Demand (lbs/yr)		2030 Growth Area Demand (lbs/yr)	
MGD	TN	TP	TN	TP	TN	TP	TN	TP
0.95^{1}	7,106 ³	1,329	24,364	1,827				
0.95	7,0574	1,336						
2.58 ⁵							19,084	3,613
1.57 ⁶							11,613	2,198
0.32					2,365	448		
Total	7,057	1,336			2,365	448	30,697 ^{5,6}	5,811 ^{5,6}
	_		2030	Theoretical Su	immary			
5.42	40,119	7,595		These	loads reflect the	eoretical maxii	num loads	
		Loa	ds based on T	able 7 from M	GE (planned lo	ads)		
	2010	total demand				2030 total o	lemand	
	35	3,760 gpd			717,640 gpd			
TN	(lbs/yr)		TP (lbs/yr)		TN (lbs/yr)		TP (lbs/yr)	
2	2,611		494		5,303	1,004		
		·	Combined Po	int and Nonpo	oint Loads 2030			
		Point I	_oads	oads Nonpoint Loads		nt Loads TMD		rshed
		TN (lbs/yr)	TP (lbs/yr)	TN (lbs/yr)	TP (lbs/yr)	TN (lbs/y	r) T	P (lbs/yr)
Nort	h East	5,303	1,004	7,511	1,003			
Growt	:h Area	30,697	5,811	35,592	3,899			
To	otal	36,000	6,815	43,103	4,902	74,749		3,763

¹ Source: Cecil County Department of Public Works; CBP data reports two year average flows of 0.954 mgd for 2006 – 2007 (available data)

² Tributary Strategy Point Source Cap for major facilities

³ Nutrient loads actual "end-of-pipe" loads (sampled)

⁴ Nutrient loads calculated by formula

⁵ Based on Theoretical Demand from all vacant residential lands plus all vacant commercial and industrial lands

⁶ Based on mixed use employment development on all Forested land

Suitable Receiving Waters [Added 4/28/10 by Resolution 2010-04-02]

The Northeast River is the only option for North East as a "receiving water" body. All non-point flows that are not infiltrated eventually reach the Chesapeake Bay via the North East River. MDE has established TMDL caps for nitrogen and phosphorous that analysis has shown will not be exceeded in the near term. The "near term" includes the next six-year interval until the North East Comprehensive Plan is required to be updated. The WRE will be updated at that time with information provided by MDE and Cecil County. If any material issues or concerns affect this finding of "suitability," appropriate changes will be made at that time.

Based on the WWTP's current actual level of performance, e.g. ENR¹, available capacity shown on the point source load table², and County plans to secure a new permit that is written for greater capacity it is anticipated that even over the long term, the North East River will be a suitable receiving water for point source discharges. County efforts at nutrient trading will also play a role in that discussion [over which the Town has no direct control]. However, the Town will be a partner with Cecil County and MDE in finding appropriate workable solutions.

The nonpoint phosphorus loadings, especially for the watershed, suggest a greater problem for "suitability." Clearly, steps will need to be taken to reduce nonpoint source loadings. Changes to stormwater management regulations and practices will need to be carefully monitored, and a watershed-based strategy for enhanced nonpoint control may need to be developed. Such an effort will also require a partnership among all affected jurisdictions.

1 Cecil County Department of Public Works, CBP data 2 Northeast Advanced Wastewater Treatment Plant Feasibility Study 2008

Source Water Protection [Added 4/28/10 by Resolution 2010-04-02]

In June 2005, the Maryland Department of Environment prepared a Source Water Assessment (SWA) study as mandated by the Safe Drinking Water Act. The study was conducted for the Northeast Creek [which supplies water to two water treatment plants that served about 5,200 people in and around the Town of North East].

Northeast Creek and its tributary Little Northeast Creek flows south and east forming the Northeast River. The intake structure for the Leslie Water Treatment Plant withdraws water from Northeast Creek upstream of the confluence with Little Northeast Creek. Water is pumped to a 1 million gallon raw water reservoir and then flows by gravity to the Leslie Water Treatment Plant. The intake structure for the Rolling Mill Treatment Plant is downstream of the confluence of the Little Northeast Creek and Northeast Creek. A third intake has been completed for the tidal area of Northeast River near the Town Park on Walnut Street.

The source water protection area for the Town of North East's intakes encompasses approximately 46 square miles (29,804 acres) of mixed land use with over 60% of cropland and pasture. Approximately 20% of the watershed extends into Pennsylvania.

Potential sources of contamination include point and non point sources, including transportation, agriculture, on-site septic systems and runoff from developed areas. Non point sources (agricultural and urban runoff) are the largest sources of contaminants in the watershed. There are several minor municipal and industrial discharges in Pennsylvania, and a quarry and a superfund remediation site at the Mechanic Valley Trade Center in Maryland's portion of the source water assessment area. Cecil County landfill (Hog Hill) is also located within the watershed of the backup intake in the tidal portion of Northeast River. The relatively low percentage of forested land within the watershed (about 30%) and continued forest loss to development present treatment and management challenges for producing safe water.

Turbidity, nutrient enrichment, and algal blooms are issues of primary concern. High turbidity levels are associated with erosion and transport of sediment during storm flows. The network of major roads (I-95 and Route 40) and rail lines in close proximity to the Town's intakes put this water supply at significant risk to impacts from potential hazardous materials spills³.

North East recognizes these concerns and has been working cooperatively with State, County and private parties to implement a comprehensive set of protection policies that incorporate and build upon many of the policies and regulations that are already in place. Stream buffers, steep slope buffers, non-tidal wetland buffers and the Chesapeake Bay Critical Area mandated buffers all address and restrict land use activities that could have negative impacts on the Town's water supply sources.

3 Much of the language and many of the facts included in this section were paraphrased from the draft 2010 Cecil County Comprehensive Plan's Water Resources Element.

Recommendations for Source Water Protection [Added 4/28/10 by Resolution 2010-04-02]

- The Town of North East should take a lead role in forming a local watershed planning team to develop and implement strategies to protect Northeast Creek as a drinking water source.
- A formal or informal agreement should be developed to engage officials from jurisdictions in Maryland and Pennsylvania on an ongoing basis.
- Encourage broad stakeholder participation, including soil conservation districts, County Planning and Zoning, transportation officials, community associations, chambers of commerce and other business organizations, the Cecil County farm bureau and individual farmers and environmental groups.
- Establish clear and achievable goals, objectives and milestones to ensure the highest quality raw water.

- A well thought out plan for being notified of hazardous material spills, and strategy for responding is critical to ensuring safe water for the Town of North East.
- Erect road signs in strategic locations to alert the public that they are entering a drinking water watershed.
- Continue monitoring for fecal coliform and E.coli in raw water.
- Increase monitoring of nutrient loads in raw water.
- Create a body responsible for periodic field surveys of the watershed to ensure there are no new sources of contaminants.
- The Cecil County Soil Conservation District and Pennsylvania Districts should continue to develop projects to reduce pathogens and nutrients from animal waste from entering upstream tributaries. Stream fencing and establishing forested riparian buffers are particularly helpful.
- The soil and erosion control and stormwater management regulations and practices in the Pennsylvania Townships within the watershed should be reviewed and compared with Maryland's standards.
- The Town should work closely with the County's Technical Advisory Group [to encourage the application of progressive stormwater management practices to reduce future impacts (erosion and sediment transport, temperature impacts and oils, other contaminants, salts from road runoff) and runoff from new development.

Existing Measures [Added 4/28/10 by Resolution 2010-04-02]

A Town/County emergency response plan is in place that includes the Town's water company, Severn Trent. It details actions to be taken in the event of different emergencies. That plan is subject to further review and refinement.

Water Resource Goals and Objectives

Water Supply

Goals:

- The Town will provide an adequate supply and a good quality of water for existing and planned development, consistent with the Comprehensive Land Use Plan and with the State's goals and programs for water resources.
- The Town will implement measures to avoid or minimize risks associated with potential contamination or degradation of water sources from the surface.

Objectives:

- The Town will provide and maintain infrastructure including a system of raw water impoundments, filtration plants, pumps, underground and elevated tanks, distribution lines, and other components for water treatment, storage, and delivery.
- The Town will continue to monitor water usage to periodically assess the adequacy of water supply, and will continue to make individual and cumulative assessments about the resource demands and impacts associated with development projects.
- The Town will encourage Cecil County to protect water quality of the streams that the Town depends upon for raw water supply. This includes implementation of the County's plans for rural conservation and preservation, and reforestation. The Town recommends that the County implement the use of 200-foot buffers along stream edges, and require reductions in impervious surfaces for future development.
- The Town will consider new study results from USGS, MDE, and other sources as part of
 the State-mandated six year Plan review process, and make adjustments and recommend
 actions, as appropriate.
- The Town will adopt a Water Supply Capacity Management Plan, using MDE's model as input.

Water Quality

Goals:

- The Town will strive to achieve MDE's TMDL for point and non-point sources in the Northeast River watershed.
- The Town will minimize the adverse impacts of development and growth in the watershed and the larger Eastern Shore Basin.

- The Town will require that developers identify and map wetland areas on-site and in adjacent areas using the following sources:
 - o National wetlands Inventory
 - o DNR wetland data layers (GIS)
 - o MDE's associated priority preservation and restoration areas
 - Hydric soils maps
 - o 100 year floodplain maps
- The Town will require the use of Best Management Practices (BMPs) for development on infill parcels and in growth areas. BMP's that are effective in phosphorous, nitrogen, and sediment removal will be required. BMPs include, but are not limited to, low impact design, stream setbacks, tree plantings, creation of natural areas around streams and wetlands, minimized impervious surface, avoidance of sensitive areas, and stormwater management.
- The Town will require that impervious surfaces be minimized insofar as possible, consistent with the type of land use planned and zoned. High levels of impervious surface will be offset with suitable plantings and large setbacks, especially around associated streams and wetlands.
- The Town will continue implementation of its Critical Area Program, and will require superior BMPs, including 200 foot stream buffers, for future development using growth.
- The Town will use the Tributary Strategy as a guide for planning and as a consideration in decision-making.
- The Town will consider new study results from USGS, MDE, and other sources as part of the State-mandated six year Plan review process, and make adjustments and recommend actions, as appropriate.
- The Town will identify, as part of the on-going planning process, potential sites for wetland and stream mitigation that can be used to mitigate impacts of capital projects where impact avoidance is not possible.
- The Town will update the Water Resources Element to incorporate new TMDLs.
- The Town will adopt a Wastewater Capacity Management Plan, using MDE's model as input.

Appendix to the Water Resource Element: [Added 4/28/10 by Resolution 2010-04-02]

EXHIBIT A: EXISTING CONDITIONS: Estimated Water Quality Impacts for the Town and the Growth Area

METHOD ONE MADERN		50	+D+0+41					
METHOD ONE: IMPERVI			<i>*R*C*A)</i> Stormwater Management)					
Land Use	Acres in Town			Mean Imprevious Surface (%)	Impervious Ac - Town	Impervious Ac - GroArea	Impervious Ac Town+GroArea	
Agriculture	58			2	1.16		11.52	
Very Low Density Res	4		341	14	0.56			
Low Density Res	33			21	6.93		114.03	
Medium Density Res	105		379	28	29.4			
High Density Res	68		118	33	22.44			
Commercial	26			70 50	18.2			
Industrial	102		335		51	116.5		
Instituional Open Urban	49 42		272 429	35 9	17.15 3.78			
Roads	257		1662	9	257	1404		
All Land (except Forest)	744		5031		407.62			
TN and TP LOADINGS (r	no BMPs) based on IMP	ERVIOUS surfaces by L	.u					
Total Nitrogen Loads					_	Annual Loadings		
Town	Imperv Surface (ac) 407.62			Rv (la variables .31, .25, .26) 0.329	R= 14.95152			Avg Ann Monthly TMDL % of TMDL 6229 0.06726624
Gro Area	2136.24		43 43	0.329	12.852			6229 0.06726624
Town+Gro Area	2542.14		43	0.284	13.20192			6229 0.40163382
Total Phosphorous Loads								
	Imperv Surface (ac)			Rv (la variables .31, .25,. 26)	R=			Avg Ann Monthly TMDL % of TMDL
Town	407.62			0.329	14.95152			314 0.17347192
Gro Area	2136.24			0.275	12.852			314 0.85920163
Town & Gro Area	2542.14	0.226	43	0.284	13.20192	3902.772185	325.2310154	314 1.03576757
SOURCES:					With Urban BMP's	TN w/BMP @15% reduction		
Annual rainfall: USGS, WI					TOWN			
Formulas from Stormwate		Center			GROWTH AREA		0.429600816	
Formulas Used Rv=0.05 + 0.9*la (impervi					TOWN+GRO AREA	0.341388744	0.517883783	
R= P (annual rainfall inche								
the contract of the contract o	Control of the Contro	stant concentration: 2 0m	g/l for TN and 0.26mg/l for	TP)				
Aillidai Loadings - 0.220	(conversion) iv c (polic	itant concentration. 2.011	g/1101 TN and 0.20mg/1101	· · · ·				
METHOD TWO: LAND U	ISE COEFFICIENTS							
		DADINGS based on Che	sBayProgam Land Use Co	pefficients and Acres (Trib St	rategies data. Eastern SI	hore Basin, septic loads remo	oved from urban	
MAJOR LAND USE	ACRES			TP lb/ac/yr	LU Loads lb/yr			
AGRICULTURE	58	9.6	556.8	0.94	54.52			
FOREST	478		678.76	0.02	9.56			
URBAN	429		2604.03	0.75	321.75			
All Land	965		3839.59		385.83		42.61	
Monthly Loads			319.9658333		32.1525		3.550833333	
						stern Shore Basin, septic loa		
MAJOR_LAND_USE	ACRES		LU Loads lb/yr	TP lb/ac/yr	LU Loads lb/yr	SED lb/ac/yr		
AGRICULTURE	518		4972.8	0.94	486.92			
FOREST			20040	0.02	51.9	0.02	51.9	
	2595		3684.9					
URBAN	2383	6.07	14464.81	0.75	1787.25		119.15	
		6.07						
	2383	6.07	14464.81 23122.51 1926.875833	0.75	1787.25 2326.07 193.8391667		119.15 274.65 22.8875	
URBAN	2383	6.07	14464.81 23122.51		1787.25 2326.07		119.15 274.65	
URBAN Monthly Loads	2383 5496	6.07	14464.81 23122.51 1926.875833	0.75	1787.25 2326.07 193.8391667		119.15 274.65 22.8875	
URBAN	2383 5496 REA	6.07 Percent TMDL for TN:	14464.81 23122.51 1926.875833 0.309339514	0.75 Percent of TMDL for TP:	1787.25 2326.07 193.8391667 0.617322187	0.05	119.15 274.65 22.8875 (No TMDL for SED)	
URBAN Monthly Loads	2383 5496	6.07 Percent TMDL for TN: Ibs/acre/yr:	14464.81 23122.51 1926.875833 0.309339514 2246.841667	0.75 Percent of TMDL for TP: Ib/ac/yr:	1787.25 2326.07 193.8391667 0.617322187 225.9916667	0.05 lb/ac/yr	119.15 274.65 22.8875 (No TMDL for SED)	
URBAN Monthly Loads	2383 5496 REA	6.07 Percent TMDL for TN:	14464.81 23122.51 1926.875833 0.309339514	0.75 Percent of TMDL for TP:	1787.25 2326.07 193.8391667 0.617322187	0.05	119.15 274.65 22.8875 (No TMDL for SED)	
URBAN Monthly Loads	2383 5496 REA Monthly Loads	6.07 Percent TMDL for TN: bs/acre/yr: Percent TMDL for TN:	14464.81 23122.51 1926.875833 0.309339514 2246.841667	0.75 Percent of TMDL for TP: Ib/ac/yr:	1787.25 2326.07 193.8391667 0.617322187 225.9916667	0.05 lb/ac/yr	119.15 274.65 22.8875 (No TMDL for SED)	
URBAN Monthly Loads TOWN AND GROWTH AI	2383 5496 REA Monthly Loads for Total Nitrogen and	6.07 Percent TMDL for TN: bs/acre/yr: Percent TMDL for TN: Total Phosphorous	14464.81 23122.51 1926.875833 0.309339514 2246.841667	0.75 Percent of TMDL for TP: Ib/ac/yr: Percent of TMDL for TP:	1787.25 2326.07 193.8391667 0.617322187 225.9916667	0.05 lb/ac/yr	119.15 274.65 22.8875 (No TMDL for SED) 26.43833333 (No TMDL for SED)	
URBAN Monthly Loads TOWN AND GROWTH AI EPA-APPROVED TMDL:	2383 5496 REA Monthly Loads for Total Nitrogen and Avg Annual Flow	6.07 Percent TMDL for TN: lbs/acre/yr: Percent TMDL for TN: Total Phosphorous	14464.81 23122.51 1926.875833 0.309339514 2246.841667 0.360706641	0.75 Percent of TMDL for TP: Ib/ac/yr: Percent of TMDL for TP:	1787.25 2326.07 193.8391667 0.617322187 225.9916667 0.719718684	0.05 lb/ac/yr	119.15 274.65 22.8875 (No TMDL for SED)	

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EXHIBIT B: POST GROWTH AND DEVELOPMENT: Estimated Water Quality Impacts for the Town and the Growth Area

METHOD ONE, IMPEDIA	NIC CUREACE/RAINE	ALL FOUNTION (I = 000*	D+C+A)	-				
METHOD ONE: IMPERVIO Impervious Surface Estim								
Land Use	Acres in Town			an Imprevious Surface (%) Im	pervious Ac - Town	Impervious Ac - GroArea	Impervious Ac Town+GroArea	
(Agriculture) OpenSpace	31.9		316.8	2	0.638	5.698		
Very Low Density Res	4	337	341	14	0.56	47.18	47.74	
Low Density Res	33		543	21	6.93	107.1	114.03	
Medium Density Res*	393.9	901.49	1295.39	28	110.292	252.4172	362.7092	
High Density Res	68		118	33	22.44	16.5		
Commercial	26		775.63	70	18.2	524.741		
Industrial	102		706.085	50	51	302.0425		
Instituional	49		272	35	17.15	78.05		
Open Urban	42	387	429	9	3.78	34.83	38.61	
Roads	257	1405	1662		257	1404		
All Land (except forest)	1006.8	5452.105	6458.905		487.99	2772.5587	3258.8287	
*Represents additions of de	eveloped net acres of a	griculture and forest						
TN and TP LOADINGS (no	BMPs) based on IMP	ERVIOUS surfaces by LI						
Total Nitrogen Loads						Annual Loadings		
	Imperv Surface (ac)			v (la variables .31, .25, .26)	R=			Avg Ann Monthly TMDL % of TMDL
Town	487.99	0.226	43	0.329	14.95152	6804.042032		6229 0.09102641
Gro Area	2772.5587	0.226	43	0.275	12.852	31671.84496		6229 0.42371495
Town+Gro Area	3258.8287	0.226	43	0.284	13.20192	38542.01609	3211.834674	6229 0.51562605
Total Phosphorous Loads								
	Imperv Surface (ac)	metric to US convers	Annual Runoff (inches)R	v (la variables .31, .25,. 26)	R=	Annual Loadings	Monthly Loadings	Avg Ann Monthly TMDL % of TMDL
Town	487.99	0.226	43	0.329	14.95152	884.5254641		314 0.23474667
Gro Area	2772.5587		43	0.275	12.852	4117.339845		314 1.09271227
Town & Gro Area	3258.8287	0.226	43	0.284	13.20192	5010.462091	417.5385076	314 1.32974047
SOURCES: Annual rainfall: USGS, Who Formulas from Stormwater Formulas Used: Rv=0.05 + 0.9*la (impervior R= P (annual rainfall inchest Annual Loadings = 0.226 (c	Resource Managemen us %) s)*Pj (0.9 used)*Rv conversion)* R * C (pollu		/I for TN and 0.26mg/l for T		With Urban BMP's TOWN GROWTH AREA TOWN+GRO AREA	0.077372448	0.199534672 0.928805432	TP w/BMP @25% reduction 0.176060005 0.819534205 0.997305353
METHOD TWO: LAND US				<i></i>				
MAJOR LAND USE	ACRES			oefficients and Acres (Trib St P lb/ac/yr	rategies data, Eastern S _U Loads lb/yr	SED lb/ac/yr	LU Loads lb/yr	
AGRICULTURE	26.1	9.6	250.56	0.94	24.534	0.2		
FOREST	215.1	1.42	305.442	0.02	4.302	0.02		
URBAN	724.35	6.07	4396.8045	0.75	543.2625	0.05		
total annual loads			4952.8065		572.0985		45.7395	
Monthly Loads			412.733875		47.674875		3.811625	
Monthly Loads		Percent of TMDL for TN:	0.066260054	Percent of TMDL for TP:	0.151830812		(No TMDL for SED)	
				Use Coefficients and Acres				
MAJOR_LAND_USE AGRICULTURE	ACRES 233.1	TN lb/ac/yr I	U Loads lb/yr Tl 2237.76	P lb/ac/yr	_U Loads lb/yr 219.114	SED lb/ac/yr	LU Loads lb/yr 46.62	
FOREST	1167.75		1658.205	0.02	23.355	0.02		
URBAN	4095	6.07	24856.65	0.75	3071.25	0.02		
total annual loads	4000	0.07	28752.615	0.70	3313.719	0.00	274.725	
Monthly Loads		Percent TMDL for TN:	2396.05125 0.38466066	Percent of TMDL for TP:	276.14325 0.879437102		22.89375 (No TMDL for SED)	
		FEICENT TWIDE FOR TIN:	0.38466066	Percent of TMDL for TP:	0.879437102		(IND TIMIDL FOR SED)	
TOWN AND GROWTH AR		lba/ag== /:	2000 705425	JE / /	222 040425	11-111	26 705275	
	Monthly Loads	lbs/acre/yr: Percent TMDL for TN:	2808.785125 0.450920714	lb/ac/yr: Percent of TMDL for TP:	323.818125 1.031267914	lb/ac/yr (No TMDL for SED)		
		rescent twide for TN:	0.450920714	referred twide for IP:	1.031207914	(NO TIMEL IN SED)	(NO TWIDE TOP SED)	

Eastern Shore Basin. Edge of Stream. Major Land Uses. Tributary Strategy Data 2006 (assumes full implementation of the Strategy)

EPA-APPROVED TMDL for Total Nitrogen and Total Phosphorou.
TMDL non-point sources Avg Annual Flow
TMDL non-point sources Critical Low Flow 6229 lbs per month 314 lbs per month (no TMDL for SED) (no TMDL for SED) 1886 lbs per month 113 lbs per month

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Design Flow Estimation Tables⁴

Flow Projection Based Upon Gallons Per Person per Day

Gallons per Person per Day (Unless Otherwise Noted) Type of Establishment Airports (per passenger) 5 3 Auditorium or Assembly Hall (per seat) Bathhouses and swimming pools 10 Camps: Campground with central comfort stations 35 With flush toilets, no showers 25 Day camps (no meals served) 15 Resort camps (night and day) with limited plumbing 50 Luxury camps 100 Country clubs (based on rated capacity) 50 Dwellinas: Boarding houses (per room) 100 Multiple family dwellings (per apartment) 220 Single family dwellings (per address) 220 Factories (gallons per person, per shift, exclusive of 35 industrial wastes) Hospitals (per bed space) 350 Hotels (per room) 120 Institutions other than hospitals (per bed space) 125 Laundries, self-service (per washing machine) 550 Mobile home parks (per space) 220 Motels (per room) 100 Picnic Parks (toilet wastes only) (per picnicker) 5 Picnic Parks with bathhouses, showers and flush toilets 10 Restaurants, bars, lounges (per seat) 25 Schools: 100 Boarding Day, without gyms, cafeterias or showers 15 Day, with gyms, cafeterias and showers 25 Day, with cafeterias, but without gyms or showers 20 Service Stations (per vehicle served) 10 Swimming pools and bathhouses 10

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⁴ Adapted from "MDE Guidelines for Estimating Water and/or Wastewater Flow," Maryland Department of the Environment, July 2005 Draft and "Design Guidelines for Sewerage Facilities; Technical Bulletin M-DHMH-EHA-S-001," Environmental Health Administration, Department of Health and Mental Hygiene, State of Maryland, 1978 Edition. Additional modifications based upon <u>Wastewater Engineering Treatment</u>, Disposal, and Reuse, Third Edition, Metcalf & Eddy, Inc., 1991.

Allocations for Sanitary Sewer and Public Water Capacity Cecil County Maintained Systems Policies and Procedures

Theaters:	
Indoor (per auditorium seat)	3
Drive-in (per car space)	5
Travel (transient or seasonal) Trailer Parks without individual water and	
sewer hook-ups (per space)	50
Travel (transient or seasonal) Trailer Parks with individual water and	
sewer hook-ups (per space)	110

Guiding Factors For Flow Projection Related With Commercial Establishments, Public Service Buildings or Dwelling Units

Type of Establishment

- 17 Per or Escaphishment	
Office Buildings	Gross Sq. Ft. \times 0.09 = gpd
Medical Office Buildings	Gross Sq. Ft. \times 0.62 = gpd
Warehouses	Gross Sq. Ft. \times 0.03 = gpd
Retail Stores	Gross Sq. Ft. \times 0.05 = gpd
Supermarkets (without food preparation)	Gross Sq. Ft. \times 0.20 = gpd
Drug Stores	Gross Sq. Ft. \times 0.13 = gpd
Beauty Salons	Gross Sq. Ft. \times 0.35 = gpd
Barber Shops	Gross Sq. Ft. \times 0.20 = gpd
Department Store with Lunch Counter	Gross Sq. Ft. \times 0.08 = gpd
Department Store without Lunch Counter	Gross Sq. Ft. \times 0.05 = gpd
Banks	Gross Sq. Ft. \times 0.05 = gpd
Service Stations	Gross Sq. Ft. \times 0.18 = gpd
Laundries & Cleaners	Gross Sq. Ft. \times 0.31 = gpd
Laundromats	Gross Sq. Ft. \times 3.68 = gpd
Car Wash without Wastewater	
Recirculation Equipment	Gross Sq. Ft. \times 4.90 = gpd
Dry Goods Stores	Gross Sq. Ft. \times 0.05 = gpd
Shopping Centers	Gross Sq. Ft. \times 0.18 = gpd

Flow Projection for Country Clubs and Public Parks

Type of Fixture Gallons Per Day	Per Fixture			
Showers	500			
Baths	300			
Toilets	150			
Urinals	100			
Sinks	50			

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