Volume 1:
County Profile

2002 Comprehensive Plan
Queen Anne's County, Maryland

Adopted by the Queen Anne's County Commissioners on May 21, 2002

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Recommended for Adoption by the
Queen Anne's County Planning Commission
on January 10, 2002

Adopted by the
Commissioners of Queen Anne's County
on May 21, 2002

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Preface

This is the first volume of the two volume Queen Anne's County Comprehensive Plan. This first volume provides a detailed overview of existing conditions, trends and issues. The second volume provides the Plan's policy direction, implementing strategies and priorities. These two volumes are supplemented by a technical appendix that provides the details of the alternative scenarios analysis and infrastructure assessment completed during the planning process.

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The Queen Anne's County Department of Planning and Zoning wishes to thank all the County agencies, adjacent jurisdictions, and the citizens who participated in the public process for their participation and helpful advice.

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1.0 The Purpose of this County Profile

➢ Setting the Stage for Planning

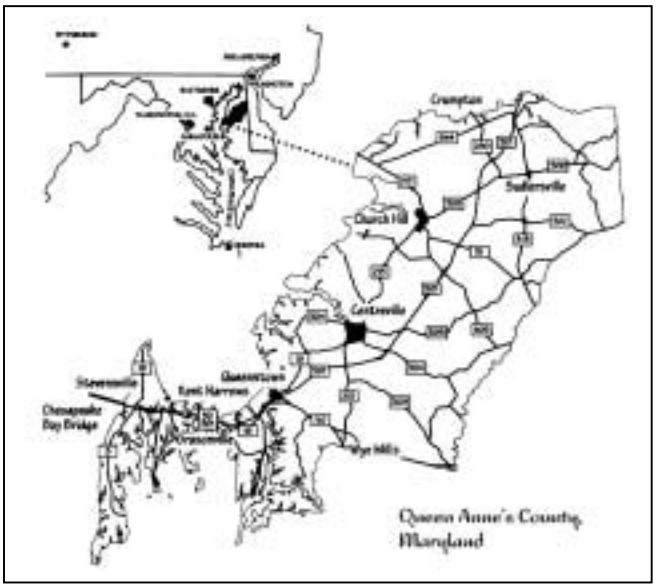
This County Profile provides the context for the Queen Anne's County Comprehensive Plan by identifying recent trends and key issues that impact development and growth in the County. The document is both descriptive and analytical and seeks to provide a common knowledge base for participants and stakeholders in the planning process. The County Profile is an important precursor to the Plan's policies and recommendations found in Volume 2 of the Plan.

There are many determinants of where and how much growth and development should occur in the County. These include public infrastructure such as sanitary sewer and water services and road access and capacity. Other determinants include natural and environmental features, zoning and other land development regulations, plans and policies, market dynamics, the location and extent of vacant land; and regional location. These and other issues and trends are discussed in this Profile.

Context

Queen Anne's County, Maryland is located on the Eastern Shore of the Chesapeake Bay across the bay from Annapolis. It is part of the Washington - Baltimore Metropolitan Area and is connected to this area by the Chesapeake Bay Bridge. The County has 373 square miles or 238,720 acres and has 258 miles of shoreline. Map 1 provides the regional context for the County.

The County's plentiful tidewater bays and estuaries have provided recreation and a livelihood for many generations. In addition to these water resources, Queen Anne's County has the highest number of acres of prime soils of any county in the State. The County's agricultural legacy is a result of these fertile lands.



Map 1: Regional Location
Source: Queen Anne's County Department of Business and Tourism

The County is bounded on the north by the Chester River and Kent County Maryland; on the east by Caroline County, Maryland and Kent County, Delaware; on the south by the Wye River and Talbot County and the west by the Chester River and the Chesapeake Bay.

Three primary land areas describe the land adjacent to the Queen Anne's County borders: Agricultural/Resource Conservation Areas, low-density, rural residential areas, and Priority Funding Areas.

In Kent County, Maryland, along the Chester River border of Queen Anne's County, the majority of land is designated Resource Conservation and Agricultural Preservation Areas with low-density residential (1 dwelling unit per 20 acres) permitted. Two Priority Funding Areas exist along the border, Chestertown and Millington. Development is encouraged in Priority Funding Areas in Kent County while

growth is restricted outside of their boundaries. Two other areas, one outside of Millington and the other south of Chestertown, are undeveloped with no existing or planned water and sewer, but have unrestrictive zoning, and therefore development potential. The Kent County Comprehensive Plan indicates that residential development has increased in recent years in rural, agricultural, and resource conservation areas with 51 percent of total lots created since 1990 in the Resource Conservation and Agricultural Districts and 21 percent in the Rural Residential and Critical Area Residential Districts.

In Kent County, Delaware, the land bordering Queen Anne's County is zoned Agriculture-Residential. Farm and resource preservation is encouraged and single-family rural residential is permitted up to 2 dwelling units per acre. A portion of the western boundary of Kent County, Delaware is a protected forest and wildlife management area.

The land bordering Queen Anne's County in Caroline County is primarily Rural and Rural Residential with the exception of Bridgetown Rural Village and Hillsboro, both Priority Funding Areas. Bridgetown has low-density residential supplied with water only and has limited expansion planned. Hillsboro is also a low-density residential area but has no existing or planned water and sewer. The area is largely undeveloped but has unrestrictive zoning. The rural lands include publicly-owned parks and recreation facilities and Maryland Environmental Trust lands. Subdivisions are permitted in the Rural and Single-Family Residential zoning areas, which comprise the majority of the border with Queen Anne's County.

Caroline County recognizes the significant impact of subdivisions and residential development on its rural land. The Caroline County Planning Commission has recommended actions to correct the adverse land use impacts of the consumption of agricultural land and the inappropriate placement of residential subdivisions in sensitive areas.

In Talbot County, the northeastern border with Queen Anne's County is primarily cropland in agricultural preservation, with a small portion designated as Agricultural/Resource Conservation with restrictive zoning, limiting development. The Wye Mills Town Center is designated a Priority Funding Area. The Village of Queen Anne is the only other developed area on the border with Queen Anne's County. In general, Wye Mills and Queen Anne tend to be residential in character, with higher densities than the surrounding areas, and provide basic business and commercial services for the local residents. These village centers are planned to remain small in scale and provide local services and limited employment opportunities.

2.0 The Planning Process and Products

➢ Introduction

During the fall of 1998, the Department of Planning and Zoning developed a preliminary scope of work and timetable for the Comprehensive Plan. The draft work program and schedule were then reviewed and approved by the County Planning Commission. The County Commissioners reviewed the project and gave their approval to begin in January, 1999.

After reaching agreement on the general scope of the project, the County solicited detailed proposals and bids from qualified consultant teams who would assist County staff and bring outside expertise to the project. A multi-disciplined consultant team of planners, land use attorneys and engineers was hired by the County in April 1999.

The project, as approved by the County Commissioners, actually consists of several interrelated parts. The major components of the project are an updated Comprehensive Plan, updated Chesapeake Bay Critical Area Program, development of a Consolidated Development Ordinance, revision of Zoning and Critical Area Maps, and a strategic assessment of infrastructure. These are discussed in the following paragraphs.

- **County's 1993 Comprehensive Plan**

The Comprehensive Plan, last updated in 1993, outlines how the County intends to manage growth over the next 20 years. It is a policy document that is required by the State to be reviewed and updated every six years. State law mandates that the Comprehensive Plan address specific topics including but not limited to land use, transportation, community facilities, the development review process, economic development and environmentally sensitive areas protection. The 1993 Comprehensive Plan was amended to include the adopted growth area plans for Stevensville, Chester, Grasonville, Queenstown and Centreville.

This 2002 Comprehensive Plan is based on the same general growth management principles adopted in the 1993 Comprehensive Plan and the subsequent growth area plans. Since the County's existing plans are consistent with the State's "Smart Growth" initiatives, as outlined in Section 3 of this document, this Plan represents a fine-tuning of existing policy. For example, growth areas are not expanded with this plan.

The legal responsibility for preparing and recommending the Comprehensive Plan for adoption by the County Commissioners rests with the County Planning Commission. The Planning Commission is specifically charged with this responsibility under Maryland's planning and zoning legislation, Article 66B of the Annotated Code. The County Commissioners ultimately maintain responsibility for adoption of the Comprehensive Plan.

- **Plan Development Process**

In March of 1999, the County Commissioners appointed a 21-person Citizen Advisory Committee (CAC) to work with the consultants and staff to provide input and feedback during the preparation of the Comprehensive Plan. CAC members were nominated by the County Commissioners and the County Planning Commission. The appointed CAC members represent many diverse interests and geographic locations within the County. A Technical Advisory Committee (TAC) consisting of representatives from various County agencies

was also formed to assist the consultants and Planning Department staff.

- **Strategic Assessment of Infrastructure**

The ability to accommodate projected development within designated growth areas is the key to smart growth. The adequate provision of infrastructure for sewer, water, roads and schools is essential to direct projected growth to the County's designated growth areas. A focused assessment of infrastructure needs and associated costs was conducted in conjunction with the Comprehensive Plan. Without adequate infrastructure in growth areas, the County will not be able to manage development in accordance with State mandated "Smart Growth" legislation.

- **Update of the County's 1996 Chesapeake Bay Critical Area Program**

This program addresses land management and environmental protection policy for specific sections of the County that are part of the Chesapeake Bay Critical Area – generally all lands within 1,000 feet of the Bay and its tidal rivers and creeks. The State requires that this program be reviewed and updated every four years. The content and policy of the County's Critical Area Program is largely dictated by State law. This program update which will be completed after the Comprehensive Plan's adoption, will consist mostly of fine-tuning.

- **Update of Zoning, Subdivision, Critical Area and other existing development regulations into a more streamlined and effective set of land development ordinances**

After the Comprehensive Plan and Critical Area Programs are updated, the various development regulations and ordinances that implement those documents also need to be reviewed and updated to ensure consistency. The intent is to make consistent the many and often overlapping existing development regulations into a more user-friendly format.

- **Comprehensive Review/Revision of Zoning and Critical Area Maps**

Both Zoning and Critical Area regulations cross-reference separate map sets that designate zoning district and Critical Area classification boundaries. These maps need to be reviewed and updated once the plans and regulations are updated to ensure consistency. Property owners will have an opportunity to request changes to their zoning district designations during this process. According to State law, all changes to the zoning maps must be consistent with land use policies contained in the Comprehensive Plan.

➢ *Public Participation in the Comprehensive Plan*

Throughout the preparation of the Comprehensive Plan, there were numerous and varied opportunities for public participation. It was the objective of the County Commissioners to solicit public involvement in the Plan as it was prepared so that all points of view were considered before the document was drafted and finalized. All CAC, Planning Commission and County Commissioner meetings on the Plan were open meetings. In addition, several public forums and focus group sessions were held at key points in the process to solicit ideas and feedback. Public forums were held in different locations around the County. Focus group sessions were also open to the public, and were specifically directed at soliciting input from a particular interest group on topics that directly affected them.

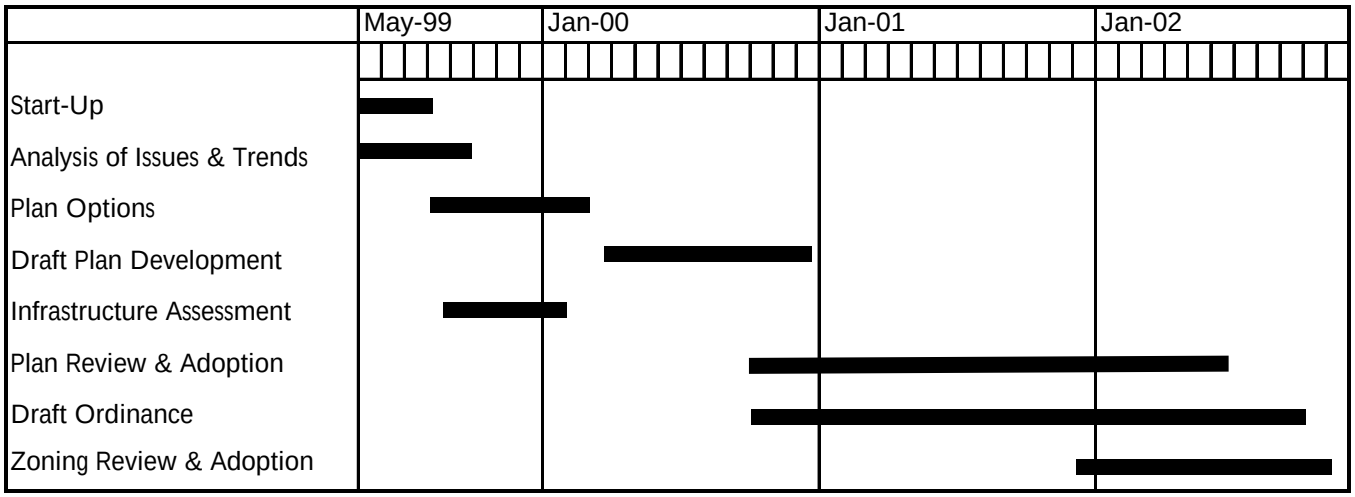
As the Plan moved closer to adoption, the Planning Commission held work sessions and a formal public hearing. The County Commissioners also held a formal public hearing to receive and review the public input prior to Plan adoption.

All public meetings on the Plan were advertised in the local paper and posted on the Internet at www.qac.org. In addition, a variety of outreach alternatives including radio announcements, maps and flyers in community areas such as grocery stores, post offices, banks, and libraries, flyers sent home to parents in elementary school bags, and flyers sent with weekend pizza deliveries were used to generate interest and participation.

➢ *Comprehensive Plan Process Timeline*

Figure 1 shows the sequence of the Plan process timeline. It outlines the major phases and timeframe for the overall project, including the Comprehensive Plan. This "County Profile" report represents the culmination of work in the Analysis of the Issues and Trends phase. The next phase involved a review of planning alternatives and the selection of a preferred option. This alternatives analysis is discussed in detail in the Appendix to the Plan. Following that, the Comprehensive Plan was drafted. The Planning Commission review of the draft Plan occurred concurrently with the consultant's preparation of the draft development ordinance. It is important that the plan and the ordinance are developed together to ensure consistency between the documents. The schedule shows an anticipated adoption date of May 2002 for the Comprehensive Plan and October 2002 for the revised development ordinance and zoning remapping.

Figure 1: Comprehensive Plan Progress Timeline



3.0 Planning Regulatory Framework

➢ Introduction

How Queen Anne's County manages growth is heavily influenced by State legislation, judicial precedent, and past planning decisions. State laws to some degree influence how the County can grow and develop, either through legislative mandates or strings attached to State funding. National, State and local court rulings over the years have further defined local government authority. Previously adopted County plans and ordinances, combined with past infrastructure investments in roads, sewer and water, have established growth patterns and property owner expectations, which are not easily changed.

It is important to understand that this planning process did not begin with a "clean slate" or absolute local discretion. Planning is a process that should begin with a realistic understanding and acknowledgment that there are practical, legal and fiscal considerations that must be taken into account.

➢ Article 66B and the 1992 Economic Growth, Resource Protection and Planning Act

Article 66 B of the Annotated Code of Maryland sets the standards for all jurisdictions that chooses to exercise Planning and Zoning Authority. While Article 66B delegates certain planning and zoning powers to the county, it also mandates specific items to be included in the county's plans and ordinances.

In 1992, Maryland adopted the Economic Growth, Resource Protection and Planning Act (the 1992 Planning Act) as an amendment to Article 66B. The Planning Act mandated that, by July of 1997, all local governments in the State adopt plans and implementation strategies that achieve seven general "visions:"

- Development is concentrated in suitable areas;
- Sensitive Areas are protected;
- In rural areas, growth is directed to existing population centers and resource areas are protected;
- Stewardship of the Chesapeake Bay and the land is a universal ethic;
- Conservation of resources, including a reduction in resource consumption, is practiced;
- To assure the achievement of the above-mentioned visions, economic growth is encouraged and regulatory mechanisms are streamlined,
- Adequate public facilities and infrastructure under the control of the county or municipal corporation are available or planned where growth is to occur; and,
- Funding mechanisms are addressed to achieve these visions.

In short, the Planning Act requires local governments to reduce sprawl development, concentrate growth in and around existing developed areas, promote economic development and protect sensitive natural resources. The Act also requires that all State and local government investments in infrastructure (roads, sewer, water, schools, etc.) are consistent with adopted local growth management plans.

➢ 1997 Smart Growth Initiatives

In 1997, the State of Maryland enacted "Smart Growth" legislation. Whereas the 1992 Planning Act provides the framework to foster growth management at the local government level, the

Smart Growth legislation gives the State programmatic and fiscal authority to encourage local jurisdictions to implement "smart growth" planning.

The Smart Growth legislative package consists of several key aspects, the centerpiece of which is the "Priority Funding Areas" law. This law limits State funding for infrastructure and economic development to locations that meet specific State criteria as "priority funding areas." This approach affects Queen Anne's County in two ways. First, State fiscal support is only provided to areas planned for development and those already developed. Second, it ensures that the State will not fund infrastructure in rural areas where growth is not encouraged. State funding through grants, loads or governmental transfers is critical to the County's ability to serve both its existing and future residents and businesses. State funding helps the County build new school facilities, purchase parkland and open space, preserve agricultural lands, and maintain and build new roads. In addition, State funds can also be used to help the County rebuild or replace existing sewer and water facilities to serve that do not meet current federal and State regulations or that are beyond their design life. Additional Smart Growth programs like "Rural Legacy" and "Live Near Your Work" contribute to the overall goal of preserving rural resources and at the same time making our cities and towns more livable.

➢ *Queen Anne's County Planning Background*

The first modern day comprehensive plan and zoning regulations for Queen Anne's County were adopted in 1964 at a time when development pressure was increasing as a result of the opening of the Chesapeake Bay Bridge in 1952. By 1964, land speculators had already subdivided numerous large-scale, small-lot residential subdivisions in the western part of the County (i.e., Cloverfields, Bay City, Kent Island Estates, Harbor View and Chester River Beach). Much of the land along the US 50/301 corridor from Stevensville to Grasonville was zoned for commercial development. Rural and waterfront areas were typically zoned for one house per every one or two acres. There were only minimal environmental protection standards in the early plan and ordinance.

A major Plan was adopted in 1987 followed by the adoption of a new set of zoning and subdivision regulations. The new performance-based zoning ordinance was a radical departure from the County's original zoning regulations. Inland agricultural areas were "down zoned" to one house per every eight acres with a condition that the homes be clustered on 15 percent of the site with 85 percent to remain as open space. Waterfront areas were "down zoned" to one house per every five acres with similar cluster and open space restrictions. In general, zoning for residential development and commercial/ industrial development was concentrated in areas the plan identified as "growth nodes." These areas included Stevensville, Chester, Kent Narrows, Grasonville, Queenstown, and Centreville. Significant environmental protection standards were included in the 1987 plan and ordinance.

In 1989, the County adopted its Chesapeake Bay Critical Area program and regulations in accordance with State law. The Critical Area is generally defined as all lands within 1,000 feet of the shoreline or head of tidal waters for the Bay proper and its tidal tributaries. Under the Critical Area Program, development of rural waterfront areas is restricted to a gross density of one house per every 20 acres. The law also establishes additional environmental protection standards.

State law governing the Chesapeake Bay Critical Area regulations does not provide much discretion for local governments to change environmental protection standards. The county's local Critical Area regulations are

essentially prescribed by the State. However, In accordance with State law, the county does have the ability to change a limited amount of Critical Area mapping in order to facilitate local growth management objectives. This process is called "growth allocation."

Taken together, the 1987 Comprehensive Plan and the 1989 Critical Area Program accomplished three significant growth management objectives:

- The overall development potential of the County is significantly reduced as a result of development restrictions on agricultural and waterfront lands. This was accomplished at a time when the County's population was relatively small and the vast majority of its land was undeveloped. Unlike the suburban Western Shore counties, Queen Anne's adopted substantial growth controls before development pressures could significantly impact much of the County's rural lands.

- Zoning districting and Critical Area mapping are arranged in such a way as to direct the majority of new development to within and around existing communities that have infrastructure or have the potential for infrastructure expansion. Vacant lands within and on the perimeter of existing communities are generally planned for future development. Rural areas are generally planned to stay rural. This is the same approach that was later endorsed statewide in the 1992 Planning Act.

- Environmental protection standards for sensitive areas such as tidal wetlands, non-tidal wetlands, forests and habitat areas are now firmly ingrained into development regulations. A combination of local and State regulations ensures that new development projects are reviewed for their impact on the environment. This was not the case up until the late 1980s.

In 1993, Queen Anne's County adopted a second major Comprehensive Plan. The 1993 Plan reaffirmed the guiding principles of the 1987 Plan and added policies to confirm compliance with the mandates of the 1992 Planning Act. One of the major recommendations of the 1993 Plan was that specific development plans should be prepared for each of the County's six designated growth areas: Stevensville, Chester, Kent Narrows, Grasonville, Queenstown and Centreville. The Kent Narrows Plan and its associated zoning changes were previously adopted in 1990 as part of the implementation of the 1987 Plan.

Each plan was intended to address land use, transportation, infrastructure and community design issues. Each growth area plan, once adopted, became a part of the Comprehensive Plan. The 1993 Plan was followed in 1994 by a Comprehensive Rezoning, which resulted in a few zoning map changes (mostly in the growth areas) and some limited changes to the 1987 Zoning Ordinance.

In 1995, the County began preparation of growth area (community) plans for Queenstown, Centreville and Chester. The plans for Queenstown and Centreville involved County coordination with the governments of each incorporated municipality. The County and towns, with help from appointed citizen advisory committees, consultants and County Planning Department staff, prepared draft community plans that were ultimately adopted in 1997. The County is currently assisting each town with zoning changes related to the adopted plans. The County Commissioners also adopted the Chester Community Plan and the associated comprehensive zoning changes needed to implement that plan in 1997.

Community plans for Grasonville and Stevensville were begun in 1997. These plans were also prepared with assistance from appointed citizen advisory committees,

consultants and Planning Department staff. Both plans were adopted in 1998 with follow-up comprehensive zoning changes occurring in 1999.

Each growth area now has an adopted plan. Aside from the incorporated towns of Queenstown and Centreville, each growth area also now has zoning that is consistent with those plans. According to State law, each adopted growth area plan must be reviewed and revised as necessary and at least once every six years.

Map 2 presents generalized land use recommendations from each of the growth area plans. Map 3 shows the generalized transportation improvements for the same area. For the first time since the growth area plans were adopted, these maps allow the reader to see (at a glance) the land use and transportation recommendations for the growth areas altogether.

➢ *Growth Management Tools*

This section of the Profile provides a quick review of growth management tools currently in-place in the County and highlights a few potential enhancements to these techniques or other tools that are used in other jurisdictions. A matrix of State-of-the-art planning and growth management tools and techniques is included in Attachment A. Each technique is described along with its objective, purpose and relation to the Comprehensive Plan. Techniques in place in Queen Anne's County are indicated with the appropriate Code or Plan reference.

Cluster Development

Cluster Development is a technique that allows for flexibility in the location of dwelling units on a site so long as the total number of dwelling units does not exceed the amount permitted by the zoning district and they are within a prescribed percentage of the overall site area. The benefits of cluster development are preservation of open space, improved quality of development, and flexibility in development design. Approximately 19,840.844 acres of land are now restricted as open space via cluster subdivisions.

Agricultural Operations

The County's farmland protection tools are state-of-the-art. Objectives to encourage the continuation of agriculture have been implemented by continued support of MALPF program through certification, encouragement of participation in other preservation programs, agricultural deed restricted open space created through clustering and housing provisions for family and farm employees. Agricultural best management practices (BMP's) are required and are incorporated in the Environmental Code.

Growth Areas

The 1993 Plan included policies to shift development to designated growth areas and the subsequently adopted growth area plans provide additional guidance and policies. However, at present, the County lacks one of the basic tools to encourage growth in these areas: infrastructure. Implementation of the County's growth area policy (which is consistent with and to a large measure required by State smart growth initiatives) has been stymied by a severe lack of available water and sewer infrastructure to serve the growth areas and the lack of a sufficient funding mechanisms to implement the needed improvements. This issue must be addressed to provide the necessary "carrot" or incentive for development to occur in the growth areas rather than in other areas of the County.

Enhancements/New Tools

Other tools that could be considered to redirect growth, coordinate the timing and phasing of growth, or determine who pays for growth include the following items.

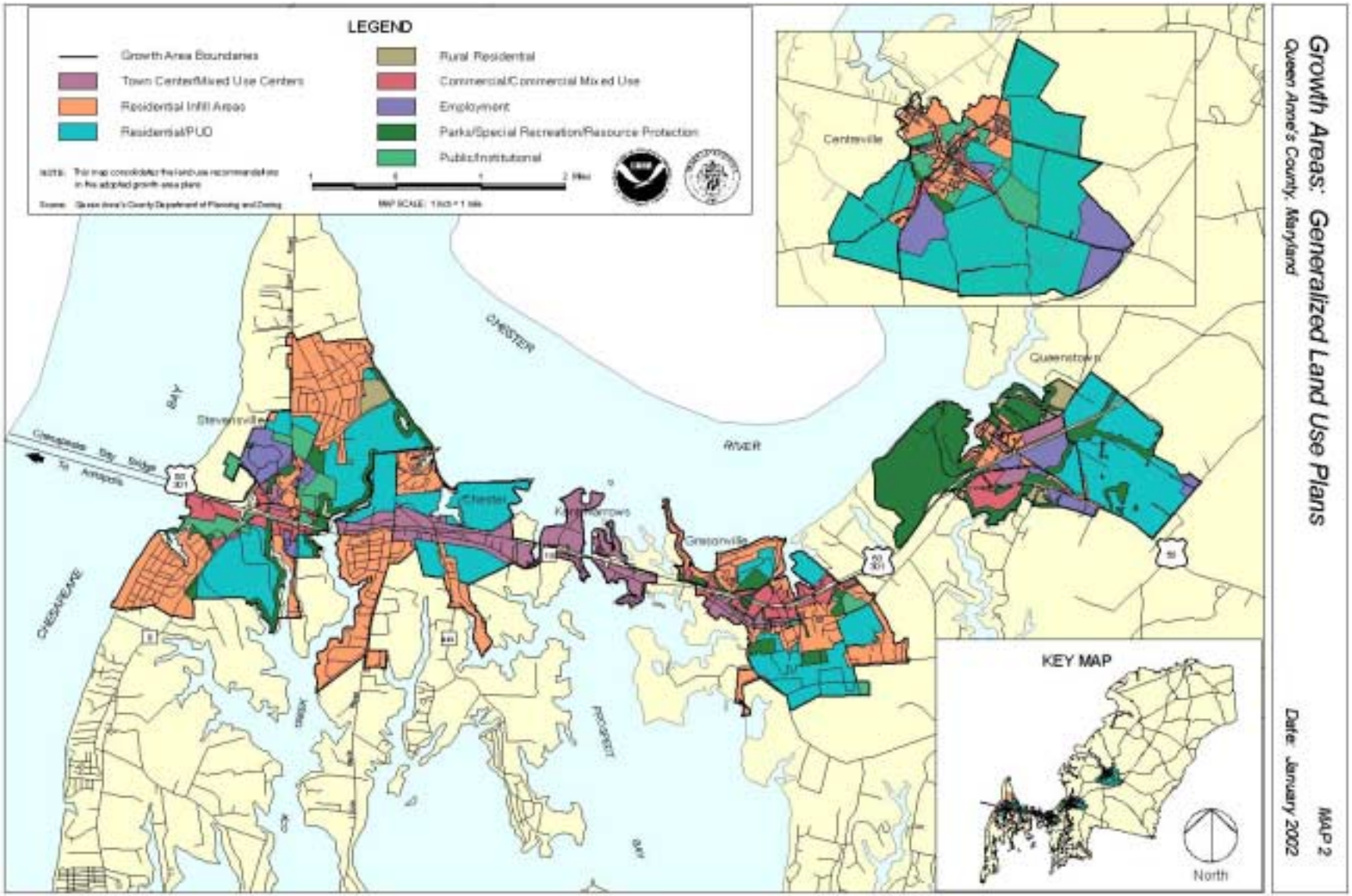
Interim Adequate Public Facilities Ordinances (IAPFO)/ Adequate Public Facilities Ordinances (APFO). In March 2001 the County Commissioners adopted an Interim Adequate Public Facilities Ordinance. The IAPFO is a growth management tool that links approvals from new development to the available capacity of several essential public facilities (specifically schools, roads, sewer and water). This is one way that local governments can manage the timing and sequencing of infrastructure. It establishes threshold levels (called levels of service) for infrastructure as a precondition of development approvals. If the proposed new development will cause an established level of service to fall below pre-determined standards, then the developer must either pay for or build the essential public facility improvements or postpone development until the government plans for and provides the facilities. The interim ordinance is in effect for nine months and may be extended for an additional nine months or until the completion and adoption of an Adequate Public Facilities Ordinance (APFO) which ever is earlier.

Infill Development Regulations and Incentives. Incentives for growth in infill areas may be created through fast-track permitting, incentives for redevelopment financing (e.g., tax increment financing (TIF) or tax abatement), and density bonus systems. In addition, the availability of sewer and water infrastructure, as discussed above, would be an incentive to development within the growth areas.

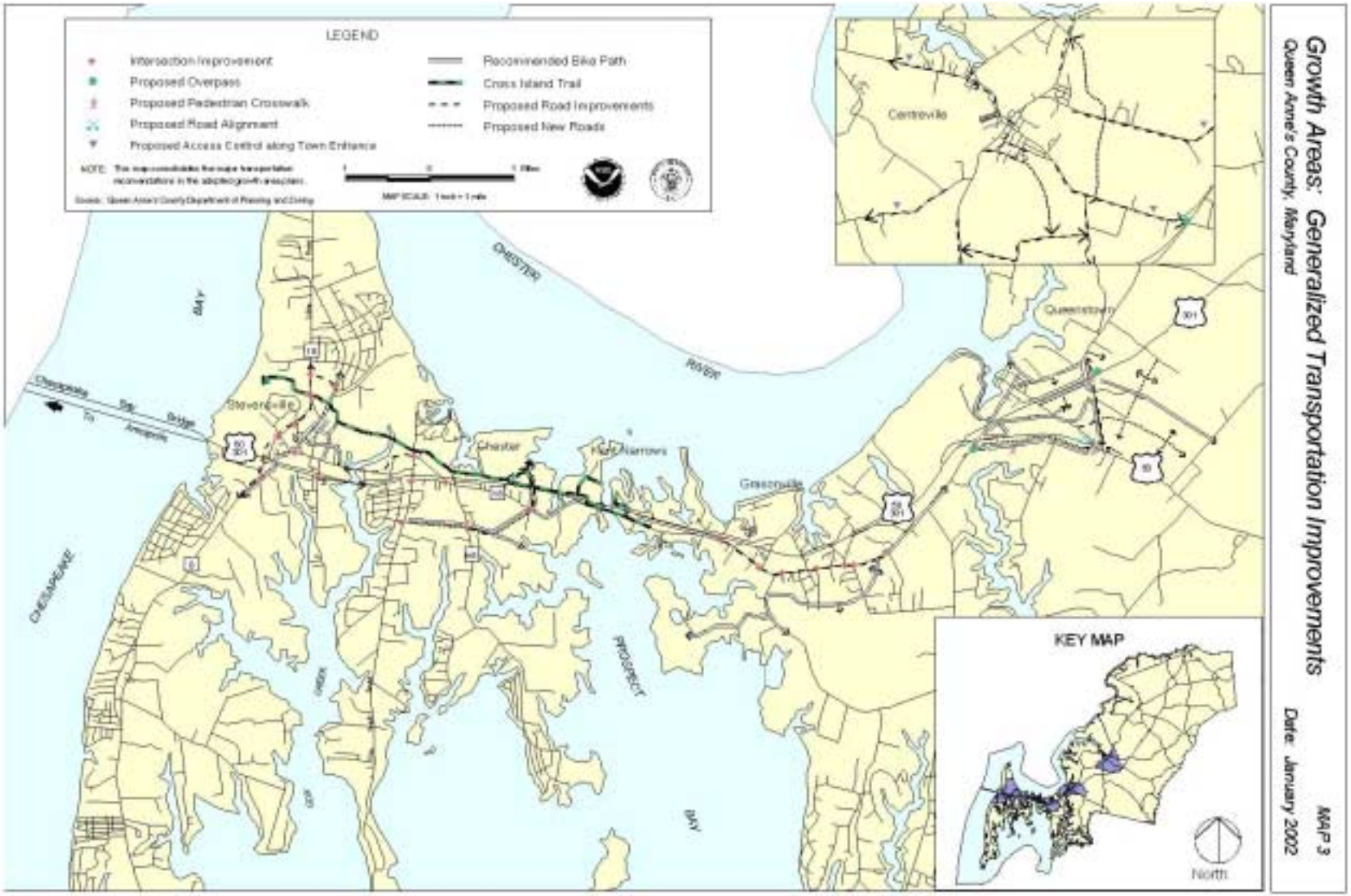
Paying for Growth: Impact Fees. The County currently levies impact fees on all new residential development for schools and public safety. In 2001, with assistance from fiscal economic and planning consultants, Tischler and Associates, and legal counsel, Freilich, Leitner and Carlisle, the County has completed and updated analysis of justifiable impact fees and draft ordinance.

The proposed revised ordinance considers impact fees for other infrastructure as well, namely, Community Parks, Fire Stations and Apparatus.

It is anticipated the new Impact Fee Ordinance will be adopted in the near future.



Map 2: Growth Areas: Generalized Land Use Plans



Map 3: Growth Areas: Generalized Transportation Improvements

4.0 Growth Trends/Issues

➢ Overview

This section includes a review of existing trends on a number of topic areas that have relevance to the County's future growth and development. The discussion provides the basis for the development and assessment of alternatives for the County's growth and the ultimate recommendations of the Comprehensive Plan. The topic areas that are reviewed include population and housing trends, employment and economic development, the location and rate of growth, the County's buildout potential, sewer and water service and related issues, transportation, historic preservation, schools, parks, fiscal health, and conservation and agricultural preservation. This section begins with a discussion of a preliminary identification of issues by the citizens and technical advisory committees.

CAC and TAC Identify Issues

The Technical Advisory Committee (TAC) and the Citizens Advisory Committee (CAC) for the Comprehensive Plan both met separately with County staff and consultants in June 1999 for their respective kick-off meetings. As part of each meeting, the committee members were asked to review a list of preliminary issues and opportunities facing the County with respect to growth and development. Members were asked to suggest additional issues and opportunities and then to rank in terms of their importance. The result was a set of high priority issues and opportunities. Table 1 shows the importance placed on various items and the degree to which the views of the two groups converge/diverge. The exercise was done at the outset of the process to help understand what the key issues and opportunities are perceived to be and is not meant to exclude any items from consideration during the planning process.

On the issues side, it is clear that the County and other agency staff members on the TAC are concerned with how to provide and pay for infrastructure and with improving the quality of life in the County. This is not surprising given their responsibilities for providing services to a growing population base. The CAC also found that providing infrastructure was a top issue. In addition, they thought that protecting the environment and agriculture were also very important.

On the opportunities side, both groups identified the same core items having to do with capitalizing on the rural lifestyle and natural amenities, building on the County's location to capture more tourism dollars, the opportunity to provide more employment, and to enhance the development regulations as the County is beginning to see large-scale developers who are accustomed to growth management regulations on the Western Shore. In addition, the TAC felt that there was an opportunity to build on the new political leadership and momentum as the result of the recent County Commissioner elections and the appointment of a new County Administrator.

Table 1: Top CAC and TAC-identified Growth/Development Issues & Opportunities

Priority Issues & Opportunities	Citizens Advisory Committee	Technical Advisory Committee
Issues		
Providing infrastructure to serve growth areas and relieve growth pressures on rural areas	◆	◆
Paying for growth		◆
Maintaining/improving the quality of life – leisure time activities, parks & recreation, schools, health & human services, activities for youth		◆
Protecting and improving agriculture & the seafood industry	◆	
Protecting the environment, rivers and streams	◆	
Opportunities		
Capitalize on rural lifestyle, natural amenities and environment	◆	◆
Strategic location to capture more tourism dollars	◆	◆
Identify and preserve lands for employment and bay access	◆	◆
Establish new rules of the game for larger-scale corporate developers	◆	◆
Take advantage of new political leadership and momentum		◆

Compiled by LDR International, Inc. based on June 8, 1999 CAC and TAC meetings.

◆ Priority issues and opportunities

A list of all the CAC- and TAC-identified preliminary issues and opportunities is included in Attachment B.

➢ *Rate of Population and Housing Growth*

Population and Household Trends

The 1990 U.S. Census population for Queen Anne's County was 33,953. The 2000 U.S. Census population for Queen Anne's County is 40,563, a 1.79 percent compound annual growth rate. This rate of annual growth is outpacing the Upper Eastern Shore with a 1.48 percent rate of growth and the State of Maryland with a 1.03 percent rate of growth during the same period. Tables 2 and 3 show the population and household change from 1970 to 2000 for the County as compared to Upper Eastern Shore and the State of Maryland.

The Maryland Department of Planning estimates show household formation increasing at a similar rate. In 1990, there were 12,489 households in the County. This number reached 15,315 in the year 2000, representing an annual average growth rate of 2.06 percent compared with 1.80 percent for the Upper Eastern Shore and 1.25 percent for the State. Attachment E provides population and household growth rates from 1990-2000 by County and Region.

Table 2: Population Change, 1970-2000
Queen Anne's County, Upper Eastern Shore and Maryland

					Compound Annual Growth Rate		
	1970	1980	1990	2000	1970-1980	1980-1990	1990-2000
Queen Anne's County	18,422	25,508	33,953	40,563	3.3%	2.9%	1.8%
Upper Eastern Shore[1]	131,322	151,380	180,726	209,295	1.4%	1.8%	1.5%
Maryland	3,923,897	4,216,933	4,780,753	5,296,486	0.7%	1.3%	1.0%

Source: Maryland Department of Planning

[1] *Caroline, Cecil, Kent, Queen Anne's & Talbot Counties*

Table 3 Household Change, 1970-2000
Queen Anne's County, Upper Eastern Shore and Maryland

					Compound Annual Growth Rate		
	1970	1980	1990	2000	1970-1980	1980-1990	1990-2000
Queen Anne's County	5,795	8,850	12,489	15,315	4.3%	3.5%	2.1%
Upper Eastern Shore[1]	39,420	52,500	66,576	79,608	2.9%	2.4%	1.8%
Maryland	1,178,933	1,460,865	1,748,991	1,980,859	2.2%	1.8%	1.3%

Source: Maryland Department of Planning

[1] *Caroline, Cecil, Kent, Queen Anne's & Talbot Counties*

Projections

Current and projected population and household data for 2000 to 2020 prepared by the Maryland Department of Planning show that by 2020 the County's population will grow to about 56,000 and households to 21,475. The County's compound annual growth is projected to continue to be higher than either the Upper Eastern Shore or the State. Tables 4 and 5 show these projections. The Maryland Department of Planning's projections assume a rate of growth for the County that is substantially lower than historic trend levels – less than 300 households per year verses a more than 10 year trend of approximately 400 household units coming on line per year. This may suggest that the State's projections for Queen Anne's County are quite conservative (low). As a part of the Plan development process, alternative projections were developed to understand what might happened if growth exceeded MDP's projections.

Table 4: Current and Projected Population, 2000-2020
Queen Anne's County Upper Eastern Shore and Maryland

				Compound Annual Growth Rate	
	2000	2010	2020	2000-2010	2010-2020
Queen Anne's County	40,563	48,500	55,800	1.8%	1.4%
Upper Eastern Shore[1]	209,295	231,800	251,125	1.0%	0.8%
Maryland	5,296,486	5,722,800	6,083,125	0.8%	0.6%

Source: Maryland Department of Planning

[1] *Caroline, Cecil, Kent, Queen Anne's & Talbot Counties*

Table 5: Current and Projected Households, 2000-2020
Queen Anne's County, Upper Eastern Shore and Maryland

				Compound Annual Growth Rate	
	2000	2010	2020	2000-2010	2010-2020
Queen Anne's County	15,315	18,725	21,850	2.1%	1.3%
Upper Eastern Shore[1]	79,608	90,925	101,125	1.3%	1.0%
Maryland	1,980,859	2,200,371	2,402,700	1.0%	0.9%

Source: Maryland Department of Planning

[1] *Caroline, Cecil, Kent, Queen Anne's & Talbot Counties*

Age Distribution

Table 6 shows the age distribution of Queen Anne's population in 1990, 2000 and projection for 2020 and compares these to the State of Maryland. In 1990, the County had similar proportions of pre-school and school age children, lower percentages of persons in the family formation years (ages 20 to 44) and slightly higher percentages of middle-aged (45 to 64 years) and older persons (65 years and older). By 2020, these same trends are evident but a bit more pronounced. As the County's elderly population continues to grow, the County may have to place more emphasis on senior housing and alternative housing types to the currently predominant single-family detached unit.

Table 6: Age Distribution (Share by Age Cohort)
Queen Anne's County and Maryland

	Queen Anne's			Maryland		
Cohort	1990	2000	2020	1990	2000	2020
0-4	7.4	6.4	5.9	7.6	6.7	6.1
5-19	19.6	21.1	16.4	19.7	21.5	18.3
20-44	38.4	33.8	28.9	42.8	37.4	32.8
45-64	21.7	25.9	29.3	19.1	23.1	26.9
65+	12.8	12.9	19.5	10.8	11.3	15.9

Source: Maryland Department of Planning, compiled by LDR International, Inc.

The Queen Anne's County Department of Aging, which functions as the local area agency on aging as authorized by the Older Americans Act, complies an annual Area Plan for services to persons over age sixty. This comprehensive document provides an inventory of services for senior citizens, details expected growth and service improvements, and presents the annual budget for the Department.

The Department of Aging manages the County Ride Transit System for the county. This system provides fixed-route service fifteen hours per day on five established deviated fixed routes; the routes serve the entire county with emphasis on transit in the Kent Island area; destinations such as shopping areas, businesses; senior centers and other public locations. In additions, Assisted Transportation is provided to individuals unable to utilize the County Ride routes. Fares are charged on the County Ride System; funding is from four state and federal grants with County funding supporting the program. An annual plan is prepared for this project and may be reviewed at the Department of aging or the Queen Anne's County Department of Planning and Zoning. A complete study of transportation needs is updated every five; the most recent Transportation Development Plan Completed in 1999 by the firm of KFH is on file in both the Department of Aging and the Department of Planning and Zoning.

In addition, Department of Aging prepares an Area Plan that outlines strategies to meet both current and expected needs of the elderly population, as mandated by the funding authority, the Maryland Department of Aging. The complete Plan may be reviewed at the Department of Aging.

Housing Unit Tenure

Table 7 shows the total number of housing units as well as the vacancy rate and relationship of owner- and renter- occupied housing units. It

shows the 2000 figures for the County as compared to the consolidated figures for the Upper Eastern Shore and the State. Of the 16,674 units in Queen Anne's County in 2000, 15,315 were occupied representing a 8.2 percent vacancy rate. This rate is slightly higher than the vacancy rate of 7.7 percent for Maryland. This is due, in part, to the second home market in the area. Of the total occupied units, 83.4 percent are owner occupied. This ownership rate is higher than both the Upper Eastern Shore at 75.4 percent and the State at 67.7 percent.

Household Size

Since 1970, the household size in Queen Anne's County has declined from a high of 3.13 in 1970 to 2.62 in 2000. These numbers mirror similar declines in the region, State, and nation as household formation has shifted from families to other household structures such as more people living alone or within smaller households.

Table 7: Housing Tenure, 2000
Queen Anne's County, Upper Eastern Shore and Maryland

	Total Units	Total Occupied Units	Vacancy Rate	Owner Occupied Rate	Renter Occupied Rate
Queen Anne's County	16,674	15,315	8.2%	83.4%	16.6%
Upper Eastern Shore[1]	89,073	79,608	10.6%	75.4%	24.6%
Maryland	2,145,283	1,980,859	7.7%	67.1%	32.3%

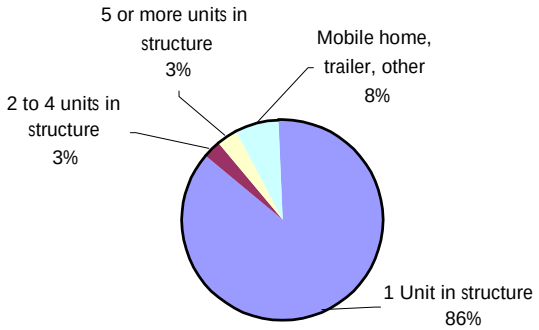
Source: Maryland Department of Planning; compiled by LDR International, Inc.

[1] *Caroline, Cecil, Kent, Queen Anne's & Talbot Counties*

Units in Structure

In 1990, Queen Anne's County had 12,024 single-family housing units representing 86 percent of the total number of residential units in the County. This is substantially higher than the State rate of 70 percent. Figure 2 depicts this information.

Figure 2: Queen Anne's County
Residential Units in Structure, 1990



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Affordable and Elderly Housing Needs

A recent study completed by Morton Hoffman and Company, Inc. examined affordable housing needs in Queen Anne's County. The study found that in 1998, there were approximately 6,050 low and moderate income households in the County and of this number, 1,110 or 18 percent were in need of affordable housing. This represents 4.7 percent of all households. By 2008, this projected need is estimated to increase by an additional 135 households.

The study also examined needs for elderly housing indicating a future need of approximately 280 additional assisted living units. Over half of the housing needs were expected to be concentrated in the Centreville, Grasonville, and Chester areas.

➢ *Employment, Income and Economic Development*

Employment is analyzed by looking at data from two different viewpoints. The first examination looks at the job base of the County itself to understand what type of employment is available within Queen Anne's County. The "Jobs in the County" section examines this viewpoint for employment analysis. The second perspective is an examination of the residents of Queen Anne's County to understand the types of jobs they hold regardless of the location of these jobs.

Jobs in the County

Total full-time employment in Queen Anne's County is estimated at 8,000 jobs (1990). Based on the estimated 12,500 households in the County (1990), the jobs to households ratio is 0.6. This rather low rate is an indication that the County is still more of a bedroom community with residents commuting to other jurisdictions for employment. Queen Anne's County has one of the lowest jobs to housing ratios in the State. A balanced jobs to household ratio is somewhere between 0.80 and 1.20. Increasing the number of jobs in the County is important to the County and its residents for a number of reasons. A more balanced mix of jobs and households will reduce the amount of out-commuting by providing more opportunities for County residents to work within the County. In addition to time-savings, this can result in decreased transportation costs and a reduction in air pollution based on a decrease in vehicle miles of travel. Another benefit of increased employment opportunities in the County is the positive impact this can have on the County's fiscal health. More information on commuting patterns can be found in the transportation section of this profile.

Where as the previous paragraph presented an estimate of full time jobs in the County, the federal government tracks combined employment data for both full and part-time employees. This trend information is important to examine the overall shifts in employment sectors especially when compared to a larger area such as the State of Maryland. Figure 3 indicates the rate of change in employment by sector in Queen Anne's County and compares it to the State of Maryland between 1990 and 1997.

The total number of jobs (full- and part-time) in Queen Anne's County increased from 12,828 to 15,402 between 1990 and 1997, a 20 percent increase. This compares to an increase of only 5.5 percent during the same period for the State of Maryland.

The sectors that enjoyed the most substantial growth were retail trade and finance/insurance/ real estate, which increased by over 50 percent each compared to increases of slightly over four percent for the same sectors statewide.

The job increases in Queen Anne's County are due to the rapid growth of population, which has stimulated the growth of the job base. The apparent large rate of increase is due also to the relatively low number of jobs in the County to begin with. Consequently, even a relatively small increase in certain sectors results in a substantial percentage rate increase.

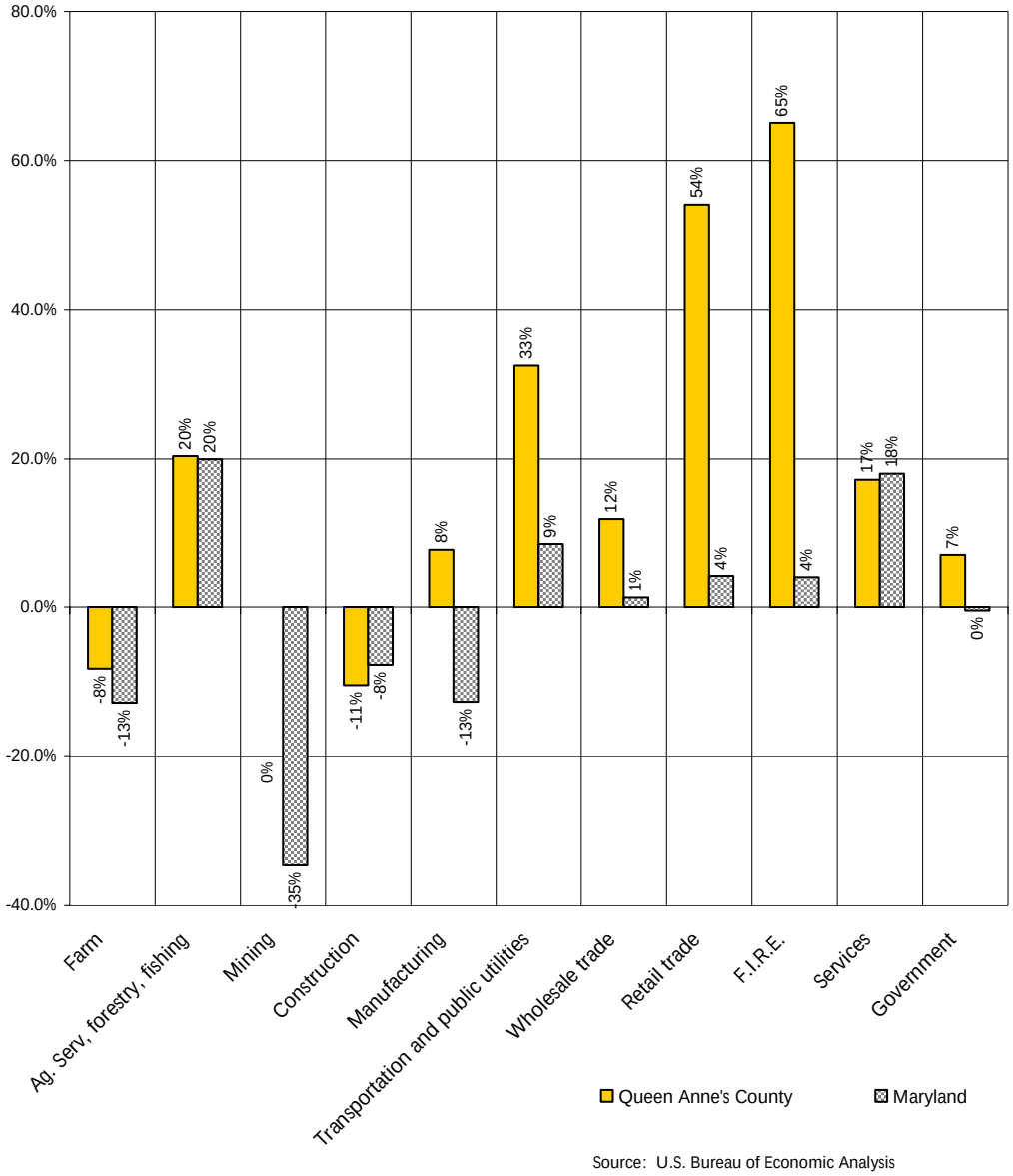
Construction and farm jobs declined in the County corresponding, to a lesser degree, with declines statewide. Manufacturing jobs increased in the County, while declining throughout Maryland.

Labor Force Participation

To examine labor force participation, the employment age population of Queen Anne's County is used as a base line. This is calculated as the total number of people over the age of 16. In 1995, the most recent year available, that population was 29,220. Of that total number,

20,070 people or 68.7 percent of the population were participating in the labor force. This is defined as those employed or looking for work. For men there was a 75.5 percent labor force participation rate; for women the rate was 62.1 percent.

Figure 3: Percent Change in Total Jobs by Sector 1990-1997
Queen Anne's County and Maryland

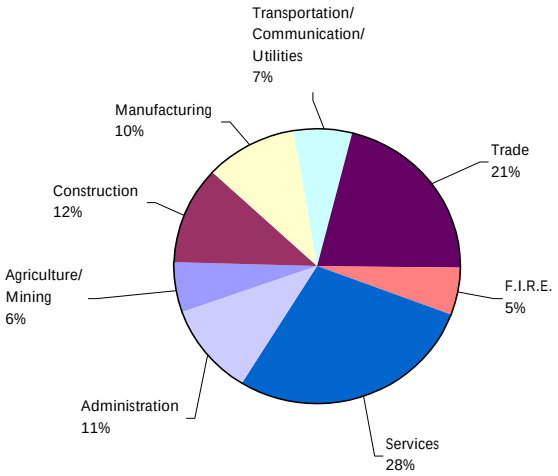


Source: U.S. Bureau of Economic Analysis

Employed Residents by Industry

In 1990, the largest proportion of Queen Anne's County residents were in employed in the services industries that included education, health, entertainment, repair, and personal services. Figure 4 reflects the breakout for employment industries in Queen Anne's County. The services industry was followed by employment in the wholesale and retail trade industry. Slightly over 49 percent of the population were employed in the service and trade industries in 1990. This number is consistent with that witnessed by the State, which had 55 percent of the population employed in these industries. These large percentages are likely related to overall shifts toward service and trade. Other categories (F.I.R.E., Transportation/ Communications/ Utilities, Manufacturing, and Administration) exhibited similar percentages with the State. Agriculture and Finance/Insurance/Real Estate sectors have the least number of employees with about 6 percent and 5 percent respectively.

Figure 4: Employed Residents by Industry, 1990

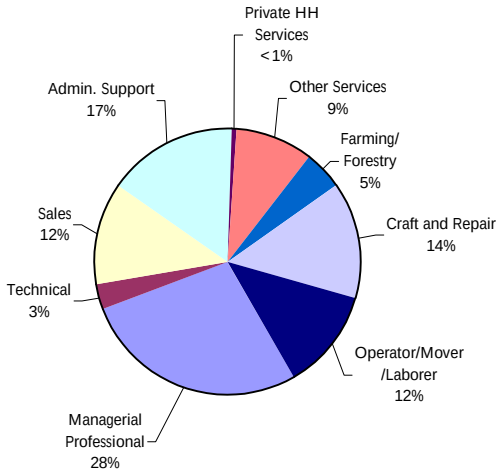


Source: U.S. Census

Employed Residents by Occupation

Figure 5 shows the breakdown of employed residents by occupation. In 1990, over a quarter of the population of Queen Anne's County was employed in managerial professional occupations. This is significantly higher than the State's figure of 16 percent. Private household, technical, and farming/forestry occupations each had less than five percent of the employed population. The trends for private household and technical occupations are consistent with those of the State, which had less than one percent and five percent respectively employed in those occupations. Queen Anne's County does have a significantly higher percentage of the population employed in agriculture (five percent) as compared to the State with only one percent engaged in the occupation.

Figure 5: Queen Anne's County Resident Employment by Occupation



Source: Bureau of the Census

Income

The median household income for Queen Anne's County was $48,400 in 1997. This is higher than the Baltimore region and about the same as the Maryland median household income of $48,900. The median household income trends in the County have mirrored those of the region and the State with general declines from 1989 through 1995 and increases since that time.

The median per capita income in 1997 was $26,455. This figure exceeded the State median of $25,288 and ranked Queen Anne's County sixth out of twenty-four counties within Maryland.

Business and Tourism Readiness

In 1999, the County merged its formerly separate departments of tourism and economic development into a new agency that coordinates both efforts: the Department of Business and Tourism. This coordinated emphasis places the County in a good position to direct its limited resources to both traditional forms of economic development, including business retention, expansion and attraction, as well as the increasing importance of tourism shopping and dinning dollars.

An analysis of undeveloped lands with non-residential potential inside the designated growth areas anticipated to be served by public water and sewer, as well as undeveloped lands outside the growth areas currently zoned for commercial or industrial uses are provided in Attachment D. The County must maintain sufficient lands served by public sewer and water, primary roads and rail to be able to attract businesses.

Telecommunications. The County must have the requisite communications infrastructure to compete in this telecommunications age. Fiber optic communication capabilities have increasingly become a prerequisite for the growing high-tech industrial sector. Economic development officials nationwide have been fielding more frequent requests from prospects about the availability of fiber optic communications networks. Queen Anne's County is no exception.

In 1998, Maryland House Bill 847 created a High Speed Networking Task Force to perform several important functions for identifying and developing a statewide fiber optic network. The task force identified more definitive engineering and technology details needed for the network, budgetary estimates, identification of private sector uses, and several cash flow alternatives. Currently, a portion of the fiber backbone is to be extended across the Bay Bridge where Queen Anne's County will be able to tie into the State system. The State will provide the fiber, equipment, and service to establish a "Point of Presence" (PoP). It will be the County's responsibility to fund the connection of their users to the PoP. One of the major advantages to this system is that once users are tied to the State system the cost will be the same regardless of the distance to the PoP site.

In addition to this State funded project, Verizon officials indicate that they are placing additional lines in Queen Anne's County. Verizon has already installed fiber optics diversity routing to the new Department of Emergency Services Building for the 911 Trunks. Through a cooperative arrangement with the State of Maryland, the Safety Drive Public Services buildings have been linked with fiber optics. These buildings include Maryland State Highway Administration Maintenance Garage, Maryland State Police Barracks, Maryland State Police Helicopter Hanger, Queen Anne's County Department of Public Works, Queen Anne's County Department of Emergency Services and the Safety Drive Transmission Tower Equipment

Building. Queen Anne's County has begun to utilize this fiber link by connecting the DPW and Public Services buildings for wide area network access.

In addition to this cooperative arrangement, Queen Anne's County was instrumental in the first Telecommunications Infrastructure Memorandum of Understanding (MOU) with various Maryland State Agencies and Talbot County. This MOU places Queen Anne's County as a partner with the State of Maryland's state wide wireless communication backbone through the use of our microwave network. Plans for future telecommunications advances in Queen Anne's County include further development of our wireless capabilities, fiber optics network and other telecommunications systems.

Chesapeake Bay Business Park. To assist in encouraging economic development, the County has developed the Chesapeake Bay Business Park. Located on Kent Island, this park offers 159-acres devoted to business and industrial uses. As of Fall 2001, there are approximately 26 vacant acres remaining. Designed to offer a campus-style setting, this park is adjacent to the Chesapeake Bay and Terrapin Park.

Tourism. The County has and is planning for additional attractive hotels, recreation and visitor attractions to increase its share of the tourism market. Currently, the County has 454 visitor rooms. Fifty-nine or 11 percent of these are bed and breakfast accommodations. The most recently completed hotel was a 76-room Holiday Inn Express, which is slated for a future 16-room expansion. Other hotel properties are older than five years and several are small older motel properties. Continued growth of the tourism infrastructure such as hotel rooms will provide a basis for expanded tourism.

Queen Anne's County is located along an important tourist thoroughfare to the oceanfront resort communities. Queen Anne's own natural beauty and its waterfront environment make it a potential destination for increased tourism and visitation. Tourism in the County is currently driven by outdoor recreation attractions, especially golf and the boating and marine industries.

Located close to US 50/301 on the Kent Narrows Channel, the Chesapeake Bay Exploration Center opened in the spring of 1998. This facility currently serves as the main visitor information center for the County and also offers an interpretive exhibit showcasing the natural and cultural heritage of the Eastern Shore. The Department of Business and Tourism also has its offices in this facility.

The County has several annual events that attract a number of people to County. These events include (2001 attendance): Church Hill Theatre (3,037), Bridge Walk Rendezvous (43,000), Kent Island Days (2,000), Chesapeake Challenge (3,000 land; 15,000 water), Thunder on the Narrows (5,200), Queen Anne's County Fair (23,000), Waterman's Festival (3,500), Centreville Rotary Artisans Festival (3,000), and the Parade of Lights (5,500).

➢ *Location and Rate of Growth*

Existing Development

As of 1999, existing non-residential development – commercial, industrial, and office uses – were roughly estimated at 4,900,000 square feet. Of this amount about 2,700,000 square feet or 56 percent is located in the County's growth areas. On the residential side, it is estimated that the County had 17,825 dwelling units in July 2001. Table 8 shows the estimated existing County development. The non-residential estimate is derived from a calculation of all the improved

non-residential lands in the County using the State's land use/land cover analysis.

Table 8: Estimated 1999 Existing Development

	Growth Areas	Non-Growth Areas	Total
Non-Residential SF	2,650,000	2,200,000	4,850,000
Dwelling Units	*	*	17,775

Source: Queen Anne's County Dept. of Planning & Zoning, Maryland Department of Planning; Compiled by LDR International, Inc.

* information not available

Map 4 shows the Maryland Department of Planning's existing land use/land cover as of 1997. Table 9 shows the change in these categories from 1973 to 1997. The result of this analysis shows the significant increase in development over this 24-year time period and the loss of forest, wetlands, and agricultural lands.

Table 10 shows the acres of existing zoning in the County by zoning district. Approximately 88 percent of the County is zoned for agricultural or countryside use. An additional 10 percent is zoned for residential uses and about two percent is zoned for mixed use and non-residential development. Map 5 shows the geographical distribution of the generalized zoning categories and the County's Election District boundaries.

Table 9: Queen Anne's County Land Use/Land Cover Change, 1973-1997

	Land Use in Acres					Land Use Change			
	1973	1981	1985	1990	1997	1973-1997		1990-1997	
Land Use						Acres	Percent	Acres	Percent
Low Density Residential	5,058	7,355	7,978	10,100	10,471	5,413	52%	371	4%
Med/High Density Residential	634	762	794	957	4,124	3,490	85%	3,167	77%
Commercial/Industrial	966	966	979	1,214	1,758	792	45%	544	31%
Institutional/Open	747	939	933	988	2,206	1,459	66%	1,218	55%
Bare Ground	97	97	363	541	75	-22	-29%	-466	-619%
Total Development	7,502	10,119	11,047	13,800	18,634	11,132		4,834	
Agriculture	156,061	154,851	154,390	152,762	151,257	-4,804	-3%	-1,505	-1%
Forest	71,078	69,658	69,223	68,077	63,663	-7,415	-12%	-4,414	-7%
Extractive/Barren	129	129	135	122	248	119	48%	126	51%
Wetland	4,334	4,347	4,309	4,216	3,760	-574	-15%	-456	-12%
Total Resources	231,602	228,985	228,057	225,177	218,928	-12,674	-6%	-6,249	-3%
Total Land	**239,104**	**239,104**	**239,104**	**238,977**	**237,562**	**-1,542**		**-1,415**	
Water	87,494	87,494	87,494	87,621	88,261	767	1%	640	1%
Total Area	**326,598**	**326,598**	**326,598**	**326,598**	**325,823**	**-775**		**-775**	

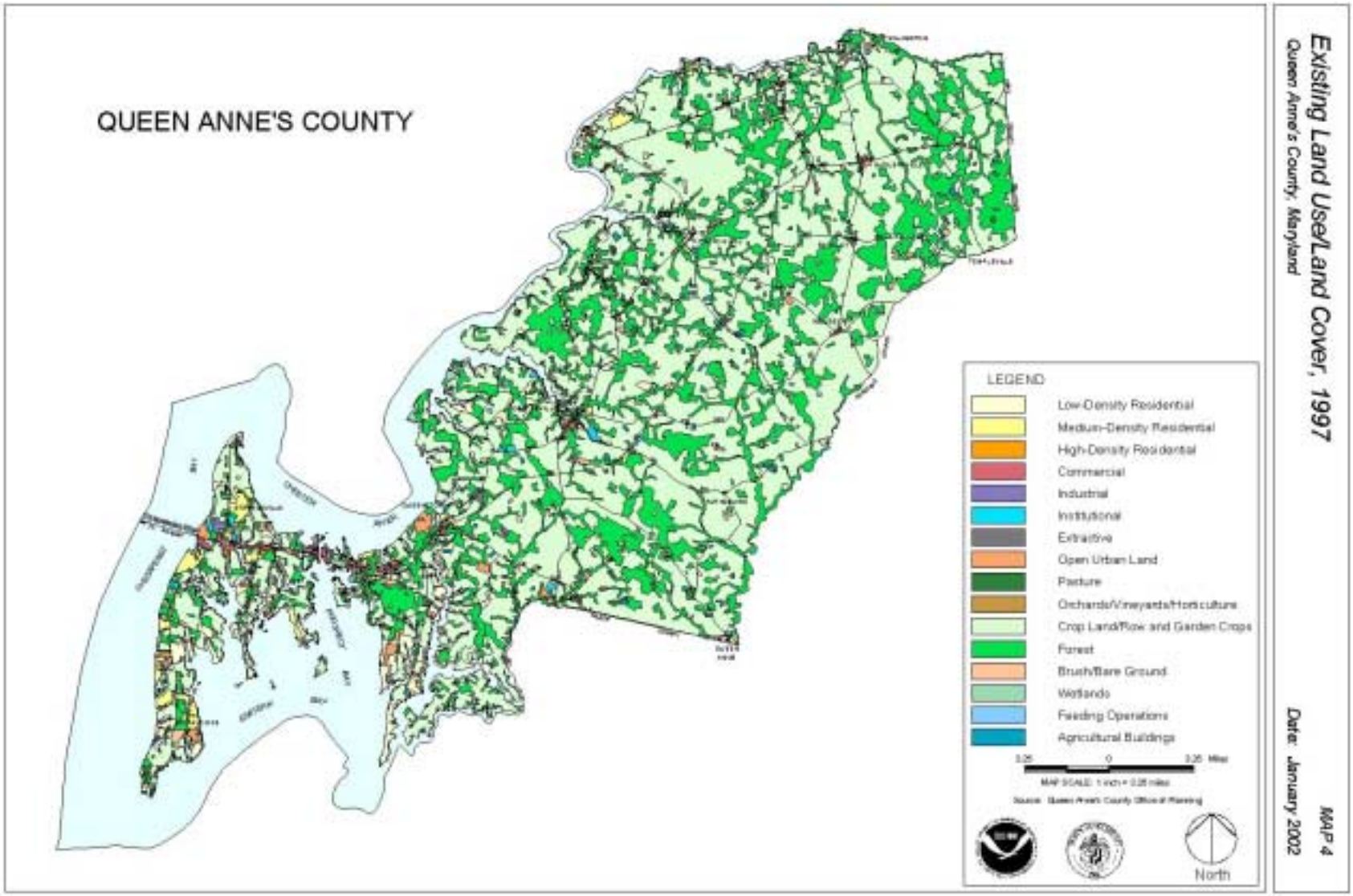
Source: Maryland Department of Planning

Note: The Total Area acreage has changed between the 1990 and 1997. Prior to 1997 the shoreline boundary was extracted from aerial photographs. In 1997 the Maryland Department of Planning adjusted the shoreline boundary by using more accurate digital information from the State Highway Administration.

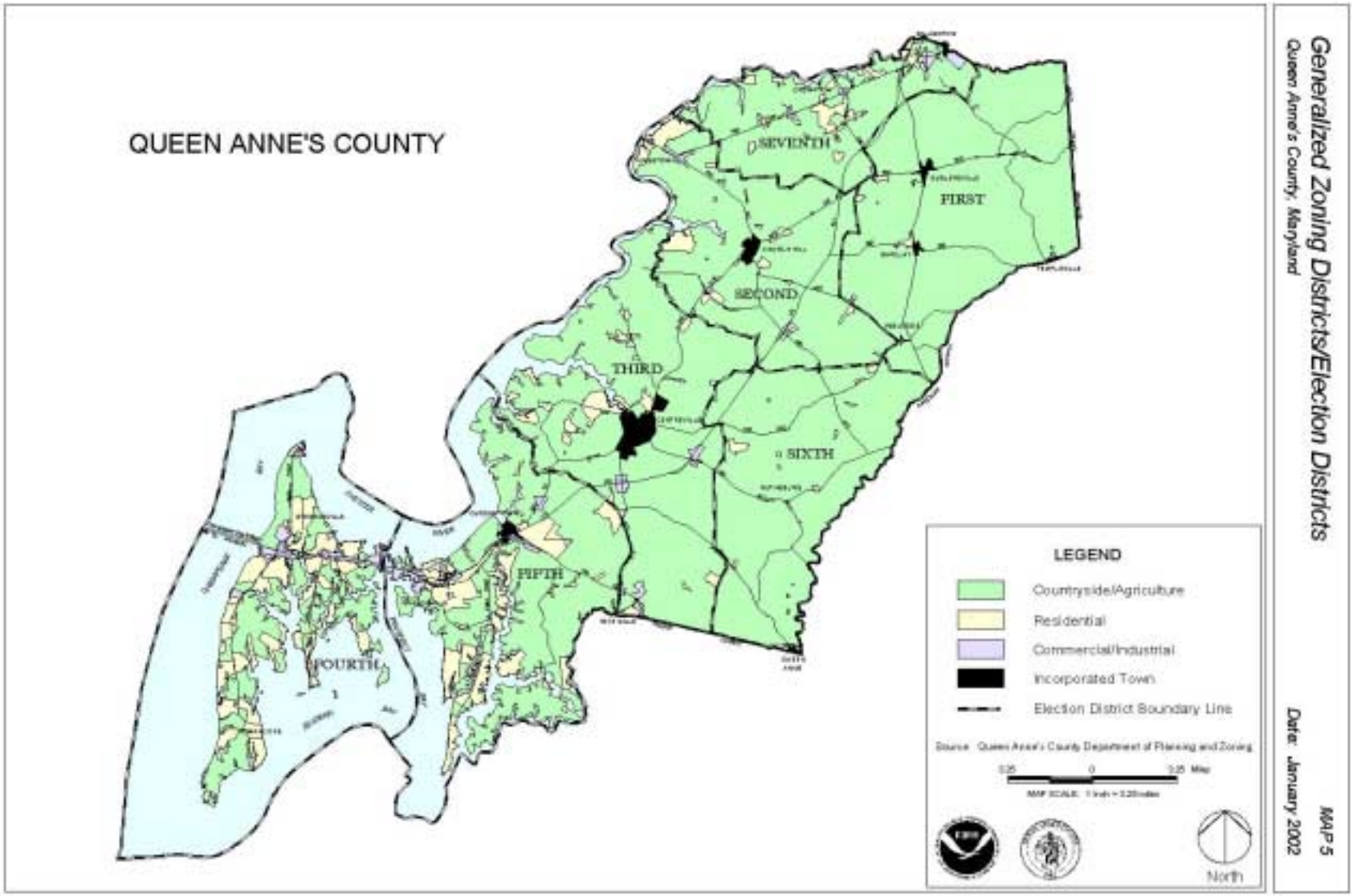
Table 10: Existing Zoning by Election District (2000)

Zoning District	Election District 1	2	3	4	5	6	7	Total Acres	% of Total
Agricultural and Countryside									
Agricultural (AG)	45,155	26,942	32,366		9,111	33,213	14,526	161,313	68.3%
Countryside (CS)	6	3,970	10,340	10,126	17,210	1,754	3,948	47,354	20.1%
Subtotal	*45,161*	*30,912*	*42,706*	*10,126*	*26,321*	*34,967*	*18,474*	***208,667***	***88.4%***
Residential									
Chester Master Planed Community (CMPD)				689				689	0.3%
Estate (E)		33	264	50	144			491	0.2%
Grasonville Planned Res'l Neighborhood (GPRN)					619			619	0.3%
Neighborhood Conservation (NC1, NC1T)	279	1,802	2,039	6,339	4,971	513	1,663	17,606	7.5%
Stevensville Master Planned Develpmt (SMPD)				1,153				1,153	0.5%
Suburban Estate (SE)	56	346	246	391	590	34	153	1,816	0.8%
Suburban Residential (SR)				49	790			839	0.4%
Urban Residential (UR)				107				107	0.0%
Subtotal	*335*	*2,182*	*2,549*	*8,778*	*7,114*	*547*	*1,816*	***23,321***	***9.9%***
Non-Residential and Mixed Use									0.0%
Airport District (AD)				82				82	0.0%
Stevensville Historic Village Center (SHVC)				45				45	0.0%
Grasonville Neighborhood Commercial (GNC)					75			75	0.0%
Grasonville Neighbrhd Village Center (GVC)					65			65	0.0%
Light Industiral Highway Service (LIHS)			100					100	0.0%
Suburban Commercial (SC)	2	209	145	48	129	59	87	679	0.3%
Suburban Industrial (SI)	24	71	302	366	267	2	385	1,417	0.6%
Town Center (TC)				383				383	0.2%
Urban Commercial (UC)				272	263			535	0.2%
Village Center (VC)	58	57	78	27	62	20	80	382	0.2%
Waterfront Village Center (WVC)				217	206			423	0.2%
Subtotal	*84*	*336*	*625*	*1,440*	*1,067*	*81*	*552*	***4,185***	***1.8%***
TOTALS	**45,580**	**33,430**	**45,880**	**20,344**	**34,502**	**35,595**	**20,842**	**236,173**	**100.0%**

Source: Queen Anne's County Planning & Zoning; Compiled by LDR International, Inc. an HNTB company



Map 4: Existing Land Use/Land Cover, 1997



Map 5: Generalized Zoning Districts and Election Districts

Location and Growth Areas

Queen Anne's location on the eastern edge of the Chesapeake Bay makes it a convenient location for commuters to live. It is within an hour's drive of the urban centers of Washington and Baltimore and is convenient to jobs in Annapolis and Anne Arundel County. It also borders Delaware, making it close to Dover, Middletown and Wilmington. The rich natural environment and expansive shoreline add to the County's appeal for those seeking a more relaxed quality of life than is available in the region's urban areas.

Map 6 shows the location of the six designated growth areas of the County. Stevensville, Chester, Kent Narrows, and Grasonville have had the most pronounced growth in recent years as a result of their location as the first communities once the Bay Bridge "touches down" on the Eastern Shore. Centreville and Queenstown growth areas have not experienced the same development pressure or trends. The northern portions of the County remain substantially rural in nature. This is by design. The County's long standing policies and development regulations seek to preserve agricultural and rural development in the north County outside designated growth areas.

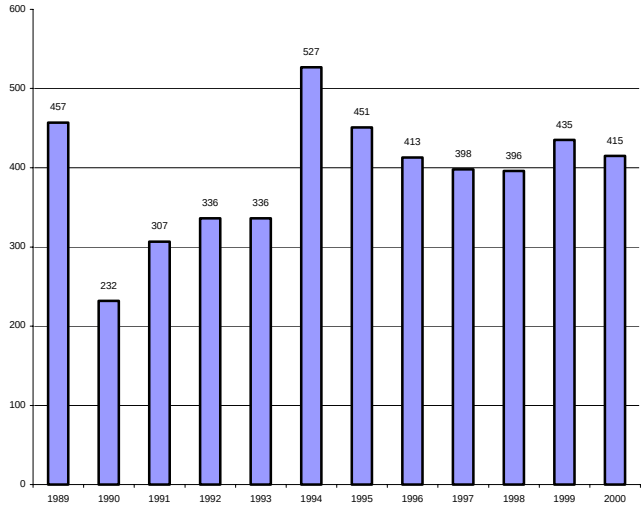
The challenge for the future is to ensure that sewer and water infrastructure and roadway capacity can be planned and implemented in the growth areas to accommodate growth to these areas and preserve rural areas.

Residential Building Permits

New residential construction in Queen Anne's County has maintained a steady pace of growth over the past decade. Since 1989, 390 residential units per year on average have been constructed in Queen Anne's County. This number has varied only slightly with declines during the recession years of 1990 and 1991 and a high of 527 units in 1994. Figure 6 shows the number of residential unit permits issued per year in Queen Anne's County for the last 11 years.

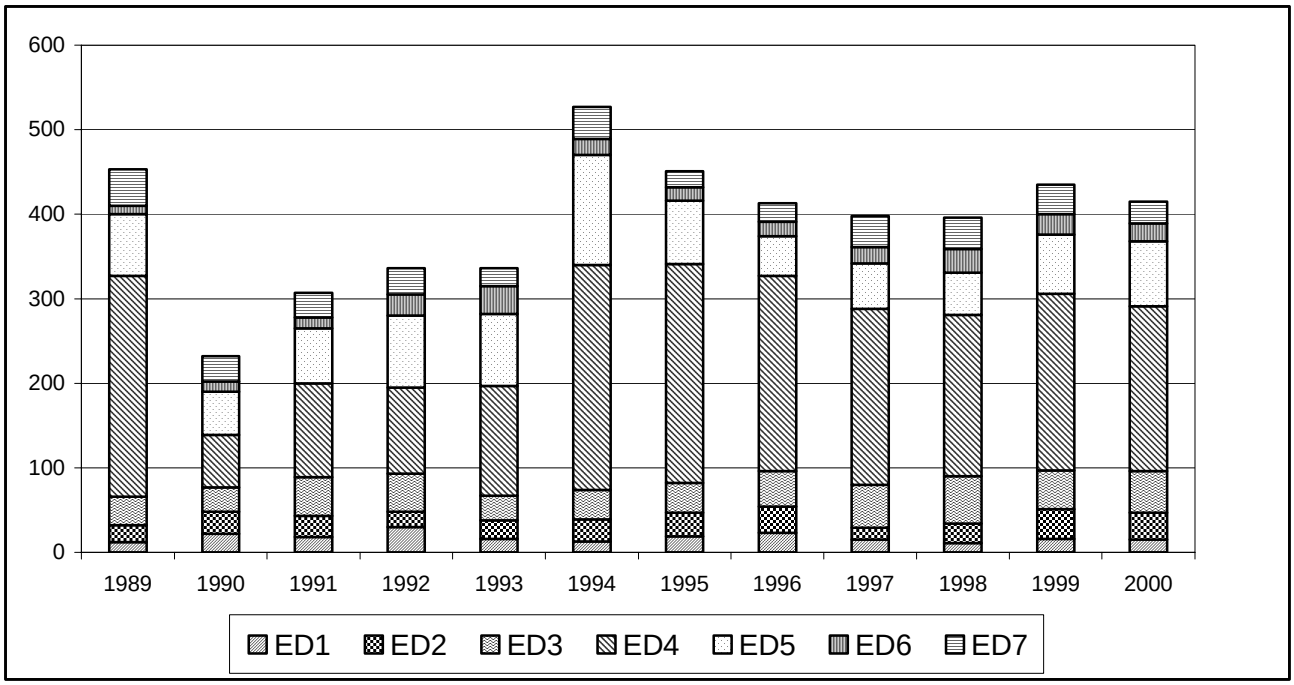
Nearly half of the residential growth over the last ten years has occurred in Election District Four, which includes the area west of the Kent Narrows. Figure 7 shows the breakout of residential permits by election district. Attachment C includes detailed building permit information by election district.

Figure 6: Queen Anne's County, 1989-2000 Residential Building Permits



Source: Queen Anne's County Department of Planning & Zoning

Figure 7: Queen Anne's County 1989 – 2000 Building Permit Data by Election District



Source: Queen Anne's County Department of Planning and Zoning

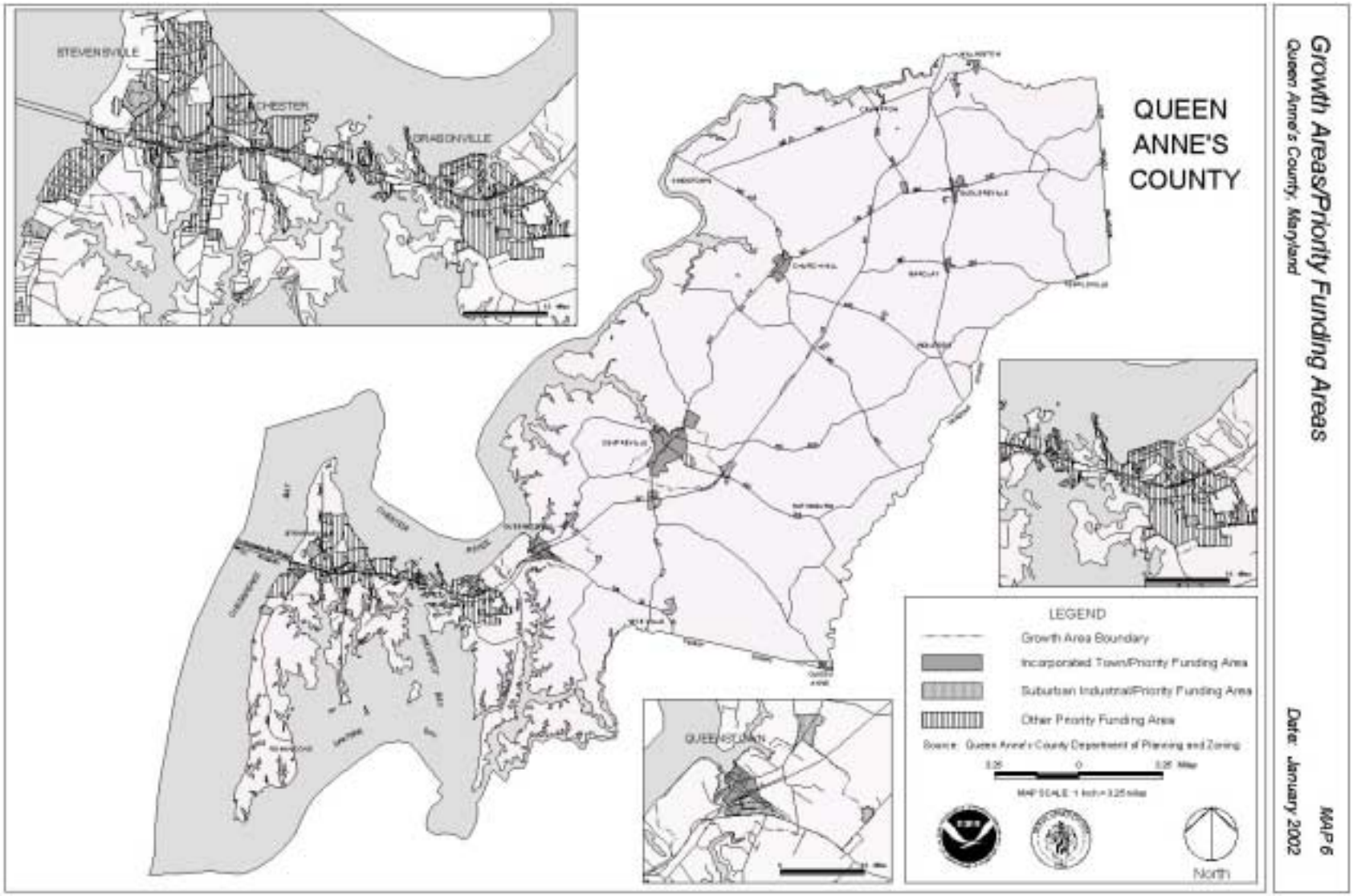
Recently Developed and Preserved Lands

Between the beginning of 1997 and the end of June, 2001, there were a total of 14,370 acres of land preserved via deed restrictions, acquisition of parkland or easements compared to a total of 1,145.5 acres approved for development. That is a little over twelve times more land protected from development than approved for development. Sixty-five percent of the residential lots and seventy-two percent of the non-residential development were approved in the growth areas. This represents a large proportion given that the growth areas comprise only six percent of the County's area.

During this three-year period, 516 new residential building lots totaling 1,046 acres were created and the County approved approximately 49 acres of non-residential impervious coverage including building footprints and parking areas. Table 11 shows the approvals for the last three years.

During the same period, approximately 1,827 acres of undeveloped land were deed restricted as open space as a condition of residential development approval. A certain amount of open space preservation is required for each approved residential lot. Also during this period, another 6,190 acres were deed restricted as open space either through the donation of voluntary conservation easements, the purchase of agricultural conservation easements, or the acquisition of property for parkland.

Since 1997, the majority of proposed new development is located within designated growth areas. This trend is very positive for meeting growth management objectives, but cannot be maintained if adequate infrastructure is not available.



Map 6: Growth Areas and Priority Funding Areas

➢ *Capacity for Growth*

Introduction

A "buildout" analysis calculates the potential development of all lands available for development given existing zoning. "Buildout" is a theoretical exercise that simply multiplies undeveloped acreage by the applicable density or floor area maximums. It does not account for development variables or constraints that limit or prevent development on individual tracts of land. Nevertheless, it is a helpful measure to see if the County has too few or too many acres of developable/zoned land to meet future demand. This section discusses the process used to understand and quantify the County's development potential. As is frequently the case, this analysis is made with less than perfect information and thus is based on certain assumptions. To the extent assumptions are made, they are explicitly stated.

At the present time, the vast majority of proposed new development is located within designated growth areas. The County is currently reviewing development applications consisting of at least, 2,500 new residential lots and approximately 500,000 sq. ft. of non-residential floor area, all located within designated growth areas. In addition to pending development applications, the County anticipates receiving additional development proposals in the near future consisting of approximately 3,000 additional lots all located within designated growth areas.

Assuming that the amount of residential growth occurring outside of growth areas remains relatively consistent into the future, and that the majority of pending/anticipated residential projects are approved, it can be assumed that approximately 85-90% of all new residential lots will be created in growth areas over the next 10 years. While it is more difficult to forecast non-residential development into the future, the amount of pending non-residential development proposed within growth areas is a prime indicator that the County will be able to retain its current amount of non-residential growth in growth areas at a figure of at least its current rate of 79%.

This trend is very positive for meeting long-term growth management objectives, but cannot be achieved if adequate infrastructure is not available.

Table 11: Growth Area vs. Non-Growth Area Development Approvals[1] (1997 – 2001)

	1997	1998	1999	2000	2001	Total
Residential Lots in Growth Area	83	162	20	183	126	265
Residential Acres[2]	25.4 ac.	68.9 ac.	6.6 ac.	65.2	64.5	100.9 ac.
Average Lot Size	0.32 ac.	0.43 ac.	0.33 ac.	.36 ac.	.51 ac.	0.38 ac.
Residential Lots Outside of Growth Area	141	52	51	46	24	251
Residential Acres[2]	388 ac.	146.3 ac.	150 ac.	125.3	44.3	944.7 ac.
Average Lot Size	2.8 ac.	2.8 ac.	3 ac.	2.7 ac.	1.8 ac.	3.8 ac.
Percent Residential Lots in Growth Area	37%	76%	28%	80%	84%	51%
Percent Residential Lots Outside Growth Area	63%	24%	72%	20%	16%	49%
Non-Residential Development in Growth Area[3]	26.7 ac.	8.3 ac.	3.9 ac.	1.6 ac.	3.5 ac.	38.9 ac.
Non Residential Development Outside of Growth Area	4.3 ac.	0.7 ac.	4.9 ac.	3.5 ac.	3.5 ac.	9.9 ac
Percent Non-Residential in Growth Area	86%	92%	44%	31%	50%	76%
Percent Non-Residential Outside Growth Area	14%	8%	56%	69%	50%	24%

Source: Queen Anne's County Department of Planning and Zoning

1 Includes minor and major subdivision lots less than 20 acres and non-residential impervious coverage granted final approval by the Department of Planning and Zoning or the Planning Commission. Does not include building permit or other construction permit data. Areas outside of Growth Areas include rural areas and existing neighborhoods and villages, which are not designated as Growth Areas.

2 Includes subdivision lot and road area. Does not include open space.

3 Includes impervious coverage (i.e., building footprints, parking areas and circulation areas). Does not include landscape areas.

Development Acres Available

To assess the buildout potential of the County under existing regulations, the vacant or undeveloped lands within the County's growth areas were identified using the County's GIS. The existing zoning category for each vacant/ undeveloped parcel was also identified to calculate the total available acreage by zoning category within the growth areas.

Within the growth areas there are approximately 6,400 acres of lands available for development – residential and non-residential. These areas represent 3% of the land area in the County. Outside the growth areas, there are approximately 700 acres designated for non-residential development.

There are also a significant number of acres available for residential development outside the growth areas. The potential buildout of these areas is more difficult to calculate due to the variability of development yields, given the County's agricultural preservation policies and flexible development yields under the cluster and other provisions of the zoning ordinance. However, using densities based on existing zoning and critical area designations, the residential buildout of the non growth area was calculated and is included in Table 12.

Potential Buildout

For each zoning district, the maximum yields were used to calculate the "theoretical maximum" amount of development. This amount was then decreased to account for sensitive areas, natural resources and other site conditions. For residential development, this probable development potential was calculated at both 50 percent and 75 percent of the theoretical maximum. For employment lands, 50 percent of the maximum theoretical was assumed. Table 12 shows the yields of this development potential.

Table 12: Buildout Capacity

	Dwelling Units			Non-Residential Sq Ft	
	Theoretical Maximum	Probable (75% of Maximum)	Probable (50% of Maximum)	Theoretical Maximum	Probable (50% of Maximum)
Growth Areas	20,000	15,000	10,000	13,050,000	6,525,000
Non-Growth Areas	19,000	14,250	9,500	11,250,000	5,625,000
Total Potential Buildout	39,000	29,250	19,500	24,300,000	12,150,000
Buildout vs. Existing	2.2 times existing	1.6 times existing	1.1 times existing	5.8 times existing	2.9 times existing

Source: Queen Anne's County Department of Planning & Zoning; Compiled by LDR International, Inc.

The result of this "probable maximum" development analysis provides an estimate of the potential buildout of the County, based on existing zoning. The County can accommodate an additional 12 million square feet of non-residential development and another 20,000 to 30,000 dwelling units. These estimates equate to almost three times the amount of existing non- residential development and 1.1 to 1.6 times the amount of residential development today. Of the non-residential development potential, approximately 54 percent is located within the growth areas. Attachment D includes the detailed worksheets that were used to calculate buildout capacity for the growth areas.

Buildout Timeframe

Based on the last eleven years of County residential building permit data, approximately 400 dwelling units are built each year. If this rate is assumed to continue, the residential lands Countywide would all be built out within approximately 50 to 75 years based on recent trends. In the growth areas the buildout period would be between 38 and 54 years, whereas the non growth areas would buildout in 75 to 102 years. The County does not currently track non-residential development in a way that absorption rates can be calculated, so a parallel timeframe for the non-residential development cannot be calculated.

Constraints on Growth

There are many factors that can act to constrain development. In addition to zoning and other regulations, some of the most important determinants of growth are access to transportation (roads or rail), access to sewer and water infrastructure, and natural resource constraints also cost of land and zoning/engineering approvals. In Queen Anne's County, available sewer, and to a lesser degree water, capacity has been a constraint on development. In the analysis and infrastructure assessment phase of the Comprehensive Plan, alternative future land use and utility extension options were developed. After analysis and public review, a preferred option was selected upon which the Plan is based. A detailed description of the Plan alternatives is included in a separate appendix to the Plan. It is available at the Planning Department.

Southern Kent Island Development Potential

There are almost 1,500 vacant lots of record in existing subdivisions on Southern Kent Island. However, the great majority of these lots are "paper lots" that were subdivided more than 40 years ago. They have not developed because of the poor soils for septic tank function and the high water table in this area. Some of the lots that have developed are experiencing septic system problems. This issue is discussed in more detail in the Sewer and Water sections later in this Profile.

During the timeframe of the Comprehensive Plan process, the County is assessing options for addressing the septic system problems and associated threats to the ground water supply on Southern Kent Island. One option would be to extend sewer service to the Southern Kent Island. If this option was to be adopted and all the existing lots of record, both vacant and improved, in these subdivisions were served, the total would be close to 3,000 lots served. However, because of existing ownership patterns where one owner controls adjacent parcels, the County estimates that number of potential lots could be significantly reduced if lots were consolidated.

This analysis does not take into consideration the by-right development potential of the lands outside of these subdivisions under current zoning and critical area designations. If these lands were included, the development potential increases by 1,000 additional lots.

The decision whether or not to extend sewer service to this area is complex since the majority of the area is outside established growth area boundaries. In addition, MD 8 is already over its design capacity for traffic volumes and additional homes would increase traffic congestion substantially as well as impact the school system.

➢ *Groundwater Protection*

As early as 1970, the County's Master Water and Sewer Plans documented saltwater intrusion at Love Point on Northern Kent Island. Brackish water intrusion has been identified along the western shore of Kent Island by subsequent Master Water and Sewer Plans.

In 1988, the State of Maryland Department of Natural Resources, Water Resources Administration began implementation of the Kent Island Water Management Strategy to protect the Aquia Aquifer from further saltwater intrusion. The strategy required that after August 1988 no new water appropriations on Kent Island from the Aquia Aquifer would be approved.

In addition, the strategy requires that for the portion of Queen Anne's County east of Kent Narrows and west of Queenstown Creek/Wye River, no new water appropriations over 1,000 gallons per day (gpd) will be approved from the Aquia Aquifer. As a reference point, the County uses a standard of 100 gpd per person for water use. This equates to approximately 250-300 gpd per household. Thus, the restriction of 1,000 gpd does not impact individual homes, but does impact new, larger developments.

East of Queenstown Creek/Wye River to the Corsica River/Centreville/Tred Avon River, large Aquia Aquifer appropriations requests are scrutinized for potential to contribute to the salt-water intrusion problem.

As part of the 1990 Sewer and Water Master Plan, the County's Environmental Health Department prepared a Groundwater Protection Report in 1989. The report was subsequently updated in 1995, in response to COMAR 26.04.02, regulations "Governing Sewage Disposal and Certain Water Systems for Homes and Other Establishments." The report had two objectives. The first was to assess and evaluate available groundwater resources and review past well and onsite septic system construction practices. The second was to develop specific on-site waste disposal management strategies to protect surficial or confined groundwater.

The County designated two zones as part of the management strategy. Management Area A was designated as that area requiring the highest degree of protection where the unconfined aquifer is used as a water supply. This area was defined as Love Point and Queen Anne's County east of the Queenstown Creek/Wye River. Management Area B consisted of the remaining County, the Grasonville/Bennett Point Peninsula and Kent Island excluding Love Point. Management Area B was characterized by those areas where the shallow unconfined aquifer had been routinely penetrated with sewage effluent from septic systems. This shallow aquifer is not used as a water supply. The concern in this area is not protecting the shallow, unconfined aquifer but instituting control and management strategies that give a high degree of protection against contaminating deeper, underlying confined aquifers. Map 7 shows the existing water system features . Map 8 shows the ground water protection areas A and B.

Most wells in the County are drilled into the nearest confined aquifer, which is the Aquia, the predominant aquifer in Management Areas A and B. Aquia water quality is good in those areas where it is not experiencing salt or brackish water intrusion and requires little or no treatment. This aquifer is a very desirable ground water resource to be managed and protected. Because of restrictions on the Aquia appropriations, the next nearest and highest yielding aquifer, the Magothy Aquifer, is becoming the primary water source in areas with restricted Aquia withdraws.

The Magothy Aquifer is high yielding in certain areas of the County but has excessive iron levels

(16-35 mg/l) on Kent Island. Water treatment is required to provide usable water. The Federal has defined desirable iron levels as less than 0.3 mg/l. In the northern end of Queen Anne's County, the Magothy is not as high yielding but has significantly lower iron levels than 0.3 mg/l. In addition, the central/north area of the County uses the Monmouth Aquifer, which exists between the Aquia and Magothy Aquifers.

The Raritan-Patapsco Aquifer has not been used in Queen Anne's County until recently because the overlying Aquia and Magothy Aquifers are shallower and less costly to drill and have met historic needs. The County has recently drilled a production well into the lower Patapsco formation of this aquifer at Stevensville with iron levels between 3 to 4 mg/l. Water quality within the Patapsco formation is variable. Iron levels in the Lower Patapsco are reported to range from 4.5 to 30 mg/l.

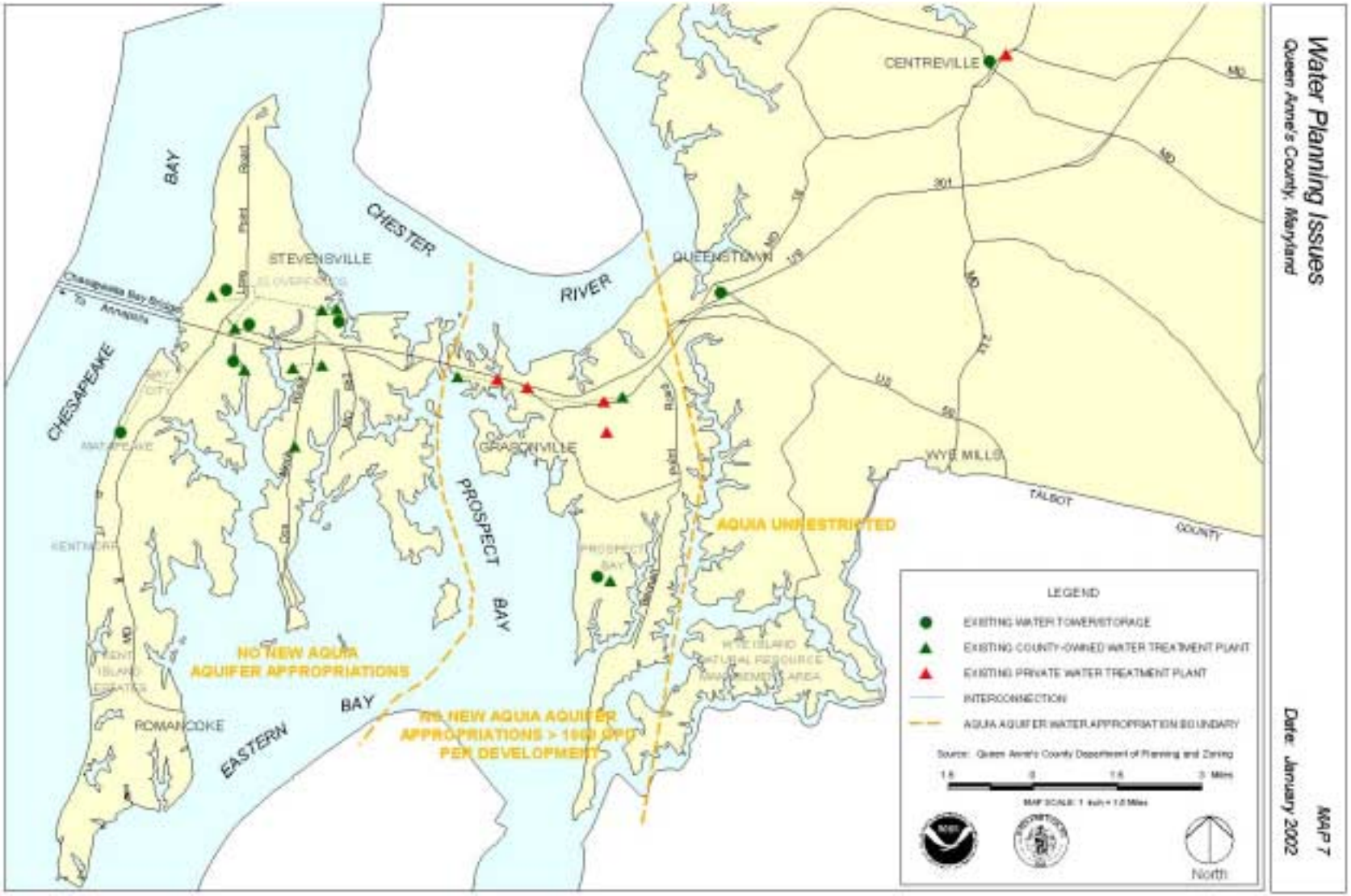
The Groundwater Protection Report identified final management strategies for on-site sewage disposal systems for Areas A and B for implementation, establishing criteria and categories. Management Area B was specifically focused on as an area of need. This area contains some concentrations of thousands of very small lots with poor to very poor subsurface drainage. Waste disposal systems have routinely directly penetrated groundwater with septic tank effluent, creating a heavy sewage loading on the unconfined groundwater aquifer. These older subdivisions particularly on Southern Kent Island represent the greatest contamination threat to deeper confined aquifers because of the high density of septic systems and sewage loadings and the uncertainty of the imperviousness of the intervening layers between the surface aquifer and the deeper aquifer.

Problem Areas

Love Point: This area is experiencing salt water intrusion into the Aquia. Residents continue to replace Aquia wells by abandonment and sealing of existing wells and drilling new wells into the Magothy Aquifer and treating the water to reduce iron levels.

Southern Kent Island: There is a threat of brackish water intrusion into the Aquia south of Batts Neck Road. Drillers report that the deepest part of Aquia is contaminated. Maryland Geological Survey Report No. 51 indicates that barring major changes in usage, the middle and upper parts will be impacted in time. Although the recently released Report of Investigation 72 indicated the rate of intrusion is not accelerating. Options include extending a transmission line from Matapeake Tower along Route 8 to Tower Gardens on the Bay to relieve demand on Aquia and building a new central water supply system.

Kingstown-Chester Harbor: Approximately five to ten percent of the wells have nitrate levels above 10 mg/l. This is the result of highly permeable soils and septic systems and/or agricultural fertilizer contamination. Impacted water supplies have private treatment systems for each home. Identification of the source of nitrates will dictate monitoring for other contaminants. Routine groundwater monitoring should be undertaken. The on-site remediation currently in use appears to be a cost-effective solution.



Map 7: Water Planning Issues

➢ *Water Distribution and Treatment*

Infrastructure

Seventeen separate significant community or multi-user water systems are in operation between Stevensville and Grasonville in the Route 50/301 corridor. Eleven of these facilities are operated by the Queen Anne's County Sanitary District. Five of the County systems use the Aquia Aquifer. Five use the Magothy and one uses Patapsco Aquifer. Having this many separate plants, many inherited from developers, creates significant operation and maintenance (O&M) costs and issues for the County. Many of the water treatment plants are in close proximity to each other.

Current analyses by the Sanitary District of the cost of water treatment varies significantly between the Aquia and Magothy Aquifers. Capital costs for water treatment plants for water from the Aquia are reported to be $1,500 to $2,000 per gallons per minute (gpm). Capital costs for water treatment plants for water from the Magothy are reported to be $5,000 to $6,000 per gpm. The difference is due primarily to iron removal requirements. The cost to treat water from the Aquia is estimated to be $1.46 per 1,000 gallons versus $4.31 per 1,000 gallons of water from the Magothy. A new production well into the Patapsco Aquifer was installed recently for the Stevensville water plant. Iron levels were approximately 3 to 4 mg/l.

To address the O&M issues and to relieve demands on the Aquia Aquifer, the Sanitary District has proposed to further consolidate existing water treatment plants. The six significant private water treatment plants are operated in the Route 50/301 corridor and all use the Aquia Aquifer as the source of supply. Major water plants and systems are owned and operated by the Towns of Queenstown and Centreville. Water quality and supply are reported to be good with the only treatment being disinfection. Centreville currently uses wells in the Monmouth Aquifer; its Aquia Aquifer wells are not in current use.

Northern Kent Island Service Area

The County operates three water treatment plants for the Stevensville Area and five for the Chester Area. The Stevensville plants are all interconnected. Two of the five Chester plants, Bayside and Queen's Landing, are already interconnected. The Sanitary District has also interconnected two of the three plants south of Route 50/301, Kent Island Village and Bridgepointe, since they serve a relatively small customer base. It is anticipated the Stevensville plants will be connected to North Chester at some point in the future.

The Riverside plant will not be interconnected since it serves only 25 dwellings and is relatively distant from the other plants. Subsequently, the Kent Island Village/Bridgepointe systems would be interconnected with the Bayside/Queen's Landing system north of Route 50/301. This final phase would effect the consolidation of these facilities into the Northern Kent Island Service Area. The Kent Island Village and Bridgepointe water treatment plants, using the Aquia and Magothy Aquifers respectively as sources would then be abandoned. Thompson's Creek water treatment plant, using the Aquia Aquifer, and the Queen's Landing water treatment plant, using the Aquia, would serve summer peak demands or as a backup to the primary Stevensville water treatment plant. This plan is predicated on satisfactory water quality from the Stevensville Patapsco wells, particularly iron less than 5 mg/l. Initial results indicate iron is less than 5 mg/l. If this plan can be implemented as noted, Queen Anne's County will have consolidated the multi-user water supply systems, eliminated their demand on the Aquia Aquifer.

Grasonville Service Area

The County operates two water treatment plants in the Grasonville Area; the three other systems are community systems. The Grasonville Area is proposed to be split into two areas, East and West. Subsequently, the system could be interconnected with the Fox Run Condominiums, taking a privately-owned water treatment plant off-line. In the Grasonville West Area, the Oyster Cove water treatment plant could be expanded to serve the east side of Kent Narrows if MDE approves additional groundwater appropriations.

Southern Kent Island Service Area

Southern Kent Island (SKI) currently has no existing water treatment system. Given the recent analysis by the Maryland Geological Survey on impending contamination of the upper and middle parts of the Aquia Aquifer, drillers' reports on contamination in the lower Aquia Aquifer, and the need to decrease demands on the Aquia, it is likely that water service will need to be provided to this area. Currently, Kent Island Estates and Romancoke on the Bay have been identified as water problem areas and could be served by a central system. This system would have wells into the Patapsco Aquifer, a water treatment plant, and a distribution system with water storage. This system could be expanded to include Tower Gardens of the Bay, Queen Anne Colony, Kentmorr, Sunny Isle of Kent, and Chesapeake Estates, since they are nearby.

➢ *Wastewater Infrastructure Needs/Deficiencies*

Southern Kent Island Wastewater Subdistrict

This subdistrict is comprised of the area west of Route 8 (old/new) from and including the communities from Batts Neck to Romancoke and also including Kent Island Estates and Romancoke on the Bay. The southern boundary of the sub-district may be extended to Tower Gardens in the future. Uncorrectable septic system failures or site conditions leading to problems have been reported in communities in this area since the 1970's. Approximately 3,000 recorded lots exist within this sub-district. Uncorrectable septic system failures are defined as those that can only be remedied on-site by implementing a holding tank and not by repairing the septic system in a manner that allows direct groundwater penetration by the wastewater discharge. Because of lot sizes, soil conditions and high ground water table, on-site correction and clustered or shared systems are not considered viable options. The two major options previously identified by the County are:

- Construction of a new central wastewater treatment plant at Southern Kent Island and a new effluent outfall to the Bay, or
- Pump the wastewater to an expanded Kent Narrows/Stevensville/Grasonville (KN/S/G) plant at Stevensville

Currently, the Sanitary District is proceeding with upgrading/expanding of the KN/S/G wastewater treatment plant to 3 MGD, and ultimately to 5 MGD in the future. The plant's current capacity is 2 MGD. This approach will centralize and consolidate wastewater treatment operations and eliminate the need for a second effluent outfall into the Bay. From a wastewater treatment perspective, it is a cost-effective approach. Map 8 shows the existing sewer service system features and issues.

Kent Narrows/Stevensville/Grasonville Wastewater Subdistrict-Dominion/Marling Farms

Dominion and Marling Farms are two communities located south of Chester on Route 552 on Crab Alley Bay. Dominion has 225 parcels of which 200 contain homes; Marling Farms contains 406 parcels of which 310 contain

homes. Small lot sizes, seasonally high water tables and poor soil permeability create severe limitations for long-term septic system waste disposal. Dominion does not have space for growth. Marling Farms, if served by a centralized sewer, has approximately 100 parcels to accommodate growth. The Health Department continues to study and monitor this area. Service to this area has been considered in several planning documents since 1984. Historically, this area has been assigned a lower priority for service than Southern Kent Island.

Towns/Other Areas

Other areas within Queen Anne's County served by on-site septic systems have reported septic system failures or potential problem septic system areas. These areas include:

Barclay: The Town has a significant rate of septic system failure. The Town has planned a central gravity septic tank effluent collection/subsurface drainfield, but the system has not been implemented.

Crumpton: This area has highly permeable soils so there are very few problems. However, it should be monitored for groundwater contamination problems.

Queen Anne: Small lot sizes result in conditions that are unsuitable for long-term septic system use.

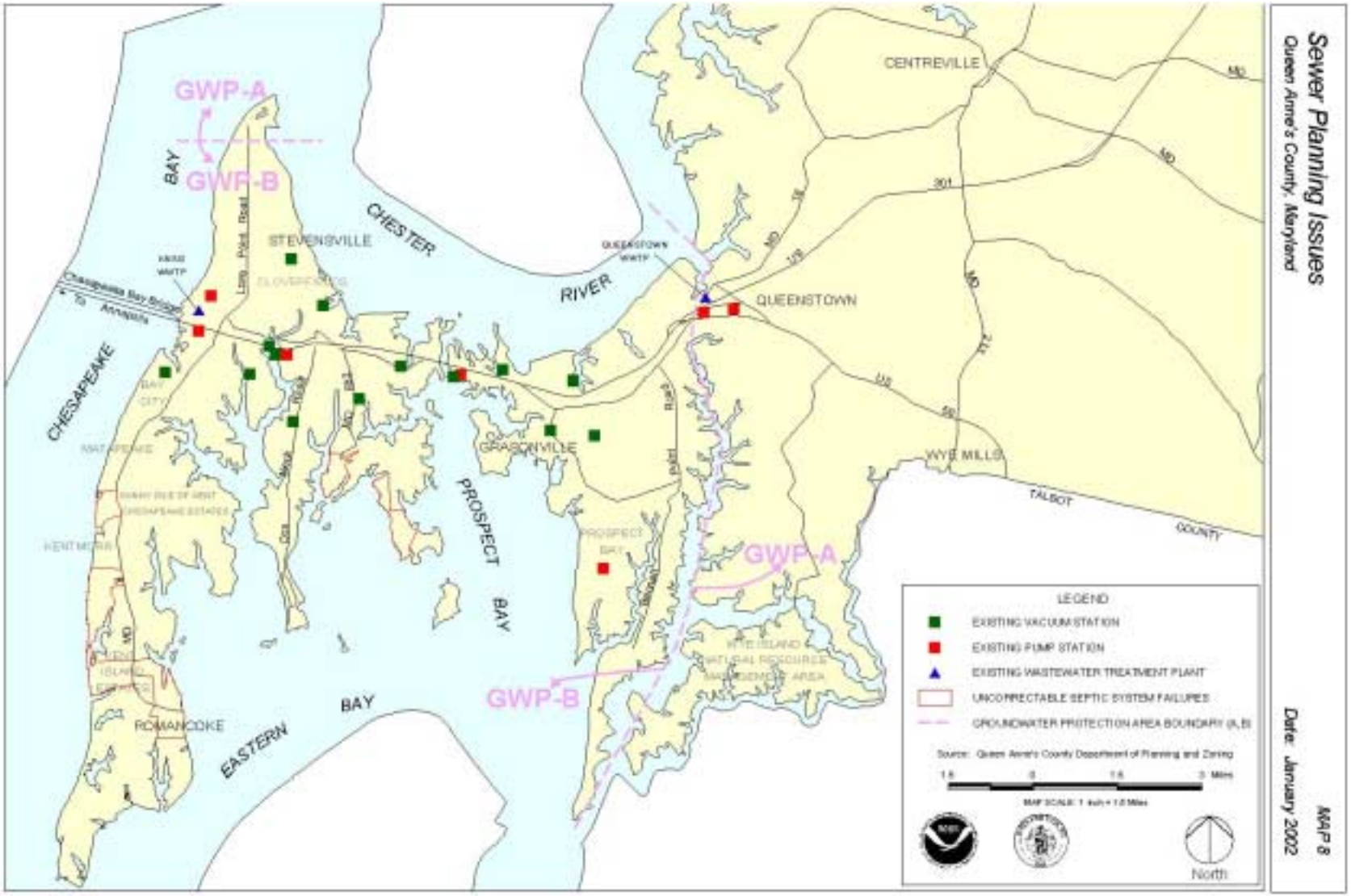
Templeville: Some reported septic system failures due to high water tables are currently being studied by Caroline County.

Matapeake Multi-use Field Station/Bay Model: On-site mound system is malfunctioning and inadequate for expansion of site activities.

Upgrades to Existing Collection/Transmission System

The current infrastructure associated with the KN/S/G system is approaching its design life of 20 years for many components. The system, which went on-line in 1982, has undergone upgrades to accommodate growth. Subsequently, the vacuum collection systems were expanded by extension to adjacent areas where feasible and new systems were built to accommodate problem areas such as Cloverfields and Bay City. Mechanical/electrical modifications/upgrades to the vacuum collection stations were necessary to accommodate system extensions in many cases. The two transmission system pumping stations constructed nearly 20 years ago are being upgraded to accommodate Prospect Bay flows. These modifications include pump and control system replacement at both stations.

An upgrade to the transmission system may be required in the future. Currently, corrosion problems are occurring in several sections of the system in Grasonville and on Kent Island. These problems have been attributed to corrosive soils.



Map 8: Sewer Planning Issues

➢ *Transportation*

Highway System Characteristics and Usage

System Characteristics. US 50 and US 301 are the principal highways in Queen Anne's County. Both routes enter the County via the Chesapeake Bay Bridge at the western end of Kent Island and split at Queenstown with roughly two-thirds of the traffic continuing east on US 50 and one-third turning north on US 301. Between the Bay Bridge and Queenstown, US 50/301 is a six-lane, access-controlled expressway. East of the split, both are four-lane divided highways with at-grade intersections, except for the US 301 interchange with Maryland Route (MD) 213. US 50 and US 301 are the only multilane, divided highways in the County. The only other State primary system route in the County is MD 404, a two-lane highway extending east from US 50 along the Talbot County line.

As the primary access route to Delaware and Maryland beaches, US 50/301 carries some of the highest traffic volumes on the Eastern Shore. Annual average daily traffic (AADT) in the corridor reached almost 80,000 vehicles on Kent Island near the Bay Bridge in 1999, and peak summer weekend travel exceeds this level. Most of the beach traffic remains on US 50 after the split with US 301, and much of the traffic destined to Delaware beaches subsequently turns east onto MD 404.

The State secondary system covers an extensive network of two-lane highways that are generally in good to excellent condition, but with some needing shoulder development. The two most important routes in the secondary system are MD 213, a north-south route across the County serving the County seat at Centreville, and MD 18, which parallels US 50/301 across Kent Island and links the communities of Stevensville, Chester, Grasonville, Queenstown, and Centreville. Traffic volumes reach a high of 14,325 vehicles on MD 213 between US 301 and Centreville. In the Kingstown area just south of Chestertown, they peak again at 11,975 vehicles. Volumes on MD 18 generally range from 2,000 to 4,000 vehicles.

Maryland Route 8 is also an important route, which serves Southern Kent Island. Maryland Routes 300 and 302 are east-west routes in the northern part of the County that link the US 301 corridor with the Dover metropolitan area in Delaware. Their highest 1998 AADTs were 3,125 vehicles on MD 300 and 4,650 vehicles on MD 302.

Beyond the State's primary and secondary road systems, Queen Anne's County maintains over 500 miles of County roads. Some of these roads in the County's growth areas, such as Greenspring Road in the vicinity of the Queenstown retail center and Castle Marina Road in Chester, are becoming increasingly important traffic carriers.

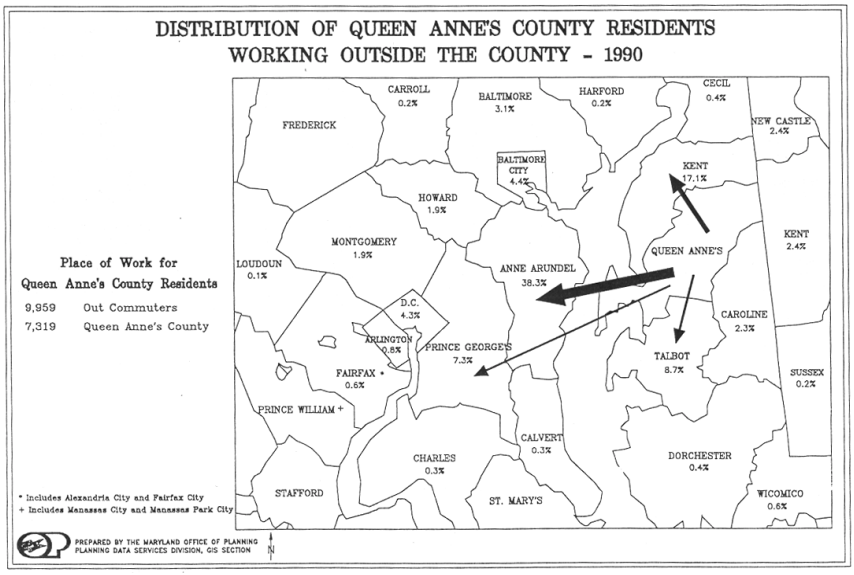
Traffic Growth Characteristics. The SHA provided AADT data for all state routes in the County for each of the five years from 1994-98. These data indicate a broad range in the rate of traffic growth over the last five years for different parts of the County. The highest traffic growth rates have been on US 50, where 1998 volumes are 60 to 73 percent higher than in 1994. This reflects an annual growth rate of 10 to 12 percent. From 1998 – 2000 US 50 has shown a modest increase in traffic. In contrast, US 301 north of the split with US 50 has experienced only modest traffic growth, except in the immediate vicinity of the Queenstown growth area. In the northern part of the County US 301 traffic has grown at a rate of one percent or less per year, while in the central section near Centreville, annual traffic growth has been between two and three percent.

Traffic growth on the secondary system has been highest in the Queenstown, Centreville, and Kent Island areas. Volumes have doubled on MD 213 and MD 304 between Centreville and US 301 because of increasing local development. Traffic on MD 8 south of US 50 on Kent Island has grown by 37 percent since 1994. While their 1994 base year AADTs were relatively low, MD 300 and MD302, which serve the Dover area and central Delaware, have experienced significant annual growth rates of eight to 15 percent in the last five years.

In summary, US 50 remains the most rapidly growing traffic corridor in Queen Anne's County with 1999 AADTs ranging from 40,000 to 80,000 vehicles. Volumes in the US 301 corridor range from a high of 26,525 vehicles just north of the US 50 split to a low of 12,000 vehicles north of MD 305. Traffic growth on secondary highways is highest in the Kent Island, Queenstown, and Centreville areas, as well as on MD 300 and MD 302 into Delaware.

Commuting Patterns: More than 57 percent of the County's employed residents (or a total of almost 10,000 residents) commute out of the County for work. This percentage is the fourth highest rate of all counties in Maryland. Most of the out commutation is to destinations within the Baltimore region. As Figure 7 shows, of those out-commuters, the most travel to Anne Arundel County and to Kent County, Maryland. There is a less significant amount (about 3,000 in-commuters) of non-residents driving to Queen Anne's to fill county-based jobs. Most of these drive from Upper Eastern Shore Counties including Caroline, Kent and Talbot and from Anne Arundel County on the Western Shore.

Figure 7: Commuting Patterns, 1990



Source: Maryland Department of Planning

Figure 8 shows that most County residents (76 percent) drive to work alone. A significant number carpool but very few report using other means.

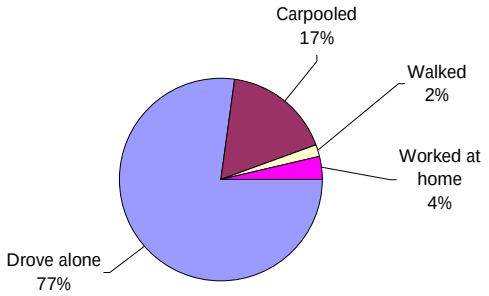


Figure 8: Means of Transport to Work, 1990
Source: US Census

Existing Deficiencies and Problems

Map 9 shows the following transportation issues.

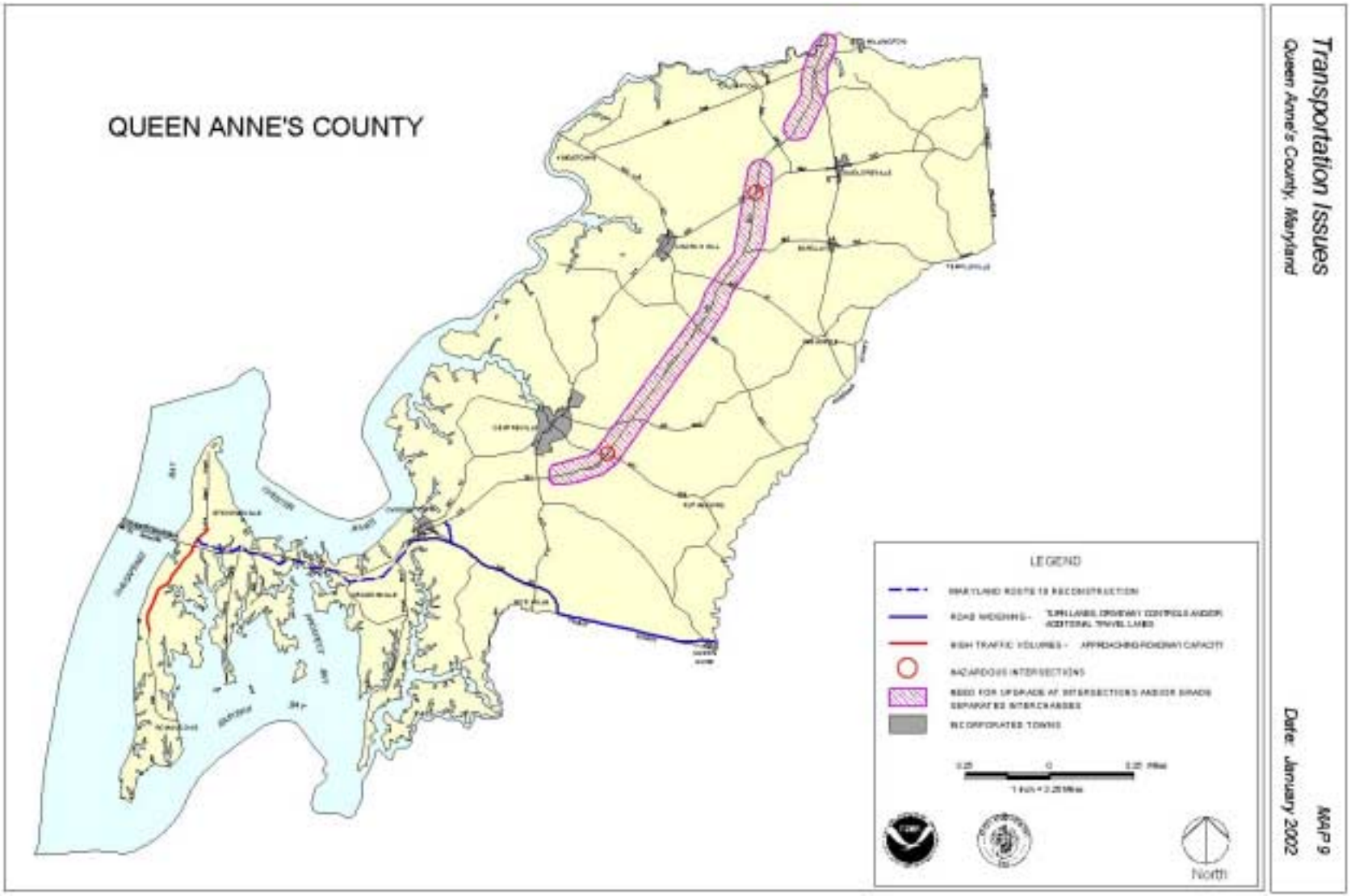
US 50 Corridor: The rapid traffic growth in this corridor underscores the need to expedite the SHA's planned improvement of the section east of US 301 to a six-lane, access-controlled facility. This $220 million project is funded for right-of-way acquisition, but not construction, which means its implementation is likely beyond 2003.

US 301 Corridor: The most significant problem in this corridor (north of US 50) is the conflict between high-speed traffic on US 301 and increasing cross route traffic on secondary highways, such as MD 300, 304, and 305, as well as MD 18 and Greenspring Road in Queenstown. The SHA has made traffic engineering improvements at most of the cross routes, but they remain hazardous locations because of the speed differentials between US 301 traffic and traffic stopping, entering, or crossing from local routes. The interchange that was built at MD 213 will likely have to be duplicated throughout the corridor, as both local and through traffic grows in the corridor. The SHA's Highway Needs Inventory estimates it will cost $174 million to upgrade US 301 between US 50 and the Kent County line to access-controlled standards with interchanges.

The extent and timing of US 301 improvements in Queen Anne's County may be affected by actions outside the County. Delaware is currently conducting a major study of future needs along its portion of the US 301 corridor. If it is upgraded to expressway standards in Delaware, that will put more pressure on making improvements in Maryland. US 301 is also seen as an alternative corridor to I-95 for north-south travel through the middle Atlantic States, especially as a bypass of the Baltimore-Washington urban region, particularly by truckers. Improvements to US 301 in Maryland west of the Chesapeake Bay and in Virginia could enhance its appeal as an interstate route and increase its volumes in Queen Anne's County.

The need for properly designed service roads in conjunction with proposed overpasses is a critical issue for local residents and businesses on US 50 and 301.

Maryland 404 : In conjunction with the rapid growth identified within the US 50 corridor and regional traffic growth destined for resort areas, MD 404 has been identified by SHA as a candidate for dualization. This project was originally planned and canceled in the early 1990's has received interest from local residents in Caroline, Talbot and Queen Anne's County is now being reevaluated by SHA officials.



Map 9: Transportation Issues

Kent Island Traffic Improvement Needs: The SHA has the two-lane reconstruction of MD 18 (Main Street) from Stevensville to Queenstown in its Highway Needs Inventory. The reconstruction of the Cox Creek Bridge and MD 18 improvements in Stevensville was completed in 1999 and the planned reconstruction of MD 18 is underway. The reconstruction of MD 18 has been needed since the upgrading of US 50 through this area, and its implementation should improve both the safety and efficiency of local traffic movement and US 50 access.

Another emerging problem is MD 8 from the Kent Island High school on the northern side of US 50 to Batts Neck road on the south side of US 50. The 1998 AADT on two-lane MD 8 just south of US 50 was approximately 16,500 vehicles, which is higher than the volume on some sections of US 301 and at the threshold of warranting four lanes. The area south of US 50/301 to Bay City is proposed for significant new development and MD 8 is the only route in the corridor.

A comprehensive analysis and access plan was undertaken by the County and State officials in May of 2000 to forecast and plan for roadway improvements along MD 8. This "Corridor Plan" will be used to stage improvements along MD 8 as growth occurs and will assist with targeting MD 8 as an important transportation needs project with MD SHA.

More growth is projected north of US 50 on Kent Island. New development in the Stevensville-Chester area will require careful consideration of its traffic impacts.

Queenstown and Centreville Traffic Improvement Needs: In the Queenstown area the improvement of Greenspring Road between US 301 and US 50 is a key proposal from the County's growth area plans, and it will provide a critical link across the east edge of this growth area.

Just north of US 301 near Centreville, volumes on MD 213 have reached 14,000 vehicles. Widening for turn lanes and driveway controls should be employed in this section. The volume on MD 304 between Centreville and US 301 was 5,250 vehicles in 1998, which is well below warrants for four lanes but high enough to exacerbate traffic conditions at its hazardous intersection with US 301. This intersection is the next likely candidate for an interchange on US 301. Although the traffic volumes do not currently warrant any capacity improvements, caution should be taken to ensure that the scenic qualities of MD 213 are not diminished.

Remainder of the County: There are no other areas of the County where existing volumes or traffic conditions warrant four-lane improvements. The SHA proposed the construction of a bypass for MD 213 around the east side of Chestertown in Kent County that would have its southern terminus in Queen Anne's County near the intersection of MD 213 and MD 544. However, this project has been dropped from the State's program because of local concerns about its possible impact on residential development, especially in the Kingstown area, and because they did not meet the Governor's Smart Growth initiatives.

Roadway Funding and SHA Expenditures in Queen Anne's County

Almost all road construction and repairs are paid for out of the Transportation Trust Fund, which is funded through gas taxes and multiple other sources but does not include local general revenue funds. Through the early 1990s, the SHA made very substantial highway investments in Queen Anne's County in the upgrading of US 50/301 to expressway standards and the construction of the Kent Narrows Bridge. As might be expected, recent capital expenditures for road improvements have been considerably smaller. Over the last three years, the SHA has

spent approximately $18.3 million on roadway improvements in the County, including several resurfacing projects. Another $2.8 million is currently being spent on the MD 18/Cox Creek Bridge reconstruction and $2.5 Million has been allocated for the MD 18 project in Grasonville.

It is not unusual for SHA expenditures in the County to follow erratic patterns because the cost of one major project, such as the Kent Narrows Bridge, can result in expenditures well above normal levels for the three to five years required to design and build the project. There have been no "big ticket" SHA projects in the County since the US 50/301 widening and bridge construction of the early 1990s. The next big SHA project will likely be the upgrading of US 50 to a six-lane expressway between US 301 and the Talbot County line. The SHA has already spent $18.6 million on planning, design, and right-of-way acquisition to date. Although no funds have been programmed for construction, the project is of strategic importance to the State as part of its efforts to improve ocean access for recreational travelers. The County has been working with SHA to review design options.

Transit/ Commuting Alternatives

The County Ride Public Transit System was established in 1998 as the first fixed route system on the Eastern Shore outside of Ocean City. Regular service on the principle route beings at 5:00 a.m. daily in Centreville with a route encompassing southern Queen Anne's County. Among areas served by County Ride are the Chesapeake Bay Business Park, the Kent Island Park and Ride (for connections with MTA vehicles to Annapolis, Baltimore, and Washington), Chesapeake College, and other shopping and business areas along the route. The route also offers extensions to Chestertown and Easton one day each week. The route runs until 8:00 p.m. each weekday in order to offer connectivity for the MTA commuter shuttles at the Kent Island Park and Ride.

A North County Route offers service to residents north of State Route 19 in Crumpton, Sudlersville, Barclay and Millington with daily trips to Chestertown. Other routes in service are in the Grasonville and Centreville areas. Under development is a Kent Island Shuttle which will cover only Kent Island and a Saturday Shuttle, also for Kent Island. These four routes have regular passengers for the senior centers in the areas but are also transporting a growing number of general public passengers.

In addition to the five public transit routes, an Assisted Transportation service provides passengers with access to medical facilities in Easton, Chestertown, Baltimore, Annapolis and other areas. Many of these passengers are wheel chair bound and require special assistance in order to receive care. Trips to dialysis centers, cancer treatments, physical therapists, and other specialized services are covered under this component. The system also is the contractual provider for Medical Assistance recipients in the county.

In FY 2001, the entire system provided over 44,000 trips to residents of Queen Anne's County. Growth of regular routed service is hampered by the fact that there are few concentrations of passengers as occur in urban areas. For that reason, a deviated fixed route service has been employed since the inception of service. A regular clientele now takes advantage of the service with a majority of public route passengers utilizing the service to travel to and from work and shopping.

As additional funding is made available through the Governor's Transportation Initiative, routes will be expanded to include connecting service to Chestertown and Easton and coordination with existing routes to Annapolis, Washington and Baltimore will be expanded. Under

consideration are plans for route coordination through Chesapeake College and improved service to medical centers in the metropolitan areas. A need expressed at public hearings is for Saturday Service; this will also be attempted on the Kent Island route.

Bay Bridge Airport

The Bay Bridge Airport located in Stevensville is a transportation and economic development asset for the County. The airport is well-used and currently has approximately 76,000 annual take-offs and landings. There is little, if any, capacity for airport expansion because of surrounding existing development. The Stevensville Community Plan recommends that height limitations for new surrounding development may be necessary to ensure flight safety during take-offs and landings.

The Bay Bridge Airport has 76,000 annual take-offs and landings

➢ *Schools*

Map 10 shows the location of the County's 12 existing public schools. Table 13 shows the current enrollment and relation of enrollment to capacity of the 12 schools. The figures are for Full Time Equivalent (FTE) enrollment. The table also shows Board of Education projected FTE enrollment and relation to school capacity for the year 2010 as distributed among the existing 12 schools. FTE accounts for 1/2-day pre-kindergarten and kindergarten children as part of the total enrollment by equating each morning and afternoon slot with one full time student. FTE is thus a more accurate depiction of capacity needs and utilization than an actual student count.

Although the Capital Improvement Plan calls for a new elementary school and a new middle school to be in place by 2004, the Board of Education projections shown in Table 13 do not incorporate this new capacity (600 elementary school places, 800 middle school places). One reason is that the locations of these proposed schools are not fixed. Consequently, any attempted redistribution of students among the new and existing schools at this time would not be an accurate planning guide. The projections do assume that all planned expansions of existing facilities will be completed.

As the table shows, the pressure on elementary schools in the Kent Island-Grasonville areas is not likely to lessen and will also increase in Centreville. The proposed new elementary school will absorb much of the projected demand in the Kent Island-Grasonville area. Centreville will not benefit from this expansion. In the more rural Church Hill and Sudlersville areas, enrollment is projected to decline.

Today, middle school capacity is still good. By 2008, however, the two middle schools serving the designated growth areas will essentially be at capacity. The more rural Sudlersville Middle School is planned to be upgraded and expanded, which will increase capacity by 2008.

If perpetuated, current trends would begin to strain the capacity of the Kent Island High School by 2004. In contrast, Queen Anne's High School would continue to easily absorb an increasing enrollment.

As these projections indicate, reliance on relocatable classrooms to relieve overcrowding of elementary schools may still be required ten years from now. Opening of the new

elementary school could diminish the scale of such need, but may not entirely eliminate it.

Additional school projections were undertaken as part of the alternatives analysis portion of this Comprehensive Plan. These are included in the Appendix to the Plan, which is available from the County's Planning Department.

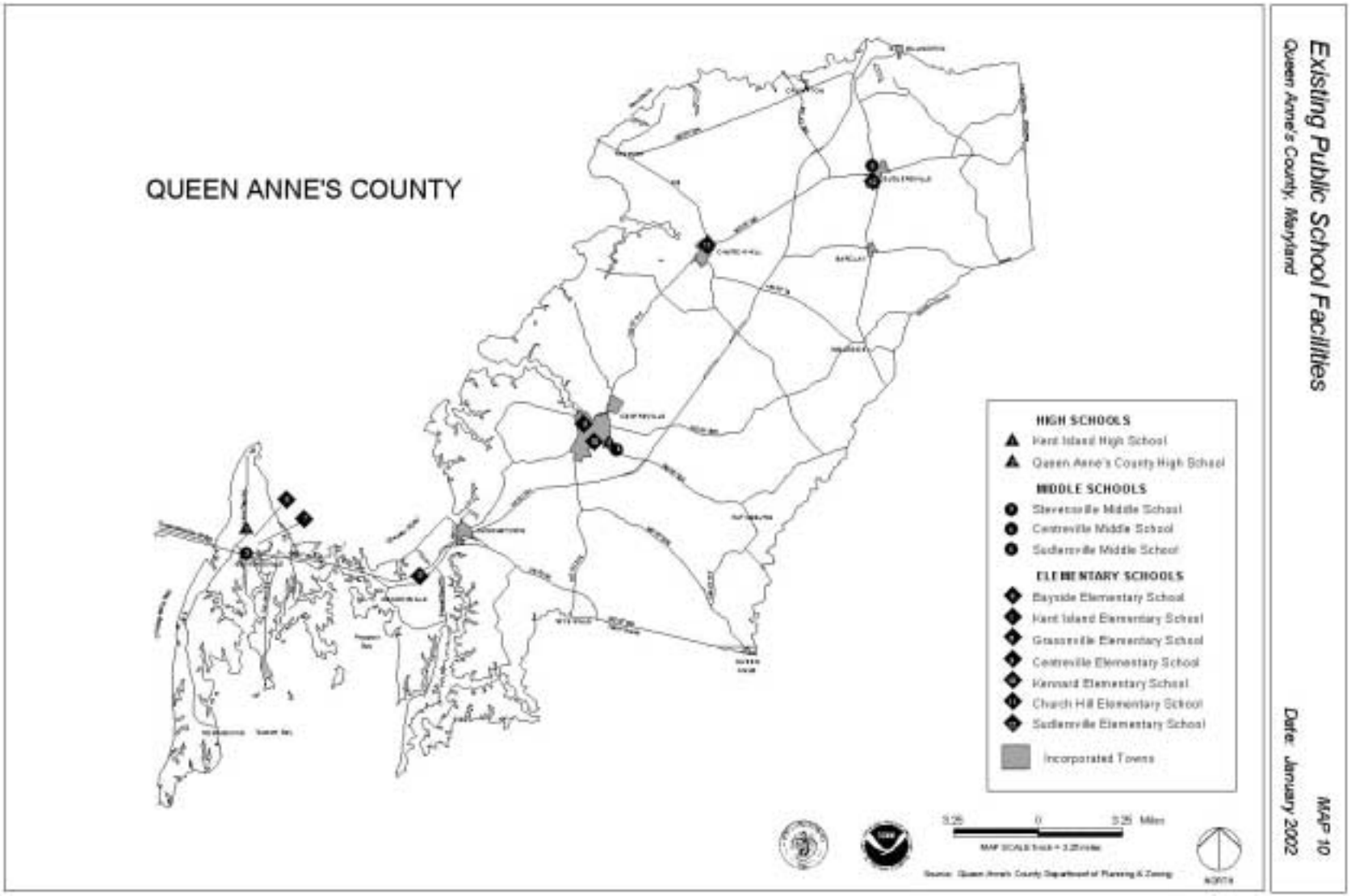
Table 13: Queen Anne's County Schools Analysis, 2001-2010

Map #	School Name	2001 Capacity	2001 FTE Enrollment	2001 Relocatable Units	2001 Surplus/ (shortage) Capacity	2001 % of Capacity	2010 Projected Capacity	2010 Projected Enrollment	2010 Surplus/ (shortage) Capacity	2010 % of Capacity
	Existing Elementary Schools									
2	Bayside	695	740	6	(45)	109%	695	900	(205)	137%
3	Kent Island	445	591	11	(146)	133%	445	825	(380)	185%
5	Grasonville	500	344	0	156	67%	500	411	(89)	62%
6	Centreville	369	360	6	9	97%	450	584	(134)	95%
8	Kennard	450	376	0	74	93%	450	519	(69)	95%
10	Church Hill	407	288	0	119	66%	407	417	(10)	75%
12	Sudlersville	450	383	0	67	110%	450	430	20	96%
	Proposed Elementary Schools									
	Kent Island – Kentmoor (600 Capacity)									
	Subtotal	3316	3082	23	234	97%	3397	4059	(662)	109%
	Existing Middle School									
4	Stevensville	757	799	3	(42)	93%	757	940	(183)	119%
7	Centreville	695	640	3	55	82%	695	675	20	83%
11	Sudlersville	359	347	5	12	87%	450	392	58	73%
	Proposed Middle Schools									
	Kent Island – Grasonville (800 Capacity)									
	Subtotal	1811	1786	11	25	88%	1902	2007	(105)	95%
	Existing High Schools									
1	Kent Island	1135	1140	0	(35)	77%	1335	1459	(124)	114%
9	Queen Anne's	1179	918	22	251	78%	1269	1122	124	114%
	Subtotal	2314	2058	22	216	78%	2604	2581	23	99%
	Total	7441	6926	56	475	88%	7903	8647	(744)	102%

Notes:

1. *All enrollment figures are for FTE and include Pre-K enrollment.*
2. *2010 projections are distributed among the 12 existing schools. No new schools are assumed. 2010 projects do not assume all planned expansions are completed.*
3. *Bayside elementary School capacity was increased by permanent attachment of four relocatables.*
4. *Relocatables at Queen Anne's High School will be removed when construction of facilities/expansion is finished.*
5. *Relocatables when used for classrooms accommodate 20-25 students.*
6. *The location of relocatables are not projected for 2009 as their use is determined on an as needed basis.*

**Subtotals do not count planned schools. Capacity of planned schools listed only for information*



Map 10: Existing Public School Facilities

➢ *Fiscal Health*

Revenues and Expenditures

In FY 2001, the County received 52 percent of its general fund revenues from property taxes and an additional 35 percent from income taxes. All other sources represented a small proportion of overall revenues with the next highest source being other local taxes, which includes recordation and sales taxes for a total of five percent.

In FY 2001, general fund moneys spent on education represented more than 56 percent of the county's expenditures, followed by public safety at 14 percent, general government at 8 percent, and transfers to pay for capital projects at four percent. The FY 2002 budget shows education funding remaining steady at 56 percent. The largest portion of the increase in cost from 2000 to 2002 is debt service on bonds sold to renovate school facilities. Debt service on school buildings increased by 57 percent from $2.7 million to $4.3 million.

Tables 14 and 15 show the breakdown of FY 2000 through FY 2002 general fund revenues and expenditures by category. FY 2001 and 2002 figures are actual revenues and expenditures, FY 2002 are per the adopted budget.

Table 14: Queen Anne's County General Fund Revenues, FY 2000 – FY 2002

Revenue Sources	FY 2000 Actual	FY 2000 Percent of Total	FY 2001 Actual	FY 2001 Percent of Total	FY 2002 Adopted	FY 2002 Percent of Total
General property taxes	26,879,315	49.9%	31,470,442	51.7%	32,772,850	50.4%
Local income taxes	19,373,084	35.9%	21,498,495	35.3%	23,250,000	35.8%
Other Local Taxes	3,000,709	5.6%	2,961,474	4.9%	2,655,000	4.1%
Licenses & permits	569,553	1.1%	639,363	1.1%	572,400	0.9%
Intergovernmental	1,249,775	2.3%	1,214,307	2.0%	1,365,812	2.1%
Charges for services	992,283	1.8%	1,099,645	1.8%	972,900	1.5%
Interest	591,824	1.1%	757,051	1.2%	550,000	.8%
Rents	43,535	0.1%	49,112	1%	46,000	0.1%
Miscellaneous	327,674	0.6%	327,726	0.5%	686,275	1.1%
Appropriated Fund Balance					1,227,000	1.8%
Transfers from other funds	882,504	1.6%	850,738	1.4%	870,918	1.4%
Total	53,910,256	100.0%	60,868,353	100.0%	64,969,155	100.0%

Source: Department of Finance

Table 15: Queen Anne's County General Fund Expenditures, FY 2000 – FY 2002

Expenditures	FY 2000 Actual	FY 2000 Percent of Total	FY 2001 Actual	FY 2001 Percent of Total	FY 2002 Adopted	FY 2002 Percent of Total
General Government	4,184,904	7.8%	5,135,886	8.4%	5,618,753	8.6%
Public Safety	7,491,702	13.9%	8,655,002	14.2%	9,625,836	14.9%
Public Works	2,267,797	4.2%	2,477,744	4.1%	2,977,308	4.6%
Public Health	879,277	1.6%	931,775	1.5%	1,125,724	1.7%
Social Services	648,475	1.2%	913,496	1.5%	868,274	1.3%
Education*	30,985,706	57.5%	34,627,436	56.7%	36,497,040	56.2%
Parks & Recreation	1,517,391	2.8%	1,697,205	2.8%	1,818,381	2.8%
Libraries	852,183	1.6%	904,151	1.5%	935,439	1.4%
Conservation of Nat'l Resources	298,586	0.6%	331,020	0.5%	349,371	0.5%
Economic & Community Devlpmt	878,577	1.6%	903,200	1.5%	1,215,069	1.9%
Insurance & Local Allocations	489,544	.9%	470,037	.8%	440,025	.7%
Intergovernmental	127,070	0.2%	138,994	0.2%	132,636	0.2%
Debt Service	620,670	1.2%	1,296,413	2.1%	1,300,799	2.1%
Contingency	110,564	0.2%	56,520	0.1%	150,000	0.2%
Transfers to other funds	2,524,413	4.7%	2,583,331	4.1%	1,914,500	2.9%
Total	53,876,859	100.0%	61,122,210	100.0%	64,969,155	100.0%

Source: Queen Anne's County Department of Finance

**Includes debt service on school facilities.*

Property Tax Rate and Total Assessable Base

For FY 2002, Queen Anne's County property tax rate is $0.976 per $100 of assessed (market) value. This is in the middle of property tax rates in the State. Ten counties have lower rates while thirteen are higher. Each one penny tax rate increase will generate approximately an additional $335,000 in revenues. From Fiscal Year 1989 to 1996, the County kept its tax rate unchanged despite a period of significant population growth and the concomitant growth in necessary facilities and services to serve this growth. For many years, some needed capital expenditures were delayed such as renovation and construction of new schools and others were undertaken using borrowed funds. For instance, prior to the 1991 opening of Bayside Elementary School, the last major school project was the construction of Centreville Middle School in the late 1970s. In 1997, the county raised the tax rate only to reduce it again to a level just above the previous level rate for fiscal 1999 and 2000. This has placed a substantial burden on the County agencies as they try to provide services and facilities to County residents and businesses. It has also forced the county to carry a high tax rate of indebtedness. In 2001, the County increased the tax rate by $.25 to $2.44. Prior to FY 2002, the rate was based on 40% of assessed (market) value.

The County had the sixth lowest total assessable base in the state during FY 2001. Assessable base is the total assessed value of all taxable real estate and personal property in the County. Only Caroline, Dorchester, Garrett, Kent, and Somerset have lower assessable base totals. The

County's low base is due mainly to the relatively low amount of non-residential development. Job-rich communities on the Western Shore such as Montgomery and Baltimore County have a much larger tax base. The County's real property assessed values have been increasing at an average rate of about 4 percent from FY1999 to FY2001 and have increased by almost 85 percent since 1992.

Income Taxes and Revenues

Local income tax, formerly known as the "piggy-back income tax" is calculated as a percentage of state taxable income.

Beginning in calendar year 1999 the local income tax was "decoupled" from the State income tax. This legislation substantially altered the nature of the Maryland local income tax. For tax years 1999 and beyond, the taxes are calculated using a flat percentage of Maryland taxable income. This modification required each county's tax rates to be restated and adjusted to reflect the new tax structure. In essence, the "piggyback" tax was abolished and replaced with a simpler flat rate tax.
State law requires that a county adopt a tax rate for 2001 that is not less than 1.01% and not more than 3.04%. Queen Anne's tax rate for 2001 is 2.8% of Maryland taxable income. Seven counties (Alleganey, Charles, Frederick, Montgomery, Prince George's, St. Mary's, and Wicomico) have adopted income tax rates higher than Queen Anne's County. Queen Anne's County ranks 17th out of the 23 Maryland counties plus Baltimore City in total net taxable income based on the 2000 filing year.

Transfer Taxes

Seventeen counties including Baltimore City exercise their authority to levy a transfer tax on real property transactions. This is a local levy in addition to the state's 0.5 percent transfer tax. The local rate is imposed as a percentage of each property transaction's total value. Queen Anne's County levies a 0.5 percent transfer tax. By way of comparison, of those counties that impose a transfer tax only Allegany, Caroline, Kent, and Worchester assess at the same or a lower rate as does Queen Anne's County. All the remaining assess a higher rate including Talbot, St Mary's Howard, Garrett, Baltimore County, Baltimore City, Montgomery, and Anne Arundel counties. The County does not currently have the authority to levy a transfer tax above 0.5 percent.

Impact Fees

Queen Anne's County levies impact fees for schools and public safety on each new dwelling unit and a public safety impact fee only on new non-residential development on a per square foot basis.

Based on the impact fee study undertaken at the county's request by Tischler & Associates (1996 to 1997), the County's impact fee structure was found to be inadequate to address the costs borne by the County to pay for school costs associated with new development. This analysis found that current impact fees covered only 36 percent of capital cost related to providing schools to service new development. Revisions to the impact fee ordinance are in progress as of June 30, 2001.

Bond Ratings and Bond Debt

Bonds are the mechanism used to finance long-term improvements. Ratings range from "AAA" for the best quality and smallest investment risk, to "C" for the poorest risk. Bonds with ratings of A and above are considered investment grade. A lower bond rating will require the payment of higher interest rates which in turn raises the cost of borrowing to the jurisdiction. For counties, key indicators in determining the bond rating are size and growth of the tax base and evidence of good fiscal management and planning.

Queen Anne's County is rated A by Standard and Poor's and A+ by Moody's. This is the same bond rating as Baltimore City and similar to those of St. Mary's, Wicomico, Cecil, and Washington counties. Of all the counties with bond ratings, Allegany, Caroline, and Dorchester Counties have lower ratings. This is indicative of the overall high quality of Maryland credits as viewed by the rating agencies.

At the end of fiscal 2001, the County's ratio of bonded debt to assessed value was 4.5. This is a substantial increase over the ratio 1.7 in 1992. Total net bonded debt at June 30, 2001 was $58.7 million. Expressed in another way, this net bonded debt was more than $1,440 per capita. This is four times higher than it was in 1992 when the figure was about $350 per capita. The high level of debt is a result of insufficient revenues to finance needed capital projects.

In FY 2001, the County issued bonds in the amount of $32.9 million. The resulting debt service required that the real property tax rate be increased to provide adequate funding for necessary services. This level of bonding is expected to continue. The adopted Capital Plan calls for the issuance of $48.2 million of bonds in the years 2002 to 2007.

➢ *Historic Resources*

Setting

The unique heritage of Queen Anne's County is evident in its historic urban centers, rural agricultural land, and maritime ports. Preservation of the region's quality of life will not only strengthen community ties, but also spur development of the tourism industry and increase private investment into the area. The following section documents the history of Queen Anne's County and provides a summary of the County's historic and cultural assets.

Overview of Queen Anne's County History. Documented inhabitants have resided on the Eastern Shore for over 11,000 years. In 1608 and 1609, Captain John Smith was the first European to explore the Eastern Shore. The first documented maps of the Chesapeake region were produced as a result of these voyages. A Virginia colonist by the name of William Claiborne attempted a settlement on the mouth of the Chester River on Kent Island in 1631. This settlement, Fort Kent Manor, was intended to serve as a trading post for the Virginia colony. However, Cecil Calvert (the second Lord Baltimore) claimed that the island was a portion of the land grant given to his family by royal charter and thus established it as part of Maryland.

Throughout the 17th and 18th centuries, tobacco cultivation dominated the way of life of these Eastern Shore residents. The wide dispersion of tobacco plantations throughout the countryside coupled with the availability of wharves at these plantations slowed the development of towns and created a landscape dependent on water transportation. In 1706, Queen Anne's County was formally established with Queenstown serving as its County seat.

With fluctuating demands for tobacco during the pre-industrial era, many plantations switched production to grain. The widespread cultivation of grain is credited for the landscape prevalent throughout the County today. Many of the earlier tobacco fields were small, irregular, and geared toward manual methods of cultivation. The cultivation of grain resulted in an orderly arrangement of larger farms. Due to the demand for grain from urban areas in the northeast, the Eastern Shore developed a strong link with northern markets.

The landscape of the Eastern Shore was beginning to feel the impact of numerous years of colonial and pre-industrial cultivation in the 19th century. It became necessary for farmers to implement crop rotation practices and use natural and chemical fertilizers. Technological advances such as steam-powered vessels, farm machinery, and the railroad dramatically increased production and led to the development of new markets such as fruits, fishing, and oystering. The emancipation of the slaves created new communities in the later 1800s and further added to the productivity of the region.

The completion of the gradual shift in primary transportation and freight movement throughout the region completed itself in the 20th century with the introduction of the automobile and the development of the interstate highway system. The automobile led to the creation of a more connected transportation system and opened up areas of the County that were previously inaccessible to residents. The completion of the Chesapeake Bay Bridge in 1952 released a wave of business, industrial, and residential development on the Eastern Shore, which stimulated substantial new development in the western portion of the County.

Historic and Cultural Sites

The following paragraphs document some of the major historic and cultural resources in Queen Anne's County. These resources are shown on Map 11 and listed in Table 16.

Kent Island: As the site of the first English settlement in Maryland, Kent Island has a history dating back to the 16th century. With the establishment of the first English settlement in Maryland, Kent Island evolved into a major residential and commercial area. Stevensville, the island's unincorporated center, was established in 1850. Listed on the National Register of Historic Places, Stevensville's Historic District provides numerous examples of the County's unique cultural heritage. Historic resources on the island range from architectural (Cray House, Stevensville Bank Building) to religious centers (Methodist Protestant Church, Christ Church) to historic economic and civic uses (Stevensville Train Depot, Stevensville Post Office).

Queenstown: Established in 1707 from 100 acres of the Bowlingly plantation, Queenstown (originally referred to as Queen Anne's Town) served as the original County seat. Its proximity to the Chester River allowed the town to flourish and serve as home to a large fleet of commercial fishing vessels for the region during the 18th century. Importance of this port to the Eastern Shore was most notably realized during the War of 1812 when the British launched several land and sea attacks on Queenstown. Historic resources include a colonial courthouse, several churches, and several private residences.

Centreville: As the current County seat, Centreville has enjoyed a long history dating back to 1692 with the establishment of St. Paul's Parish. In response to the demand for a more centrally located courthouse, the Maryland State legislature relocated the courthouse and government center from Queenstown to a 400-

acre tract known as "Chesterfield" in 1792. Officially incorporated in 1794, Centreville lies at the head of the Corsica River and is centrally located within the County and the Eastern Shore. The historic character of the town is evident in the numerous architectural examples from the austere federal period and the Victorian era. Centreville is also home to the Queen Anne's Museum Of Eastern Shore Life. This museum actively promotes the agricultural and maritime heritage of the region through exhibits and displays of artifacts, agricultural tools, household goods and other cultural relics.

Wye Mills: This area of Queen Anne's County was named after the Wye Grist Mill, the Eastern Shore's oldest frame grist mill, and is listed on the National Register of Historic Places. Mill operations were so successful that during the 1706 survey of the border between Queen Anne's and Talbot County the mill served as a reference point. The State of Maryland acquired the mill in 1953 in order to convert the millpond into a community fishery and flood-control project.

Wye Island: Wye Island was originally referred to as the "Great Island in the Wye River." The island was predominantly occupied by a handful of farms until the 1970's when pressure to develop the area as a planned community occurred. Due to local opposition, development plans were halted and the State of Maryland purchased 2,450 acres for the creation of the Wye Island Natural Resources Management Area.

Other Historic Sites: There are several other areas within the County with historic or cultural resources. Several historic churches are located in the town of Church Hill. Sudlersville is the site of Dudley's Chapel, the first Methodist meeting house in Queen Anne's County, and was the childhood home to baseball great Jimmy Foxx. Developed in the 19th century around McCallister's Ferry, the town of Crumpton served as a popular crossing for travelers during the winter months due to the swift current of the Chester River, which slowed the development of ice.

Status of Preservation Measures in Queen Anne's County

The County's community plans for Centreville, Chester, Grasonville, Stevensville, and Queenstown developed in 1997 and 1998 address streetscape issues, community character, and historic resources. Several studies also have addressed the need for regional cooperation for the preservation of the entire Eastern Shore. Two of these studies as well as current planning efforts are highlighted below.

Countryside Stewardship Exchange Program. In 1994, the County participated in the Countryside Stewardship Exchange Program performed in the Chesapeake Bay region. This program provided an opportunity for professionals from the U.S. and abroad to make recommendations on future courses of action for the community in order to preserve unique cultural, historic and natural resources. As a component of this program, three separate studies were conducted along the Eastern Shore from Pennsylvania to Virginia. Queen Anne's County was studied in conjunction with Kent County. Recommendations from this report include: raising public awareness about the region's heritage, developing industries that promote the traditional lifestyle and quality life of the area, creating a shared vision among neighboring communities and counties and developing adequate mechanisms for communication.

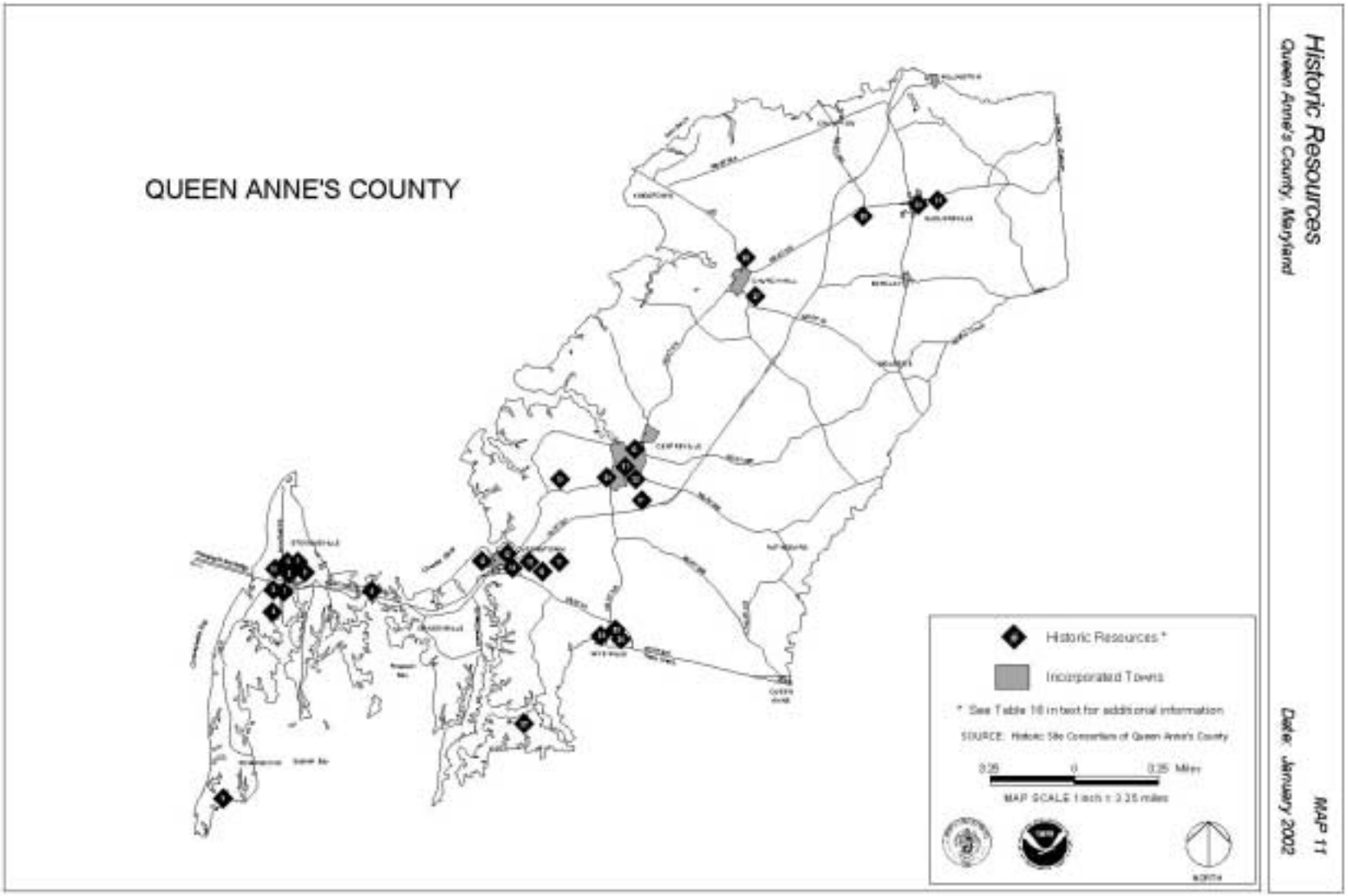
Heritage Planning Initiative. Officials and private groups from Maryland's Eastern Shore (Queen Anne's, Kent, Talbot, and Caroline Counties) initiated a proposal to develop a Heritage Area for the Upper Eastern Shore in 1999. Established by the Maryland General

Assembly in 1996, the Maryland System of Heritage Areas is intended to promote historic preservation and stimulate the economy through the generation of sales, tax revenues and income. A feasibility study, prepared for the Heritage Partnerships for Maryland's Upper Eastern Shore, outlined the region's historical resources and developed a process for managing the Heritage Area, which is now officially recognized by the State. Work is underway to develop a management plan for the Area.

Current Preservation Efforts: Queen Anne's County is actively involved in efforts to preserve the distinct quality of life and heritage of the County. In 1995, the County created the Historic Sites Consortium (HSC) to assist in site management organizations with promotion, increase public access to historic sites, increase the knowledge and application of museum standards, develop exhibits and obtain funding assistance. The HSC consists of 11 organizations and 15 historic sites within the County. A part-time coordinator was hired in 1997 to manage the program. Since its creation, the HSC has held open house events, designed a "History & Heritage Explorer" Tour Map, held a docent training program and been involved with the Heritage Area Planning Initiative. The consortium is currently working on developing a Youth Heritage Initiative designed to provide educational materials and field trips to third and fourth graders from County schools.

Chesapeake Country Scenic Byway: The Planning and the Business and Tourism Development Departments of Queen Anne's County, in conjunction with Kent and Cecil Counties and the State Highway Administration (SHA), have prepared a Corridor Management Plan (CMP) for the state-designated Chesapeake Country Scenic Byway. This 90-mile corridor runs primarily along MD 213 and MD18 between the Chesapeake and Delaware Canal and the Chesapeake Bay Bridge, with a branch on MD 20 and MD 445, which extends from Chestertown through Rock Hall to the Eastern Neck Wildlife Refuge. The Maryland SHA designated the Chesapeake Country route as a Scenic Byway in 1998 for its scenic, cultural, historical, recreational, and environmental qualities. The vast majority of the route consists of wide vistas of farmland, interspersed with small towns, most with extensive historical assets. Views of local hydrological features are common along the route as creek, river, and bay crossings occur throughout the corridor. In early 2000, the County hired a consultant to assist the cooperating counties with the planning process, prepare the CMP, and complete the National Scenic Byways application.

Now that the CMP is complete, the Chesapeake Country Scenic Byway team is eligible to apply for project grant funding, and to submit an application for National Scenic Byway designation. Both efforts are currently underway.



Map 11: Historic Resources

Table 16: Historic and Cultural Resources in Queen Anne's County

Map #	Area / Site	Status	Description
	Kent Island		
1	Christ Church	N	Founded in 1631, this site houses the oldest established congregation in the state and is home to a Gothic church. (C. 1880)
2	Cray House	N, Q	A rare example of "post and plank" construction, gambled roofed house. (C. 1839)
3	Kent Fort Manor Marker		Stone marker identifying the general location of the trading post established by William Claibourne. (1631).
4	Kent Manor Inn		Large county inn located in the middle of a 226 acre tract once called Smithfield. (1820s).
5	Kent Narrows		Historically a bustling commercial center for seafood processing and packing houses, the area now boasts numerous restaurants and the Chesapeake Exploration Center.
6	Lowery Hotel		A historic private residence altered to accommodate travelers. (C. 1860).
7	Methodist Protestant Church		Brick church constructed near the end of the Civil War. (C. 1864)
8	Stevensville Bank Building	N	The first banking enterprise located on the island. (1902-1907).
9	Stevensville Post Office	Q	Site served as the Stevensville Post Office for the first half of 20th century. (C. 1877).
10	Stevensville Train Depot	Q	Original station house at Stevensville for the Queen Anne's railroad system. (c.1902)
	Queenstown		
11	Bloomingdale	N	Federal style, 2-story brick mansion listed. (1792).
12	Bowlingly	N	Georgian style private residence. (1733).
13	Colonial Courthouse	Q	First courthouse in the county. (C.1708)
14	My Lord's Gift		Large tract of land given as a gift by Charles Calvert, Third Lord Baltimore. (1658).
15	St. Luke's Episcopal Church		Small county church. (1840-1841).
16	St. Peter's Catholic Church	N	Romanesque and Victorian architecture adorn this church. (1823-27, 1877).
	Centreville		
17	Kennard School		First and only secondary school for blacks in Queen Anne's County. (1936).
18	Queen Anne's Courthouse	Q	Oldest continuously used courthouse in Maryland. (1792-94).
19	Queen Anne's Museum of Eastern Shore Life	Q	Exhibits focusing on Queen Anne's rural lifestyle.
20	St. Paul's Episcopal Church		Stained glass windows and a herb garden adorn this church. (1834).
21	Tucker House	Q	Federal style private residence. (C. 1794).
22	Wright's Chance	Q	Frame style plantation house from the mid- to late- 18th century. (C. 1744).
	Wye Mills / Wye Island		
23	Wye Island		Historical island currently the Wye Island Natural Resources Management Area.
24	Wye Mill	N, Q	Eastern Shore's oldest frame grist mill. (late 18th century).
25	Wye Oak		16th century white oak tree recorded as one of the oldest specimen eastern U.S.
26	Wye School		One-room schoolhouse with Flemish influences. (C. 1800s).
	Churchill		
27	Church Hill Theatre	Q	Originally used as town hall, theatre still brings performing arts to the county.(1929).
28	St. Luke's Episcopal Church	N	Oldest brick church in MD. (C. 1732)
	Sudlersville		
29	Dudley's Chapel	N, Q	First Methodist meeting house in Queen Anne's County. (C. 1783).
30	Jimmy Foxx Memorial Statue		Lifesize bronze statue of Baseball Hall of Fame member Jimmy Foxx.
31	Sudlersville Train Station	Q	Only remaining Queen Anne's County station surviving on its original site. (C. 1885).

N = National Register of Historic Places, Q = Historic Sites Consortium of Queen Anne's County

➢ *Agriculture*

The County has some of the most productive soils in Maryland. According to the *Agriculture in Maryland Summary for 1998* prepared by the Maryland Department of Agriculture, Queen Anne's County is the largest producer of corn, soybeans, and wheat in Maryland. Of the total yield for various crops within the State, Queen Anne's County produces three percent of the total output for corn used as silage, 16 percent of the total output for soybeans, 16 percent of the total output for wheat and 11 percent of the total output for barley. Conserving agricultural resources within the County will be paramount not only to protecting a segment of the County's economic base, but preserving the historic heritage and culture of the region.

The County has some of the most productive soils in Maryland.

Farm Numbers, Size, Operation, and Ownership. An analysis of the Agricultural Census from 1987, 1992, and 1997 showed that the number of farms declined by eight percent during this time period as shown within Table 17. Mid-sized farms (50 to 499 acres) experienced the largest decline while farms between 10 and 49 acres and those over 1,000 acres increased slightly. These figures, shown in Table 18, demonstrate that mid-sized farms are more likely to face development pressure and are often subdivided for residential and farmette uses or are absorbed into large farms.

Table 17: Number of Farms

	1987	1992	1997	% Change (87-97)
Farms	457	413	419	-8%
Farm Acres	170,677	165,349	167,957	-2%

Source: 1987, 1992, and 1997 Census of Agriculture

Table 18: Farms by Size

	1987	1992	1997	% Change (87-97)
1 to 9 acres	32	26	30	-6%
10 to 49 acres	69	90	88	28%
50 to 179 acres	115	90	97	-16%
180 to 499 acres	131	95	89	-32%
500 to 999 acres	59	63	61	3%
1,000 acres or more	51	49	54	6%

Source: 1987, 1992, and 1997 Census of Agriculture

Further analysis of the Agricultural Census finds that the average size of farms has stayed constant at about 400 acres but the number of farmers reporting farming as their principal occupation declined by approximately five percent. The average age of farmers also increased from 52 to 54 years during this time. These figures reveal that farmers are staying on and fewer are transferring farms to the next generation, a potential threat to the long-term viability of the County's agricultural economy and way of life.

In 1997, a majority of all farms within Queen Anne's County were owned and operated by the same individual. During the 10-year period from 1987 to 1997, the County experienced a decline in the number of farms operating under full and partial ownership status. These figures are presented in Tables 19 and 20.

Table 19: Operators by Principal Occupation

	1987		1992		1997	
	All Farms	%	All Farms	%	All Farms	%
Farming	281	61%	266	64%	268	64%
Other	176	39%	147	36%	151	36%
Total	457	100%	413	100%	419	100%

Source: 1987, 1992 and 1997 Census of Agriculture

Table 20: Farm Ownership

	1987				1992				1997			
	Farms	%	Acres	%	Farms	%	Acres	%	Farms	%	Acres	%
Full Owner	244	53%	46,878	27%	220	53%	44,090	27%	229	55%	54,612	33%
Part Owner	139	30%	93,235	55%	111	27%	89,984	54%	115	27%	83,555	50%
Tenant	74	16%	30,564	18%	82	20%	31,275	19%	75	18%	29,790	18%
Total	457	100%	170,677	100%	413	100%	165,349	100%	419	100%	167,957	100%

Source: 1987, 1992, and 1997 Census of Agriculture

Farms with Sales Over $10,000.

One of the key indicators of the vitality of an agriculture system is farms with sales of more the $10,000 per year. These farms demonstrate those with substantial agribusiness operations and remove those with part-time or "hobby" farming functions. Over the ten-year period from 1987 to 1997, the number of farms achieving sales of greater than $10,000 stayed fairly constant as did the total acreage consumed by these farms. These figures are shown in Table 21.

Table 21: Farms Sales of 10K or More

	1987	1992	1997	% Change 87-97)
Farms	288	308	293	2%
Total Acres	155,643	161,321	161,078	3%
Total Sales ($1,000)	30,706	54,849	68,358	123%
Avg. Sales per Farm	106,619	178,083	233,304	119%

Source: 1987, 1992, 1997 Census of Agriculture

Market Value of Crops and Production.

Further analysis of the Agriculture Census found that the market value of products sold from 1987 to 1997 increased by 54 percent after adjusting for inflation. These figures, shown in Table 22, only represent the value of the goods sold and do not represent those goods produced for livestock or poultry feed. Due to the 22 percent rise in the number of chicken farms and the 75 percent increase the number of chickens sold between 1987 and 1997, there is a growing use of crops produced that are unmeasured in the determination of the total market value.

Although the number of farms producing the County's major crops of corn, wheat, soybeans, and barley have decreased by 18 percent, the total acres in production increased by 37 percent and the total bushels produced increased by 107 percent. These figures suggest that farms operating today utilize more efficient production methods.

Table 22: Market Value of Agricultural Products Sold, 1987-1997 (in constant 1997 dollars)

		1987	1992	1997	% Change (87-97)
Total Sales					
	Total ($1,000)	44,732	46,344	68,736	54%
	Avg/Farm	97,882	112,215	164,047	68%
Sales by Commodity					
Crops	Farms	384	361	338	-12%
	Total ($1,000)	14,259	35,075	43,607	206%
Grains	Farms	359	329	292	-19%
	Total ($1,000)	12,009	29,576	36,167	201%
Corn for Grain	Farms	295	240	219	-26%
	Total ($1,000)	5,418	13,591	13,108	142%
Wheat	Farms	216	220	212	-2%
	Total ($1,000)	1,938	4,727	6,725	247%
Soybeans	Farms	307	291	272	-11%
	Total ($1,000)	4,201	10,564	15,506	269%
Livestock/Poultry	Farms	145	127	121	-17%
	Total ($1,000)	17,022	20,097	25,129	48%

Source: 1987, 1992, and 1997 Census of Agriculture

Expenses and Net Value Cash Return. Table 23 shows that production expenses increased by 47 percent from 1987 to 1997 for all farms within the County and 35 percent for farms with sales of $10,000 or more after adjusting for inflation. This increase in expenses is the result of rising costs associated with petroleum, feed, seed, repairs and interest rates. The Census of Agriculture also reports the "net cash return from agricultural sales for farm units," which details the gross market value of products sold minus the total operating expenses. In 1997, 50 percent of the farms within Queen Anne's County had net gains averaging $74,562. Average losses in 1997 were $17,799. Over the ten-year period from 1987 to 1997, the number of farms with net gains increased from 33 percent to 50 percent. These figures are shown in Table 24.

Table 23: Production Expenses Per Farm (Constant 1997 Dollars)

	1987	1992	1997	% Change (87-97)
All Farms	93,626	94,657	137,230	47%
Farms with $10K or more sales	141,914	127,036	191,553	35%

Source: 1987, 1992, and 1997 Census of Agriculture

Table 24: Net Cash Gains and Losses

	1987	1992	1997
Number of Farms with Gains	150	279	209
% of Farms with Gains	33	67	50
Avg. $ per Farm	48,294	63,865	74,562
Number of Farms with Loss	307	135	211
% of Farms with Loss	67	33	50
Avg. $ per Farm	21,230	10,494	17,799

Source: 1987, 1992, and 1997 Census of Agriculture

* Constant 1997 dollars

Regional Context. When compared with Maryland's other Upper Eastern Shore Counties (Caroline, Cecil, Kent, and Talbot), Queen Anne's agricultural industry is experiencing less farmland conversion and higher productivity. These relationships are shown in Tables 25 and 26. According to the 1997 Census of Agriculture, Queen Anne's County had eight percent of the farmland within the State as compared to the five percent average exhibited by the other Upper Eastern Shore counties. On average, the County's farms are experiencing a higher market value for products sold and lower production expenses than its Eastern Shore counterparts.

The County recognizes the need for the continued viability of its strong agricultural base and the importance of the integral agricultural support system that exists throughout the Eastern Shore. The County is committed to maintaining the low densities in agricultural areas while encouraging cluster development and the protection of natural resources and sensitive areas to maintain the maximum amount of productive soils for agricultural use.

Table 25: Acres of Agricultural Land

	1987	1992	1997	% Change (87-97)
Cecil	86,861	80,241	85,702	-1%
Caroline	132,804	126,981	111,316	-16%
Kent	133,597	131,283	117,526	-12%
QUEEN ANNE'S	**170,677**	**165,349**	**167,957**	**-2%**
Talbot	109,032	109,108	109,572	0%

Source: 1987, 1992, 1997 Census of Agriculture

Table 26: Regional Comparison of Agriculture on the Upper Eastern Shore, 1997

	Farms	Acres	% of State Total	Average Size of Farm	Total Market Value of Products Sold (1,000)	Market Value of Products Sold (per farm)	Average Production Expenses
Caroline	525	111,316	5%	212	95,120	181,181	167,878
Cecil	464	85,702	4%	185	59,052	127,267	108,392
Kent	314	117,526	5%	374	60,957	194,131	176,303
QUEEN ANNE'S	**419**	**167,957**	**8%**	**401**	**68,736**	**164,047**	**137,230**
Talbot	240	109,572	5%	457	48,530	202,208	164,057

Source: 1997 Census of Agriculture

➢ *Conservation Lands*

Map 12 shows all lands within Queen Anne's County (as of November 2001) that are currently preserved, conserved, deed restricted as open space as a result of cluster subdivisions or Transfer Development Rights (TDR) projects. In addition, publicly owned lands (State and County) are shown. Table 27 shows the amount of lands conserved by preservation programs or tools.

Total permanently protected acreage is 54,813 (67,783 minus 12,970 in MALPF districts, which are not permanent) or 23% of the County's total acreage. Publicly owned lands account for an additional 6,900 acres or 3% of the County's total acreage.

Table 27: Conservation Lands

MALPF Easements*	19,114 acres
MALPF Districts*	12,970 acres
MALPF/Greenprint Easements	222 acres
MET Easements	6,774 acres
Rural Legacy Easements	5,013 acres
Private Conservation Easements	1,378 acres
TDR Program	2,471 acres
Deed restricted open space *(as a result of cluster subdivisions)*	19,841 acres
Total	67,783 acres

Source: Queen Anne's County Department of Planning & Zoning

* The Maryland Agricultural Land Preservation Foundation (MALPF) program is explained on the next page.

Rural Preservation

Approximately 209,000 acres or 88 percent of Queen Anne's County is zoned Agricultural (AG) or Countryside (CS). The following rural preservation techniques are applicable in the AG and CS Zoning Districts.

Large Lot Subdivision: requires a 20-acre minimum lot size while meeting all other standards as outlined in the Code with regard to bulk standards in addition to a mandatory 35' frontage on a public or private road.

Sliding Scale Subdivision: the number of lots (including the residual parcel) may not exceed two lots for the first one hundred acres of a parcel and one lot for each additional hundred acres or part thereof. (Minimum lot size is 20,000 sq. ft.) The technique was specifically incorporated to allow rural landowners a simpler, less expensive option of subdividing their land.

Cluster Subdivision: maximizes the development potential of the property with one dwelling unit per eight acres permitted on 15 percent of the property with the remaining 85 percent of the property deed restricted via open space covenants. (Minimum lot size is 20,000 sq. ft., 15 percent net buildable includes all lots, roads, etc.)

The 19,841 acres of open space listed in Table 27 represents 85 percent (or the minimum amount of open space required) of the total acreage involved in the cluster subdivision process. Although most subdivisions do not maximize their development potential, ultimately they have the option to develop up to 15 percent of their properties. There is no requirement that the deed restriction for agriculture use be "tillable" land. The "open space" usually includes natural resources that are required to be protected by State or Federal regulations such as woodlands, wetlands or habitat protection areas.

The following options are alternative development techniques and are also available:

Non-contiguous development: Allows a landowner or group of landowners whose properties are in the same zoning district but not contiguous to file a development plan as if the lands were one parcel. Although no density bonus is derived from using the technique, it does allow the reduction of open space to 50 percent on the "developed" parcel to concentrate the development while maintaining the 85 percent open space overall. Several of the larger subdivisions in the Ag. districts within the last two years have employed this technique resulting in approximately 500 acres of additional open space being created.

Transfer of Development Rights (TDRs). Queen Anne's County TDR program has been in place since 1987, when agriculturally zoned lands were downzoned from one dwelling unit per acre to one dwelling unit per eight acres. Modifications to the TDR program concurrent with the 1994 Zoning Ordinance update permitted four acres of AG land and five acres of non-Critical Area CS land respectively to be deed restricted per one development right.

Current regulations also require non Critical Area TDRs to be placed down within the boundaries of designated growth areas. As a result of the recent completion and adoption of five growth area plans, receiving parcels for TDRs have been identified. In some cases, the transferor or sending parcels have been restricted to those lands within the same election district. To date, development proposals in the growth areas have not opted to take advantage of TDRs to maximize development yield.

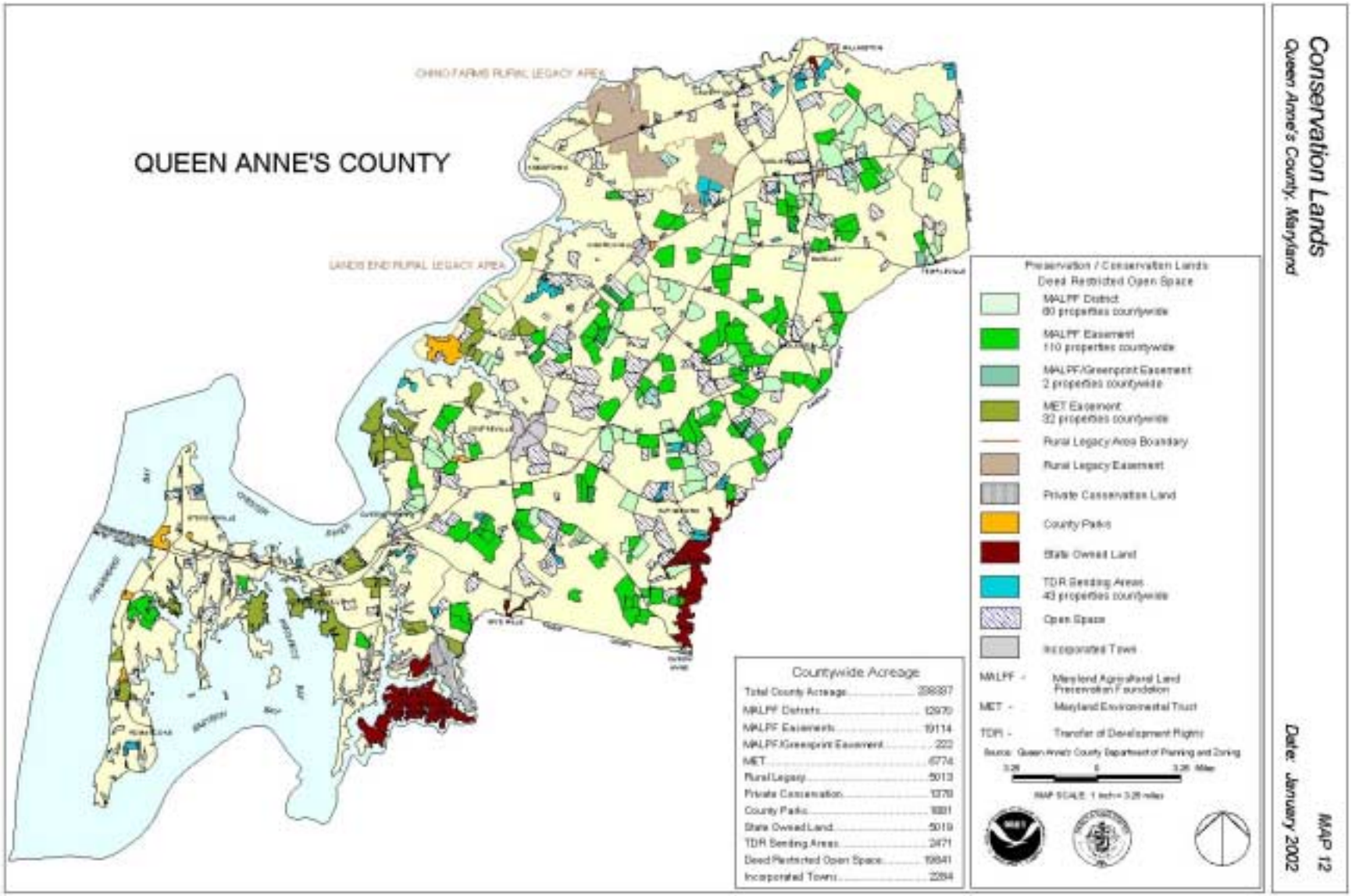
As an additional incentive for TDR use, there is also a conversion provided for non-residential uses. Deed restricting the standard acreage of AG and non-Critical Area CS land is the equivalent of 200 sq. ft. of floor area and 500 sq. ft. of impervious surfaces on the receiving parcel. Incorporating the use of TDRs allows an overall increase in floor area and impervious area by 25 percent and a decrease in landscaping surface area by 25 percent on the project.

Preserving agriculture and rural character.

The transfer of development rights is regarded as a private market transaction between willing buyers and sellers. To date, the County has not been involved in the process, with the exception of reviewing the necessary legal documents for consistency with the Code and other regulations and to receive them once they are "set down." As indicated on Table 27, there are 2,471 acres deed restricted acres as a result of the TDR program. Of all the preservation/conservation options, this program has been the least effective and plagued with legal appeals by property owners near the receiving parcels.

Voluntary Preservation/ Conservation Options

1. Private organizations such as the Maryland Environmental Trust (MET), the Eastern Shore Land Conservancy, The Conservation Fund and The Nature Conservancy work with landowners who voluntarily protect/deed restrict their land and as a result are eligible to receive tax benefits. Approximately 6,774 acres of the currently preserved lands are attributable to the ESLC and MET easements. Four properties encompassing 739 acres were deed restricted in 2000.


QUEEN ANNE'S COUNTY
CHINO FARMS RURAL LEGACY AREA
LANDS END RURAL LEGACY AREA
Countywide Acreage
Total County Acreage 239337
MALPF Districts 12970
MALPF Easements 19114
MALPF/Greenprint Easement 222
MET 6774
Rural Legacy 5013
Private Conservation 1370
County Parks 1691
State Owned Land 5019
TDR Sending Areas 3471
Deed Restricted Open Space 19841
Incorporated Towns 2284
Preservation / Conservation Lands
Deed Restricted Open Space
MALPF District
80 properties countywide
MALPF Easement
110 properties countywide
MALPF/Greenprint Easement
2 properties countywide
MET Easement
32 properties countywide
Rural Legacy Area Boundary
Rural Legacy Easement
Private Conservation Land
County Parks
State Owned Land
TDR Sending Areas
43 properties countywide
Open Space
Incorporated Town
MALPF - Maryland Agricultural Land Preservation Foundation
MET - Maryland Environmental Trust
TDR - Transfer of Development Rights
Source: Queen Anne's County Department of Planning and Zoning
3.26 0 3.26 Miles
MAP SCALE: 1 inch = 3.26 miles
Conservation Lands
Queen Anne's County, Maryland
Date: January 2002
MAP 12

Map 12: Conservation Lands

2. Maryland Agricultural Land Preservation Foundation (MALPF) – This State program has had the greatest impact on land preservation and the effort to create a solid base for productive agriculture in Queen Anne's County. Currently there are 80 district properties preserving 12,970 acres and 113 easement properties accounting for an additional 19,436 acres. The combined acreage of MALPF district and easement properties accounts for 47% of the total deed restricted lands in the county. (MALPF Districts are formed when landowners sign a voluntary agreement that states that the land will be maintained in agricultural uses for a minimum of five years and that the land will not be subdivided for non-agricultural uses while under district status. Once land is designated as a district, the owners are eligible to apply to sell an agricultural land preservation easement to the State. Easements provide for the permanent protection of agricultural land).

   In 1999, Queen Anne's County's local agricultural preservation program was certified by MALPF and the Maryland Department of Planning. Certification allows the County to retain 75 percent of the agricultural transfer tax collected and dedicate this revenue to the matching funds program available through MALPF. The result is anticipated to double the amount of funds available to purchase easements. In FY01, the County committed at "full match", which is $666,667. This amount was matched with $1 million by the State.

   In Fiscal Year 2000, the first year of the County's certification, the County committed more than four times as much to the County match as the previous year and was able to purchase twice as many easements.

3. Rural Legacy – In 1998, Queen Anne's County participated in the Rural Legacy Program and as a result, with the assistance and funding from Rural Legacy, The Conservation Fund, and Program Open Space, the County was able to purchase almost 682 acres bordering the Chester and Corsica Rivers. The property will be managed by the Queen Anne's County Department of Parks and Recreation as a passive recreational and wildlife preserve facility.
   In 2000, Queen Anne's County again partnered with the Conservation Fund and submitted a successful application to establish a Rural Legacy Area in the northern part of the County, encompassing 5,000 acres of the Chino Farms property, plus some additional acreage on adjacent farms. The total area to be protected is 6,880 acres. Grant awards in 2000 and 2001 have placed under easement the vast majority of the Chino Farms property. Future applications will seek funding to protect the remainder of the Chino Farms Rural Legacy Area.

➢ *Parks & Recreation*

Park Lands

There are a wide variety of park and recreation facilities in Queen Anne's County. They range in size from small County-owned boat launch areas and waterfront access sites to large County and State parks. Map 13 shows the location of these various sites. Table 28 lists by different categories the specific sites and their acreage that make up this current system. In addition, the adopted growth area plans contain park and recreation recommendations for each community. The County has a separate Park and Recreation Plan.

The largest single parks category is the State facilities. This group totals approximately 4,695 acres, more than half of which comprise the

Wye Island Natural Resource Management Area. This is followed by approximately 1,474 acres in countywide special use areas (such as Conquest Farm and Terrapin Park), 300 acres at school sites, 353 acres in community parks and 70 acres in neighborhood parks. The smallest category is for waterfront access and public landings – 22 properties totaling approximately 27 acres.

Terrapin Park is one of the Queen Anne's largest County-owned parks.

The total county-owned parks and open space plus the schools used for public recreation equals approximately 2,235 acres or almost 55 acres per 1,000 population. The County is currently well positioned with its ratio of parkland per capita. (Generally, accepted national standards recommend 30 acres per 1,000 people of locally provided parks and recreational facilities.) The total parks and recreation holdings is approximately 6,930 acres.

Community parks and neighborhood parks, those most likely to meet immediate local recreation needs, total less than 425 acres. With a current population of approximately 40,500, this total breaks down to less than 11 acres per 1,000 population for these two categories of parks. Based on this analysis, there may be a need to create more community and neighborhood parks to increase the active recreation facilities available to County residents. Table 29 defines the neighborhood, community and special use parks and their service areas.

The Horsehead Wetlands Center, a 500-acre environmental education facility, is located on Prospect Bay, near Grasonville. The Center is privately owned, and offers many nature tourism opportunities. There is a Visitor Center with exhibits, and educational programs are provided for the public. Hiking and canoeing trails exist throughout the property.

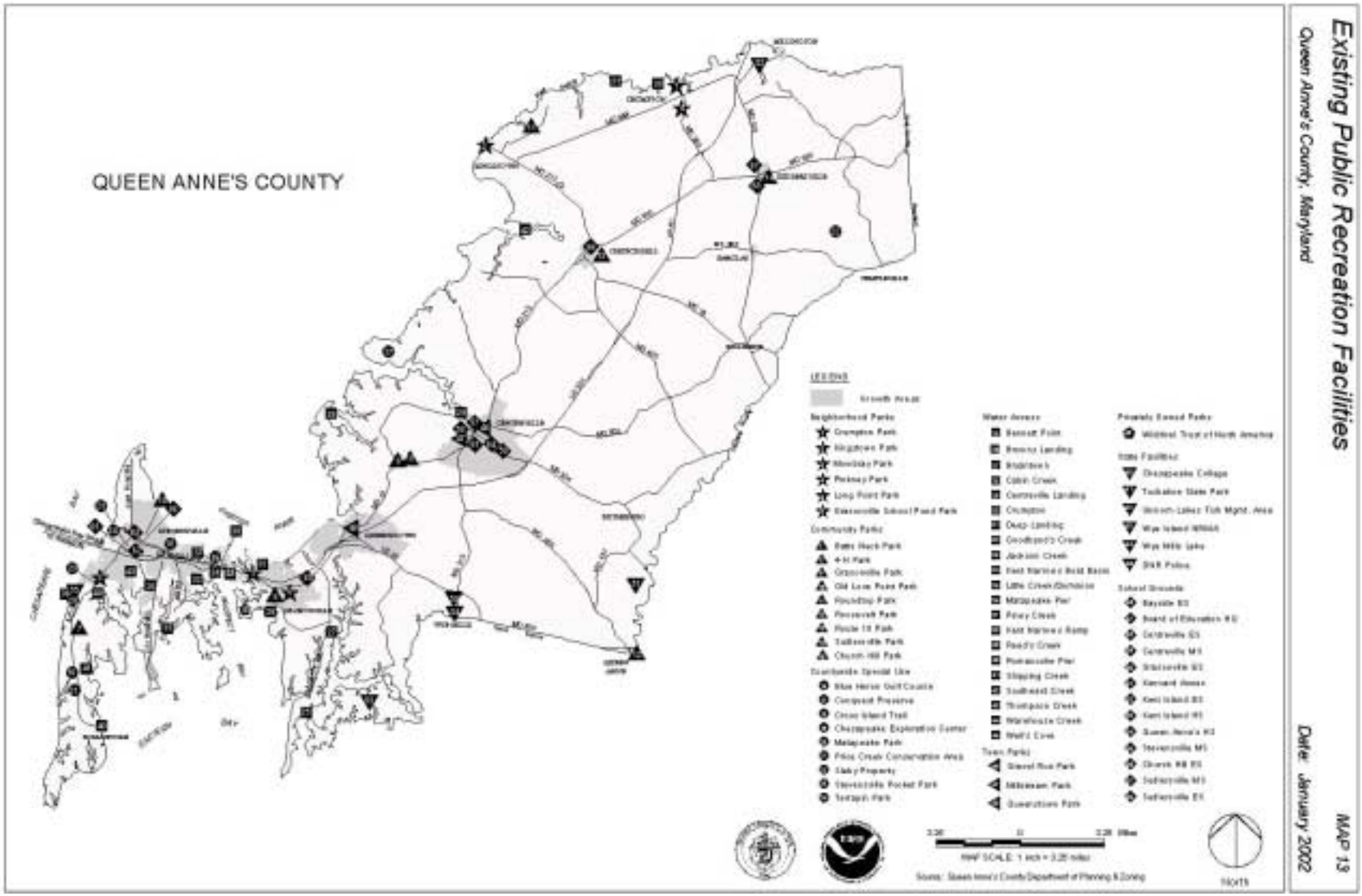
Children enjoy programs geared toward their needs.

Parks Programming

The County's Department of Parks and Recreation offers a wide range of programs from organized sports leagues to winter ski trips. The department offerings include activities for all County residents with specialized programming for seniors, adults, and children. Activities are offered year-round at parks sites and at various County school facilities.

Cross Island Trail Update

One mile of the Cross Island Trail (using a former railroad right-of-way from Castle Marina Road to Old Love Point Park) opened to the public in the fall of 1998. In the fall of 2001, the Trail was extended east to the Kent Narrows, and west to Terrapin Park. Including the walking trails in and around the Kent Narrows area, the Cross Island Trail is now over 6 miles in length. Future sections to Long Point Park, and extensions down MD 8, are in the planning stages.



Map 13: Existing Public Recreation Facilities

Table 28: Queen Anne's County Existing Parks and Recreation Facilities

Map #	Park Name	Size Acres	Main Uses
	Neighborhood Parks		
1	Crumpton Park	7.00	Ballfields
2	Kingstown Park	1.50	Picnic
3	Mowbray Park	23.50	Tennis, ballfield, picnic
4	Pinkney Park	12.50	Basketball, ballfield, picnic
5	Long Point Park	7.30	Tot lot, trail
6	Grasonville School Pond Park	18.50	Open Space
	Subtotal	70.30	
	Community Parks		
7	Batts Neck Park	45.00	Roller blade rind &ballfields
8	Church Hill Park	41.00	Open Space
9	4-H Park	27.00	Equestrian, picnic pavillion
10	Grasonville Park	39.00	Tennis courts, ballfield
11	Old Love Point Park	30.50	Ballfields
12	Roundtop Park	75.00	Basketball, tennis, ballfield
13	Roosevelt Park	7.75	Multiple use trail & ballfield
14	Route 18 Park	51.60	Ballfields, picnic, trail
15	Sudlersville Park	36.50	Ballfields, trails, tot lot
	Subtotal	353.35	
	Countywide Special Use Areas		
16	Blue Heron Golf Course	94.10	Golf
17	Conquest Preserve	682.00	Fishing, swimming
18	Cross Island Trail	24.50	Trail
19	Chesapeake Exploration Center	1.60	Visitor Information
20	Matapeake Park	70.00	Trail, nature studies
21	Price Creek Conservation area	300.00	Open Space
22	Slaby Property	26.60	Open Space
23	Stevensville Pocket Park	0.30	Passive
24	Terrapin Park	275.00	Beach, trail, nature
	Subtotal	,474.10	
	Water Access/Public Landings		
25	Bennett Point	1.50	Water access w/o ramp
26	Browns Landing	0.10	Water access w/o ramp
27	Bryantown	0.50	Water access w/o ramp
28	Cabin Creek	2.60	Water access w/o ramp
29	Centreville Landing	1.00	Boat slip, ramp
30	Crumpton	0.30	Boat launching
31	Deep Landing	0.65	Boat launching
32	Goodhand's Creek	1.50	Boat launching
33	Jackson Creek	1.50	Water access w/o ramp
34	Kent Narrows Boat Basin	1.70	Boat slip
35	Little Creek/ Dominion	1.00	Boat launching, water access
36	Matapeake Pier	5.00	Boat launching, fishing
37	Piney Creek	0.10	Water access w/o ramp

Map #	Park Name	Size Acres	Main Uses
	Water Access/Public Landings (cont.)		
38	Kent Narrows Ramp	1.00	Boat launching
39	Reed's Creek	0.10	Water access w/o ramp
40	Romancoke Pier	2.50	Fishing Pier
41	Shipping Creek	2.50	Boat launching
42	Southeast Creek	0.25	Boat launching
43	Thompson Creek	1.00	Boat launching
44	Warehouse Creek	0.10	Water access w/o ramp
45	Well's Cove	2.00	Water access w/o ramp
	Subtotal	27.40	
	Town Parks		
46	Gravel Run Park	0.10	
47	Millstream Park	6.00	
48	Queenstown Park	2.00	
	Subtotal	8.10	
	Privately Owned Parks		
49	Wildfowl Trust of North America	462.40	
	State Facilities		
50	Chesapeake College	170.00	
51	Tuckahoe State Park	1,842.00	
52	Unicorn Lakes Fish Mgmt. Area	69.00	
53	Wye Island NRMA	2,514.00	
54	Wye Mills Lake	66.00	
55	DNR Police	3.00	
	Kent Island Research Center	31.00	
	Subtotal	4,695.00	
	School Grounds		
56	Bayside ES	16.00	
57	Board of Education HQ	13.00	
58	Centreville ES	14.20	
59	Centreville MS	54.00	
60	Grasonville ES	9.40	
61	Kennard Annex	14.20	
62	Kent Island ES	13.70	
63	Kent Island HS	46.00	
64	Queen Anne's HS	80.00	
65	Stevensville MS	11.70	
66	Church Hill ES	6.10	
67	Sudlersville MS	10.70	
68	Sudlersville ES	10.40	
	Subtotal	299.40	
	Total	**7,390.05**	

Map #'s refer to Map 13

Source: Department of Parks & Recreation; Department of Planning & Zoning; Compiled by LDR International, Inc.

Table 29: Parkland Classification System Guidelines

Type	Service Area	Desirable Size	Acres/1000 Residents	Desirable Site Characteristics and Facilities
Neighborhood Parks	¼ to ½ Mile	5-15 Acres	1-2 Acres	Areas that serve the surrounding neighborhoods with facilities such as basketball courts, children's play equipment and picnic tables.
Community Parks	1-3 Miles	25-60 Acres	5-8 Acres	May include areas suited for intense recreation facilities, such as athletic facilities, ball fields, and large swimming pools. Easily accessible to nearby neighborhoods and other neighborhoods.
Special Use Areas	No Applicable Standard	Variable Depending on Desired Size	Variable	Area for specialized or single purpose recreation activities, such as golf courses, campgrounds, water recreation areas, and other centers for natural, historic and cultural interpretation.

Source: Recreation, Park and Open Space Standards and Guidelines, National Recreation & Parks Association, 1983.

➢ *Emergency Services*

The delivery of emergency services in Queen Anne's County is provided by several County agencies, nine volunteer fire companies and one volunteer ambulance company. County agencies include the Queen Anne's County Sheriff's Office, which provides law enforcement and Court security services; Department of Corrections, which oversees the County Detention Center; Department of Emergency Services, which is responsible for 9-1-1 services and emergency communications, emergency management services and supplements emergency medical services provided by volunteer fire/ambulance organizations. The volunteer fire and ambulance companies, which are independent organizations, provide fire services and emergency medical transport services to defined service areas within the County. There are more than 100 full-time County employees providing emergency services as well as approximately 375 active volunteer fire/ambulance company members.

Law Enforcement Services

The Sheriff, who is elected by the voters, directs law enforcement services and is responsible for policy development, administration, and maintaining liaison with other State and County Law enforcement and related agencies. A Chief Deputy, who oversees the internal operations of the department, assists the Sheriff in managing the operations of the Sheriff's Department. The Chief Deputy supervises several units within the Department: the Patrol Division; the Criminal Investigations Unit; the Community Policing Unit; and the Support Services Unit, which consists of the Court Security Detail, the Warrant Service Detail and the Civil Processing Detail. The Sheriff's Office occupies a portion of a building that also houses several other State and County offices in Centreville. The current Sheriff's Department office is inadequate to meet

the needs of a modern law enforcement department.

The Sheriff's Department responds to approximately 12,500 incidents each year. The number of incidents are expected to increase as population growth occurs.

County Detention Services

The Queen Anne's County Detention Center is located in Centreville and houses pre-trial and sentenced inmates. The current facility opened in 1988. The County Detention Center has two missions. Its primary mission is pre-trial housing and in this capacity it functions as a maximum-security facility. The Detention Center's secondary mission is for post-trial incarceration of those found guilty of offenses resulting in relatively short sentences. There is also a contractual arrangement with the U.S. Marshall's Office to house some federal pre-trial inmates at the Detention Center. The Detention Center, which houses between 80 and 90 inmates, needs to be expanded. This expansion is currently in the planning stages.

Fire and Rescue

Delivery of fire, rescue and emergency medical calls in Queen Anne's County is the responsibility of nine volunteer fire company organizations, housed in strategically located fire stations throughout the County. While fire stations are generally well located for emergency response purposes, some fire stations are not fully adequate to meet modern needs. Kent and Caroline County fire units provide mutual support on the initial alarm in three small northern portions of the County.

Fire companies are coordinated on a countywide basis though the Fire Chiefs Association. The companies are supported by means of their own fund raising efforts, County financial support, and some ambulance billing receipts. The fire companies are identified by name and station number, below:

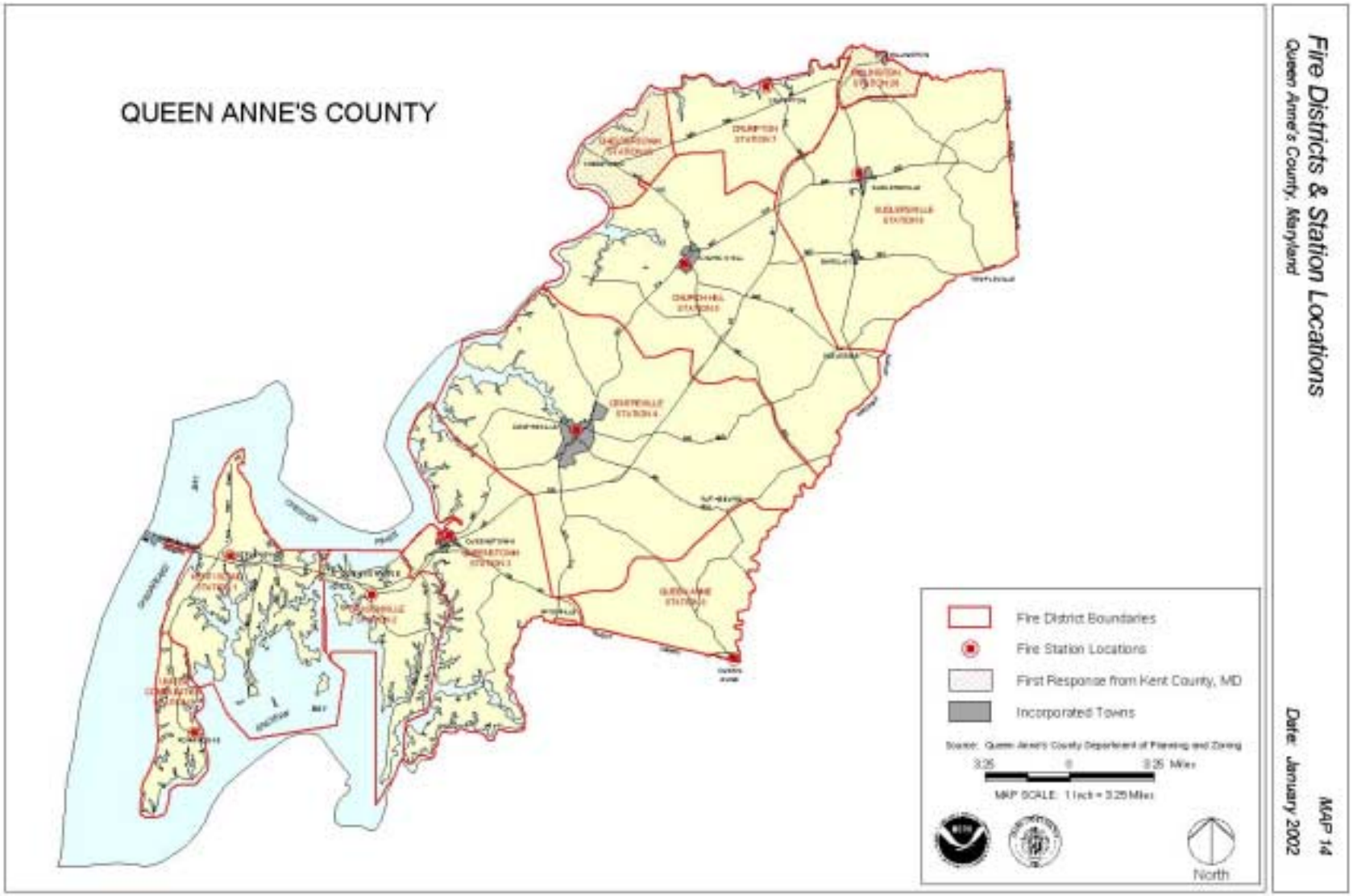
Station 1 Kent Island
Station 2 Grasonville
Station 3 Queenstown
Station 4 Centreville
Station 5 Churchhill
Station 6 Sudlersville
Station 7 Crumpton
Station 8 Queen Anne-Hillsboro
Station 9 United Communities

Each fire company has several major pieces of apparatus and together they collectively operate a fleet of 43 pumpers, aerial ladders, tankers and brush trucks. In calendar year 2000, fire companies responded to 1,525 fire and emergency calls.

Emergency Medical Services (EMS)

The delivery of Emergency Medical Services (EMS) in Queen Anne's County is through a bifurcated system supported by the volunteer fire departments and full-time and part-time staff employed by the County (Department of Emergency Services). Volunteers from the fire departments staff ambulances and provide patient transportation to a hospital. Patient care is provided by both EMS-trained volunteers and Department of Emergency Services personnel at the scene. Personnel from the Department of Emergency Services respond to EMS incidents in non-transporting chase cars.

During calendar year 2000, there were 3,632 requests for medical assistance. For each of these requests for assistance, at least one volunteer ambulance responded. County EMS personnel responded to 3,470 of these requests in a chase car. Volunteer ambulances transported patients to regional hospitals on 2,429 occasions.



Map 14: Fire Districts and Station Locations

Eight volunteer fire companies are organized as joint fire and EMS providers. One company, Grasonville, has a separate EMS division within their organization. Ambulances are generally staffed with State of Maryland certified Basic Life Support (BLS EMT-B) volunteer providers and, in some instances, State of Maryland certified Advanced Life Support (ALS EMT-P) volunteer providers will staff an ambulance. The number and level of training of emergency medical personnel varies among each company, but most companies have members trained to the first responder level, while others have received advanced training.

Emergency Services

County emergency services are coordinated and integrated by its communication system. The Department of Emergency Services operates the 911 and radio communications systems of Queen Anne's County. The County Emergency Operations Center and 911 Center is a well designed, recently opened facility. There is a state-of-the-art 800 MHz digital radio system. Emergency communications are provided from a newly constructed emergency operations center. The center handles all E-911 calls for the County and provides communications and dispatch services to the Sheriff's Department, the Centreville Police Department, each fire department and the County's emergency medical units.

➢ *Sensitive Areas*

Chesapeake Bay Critical Area

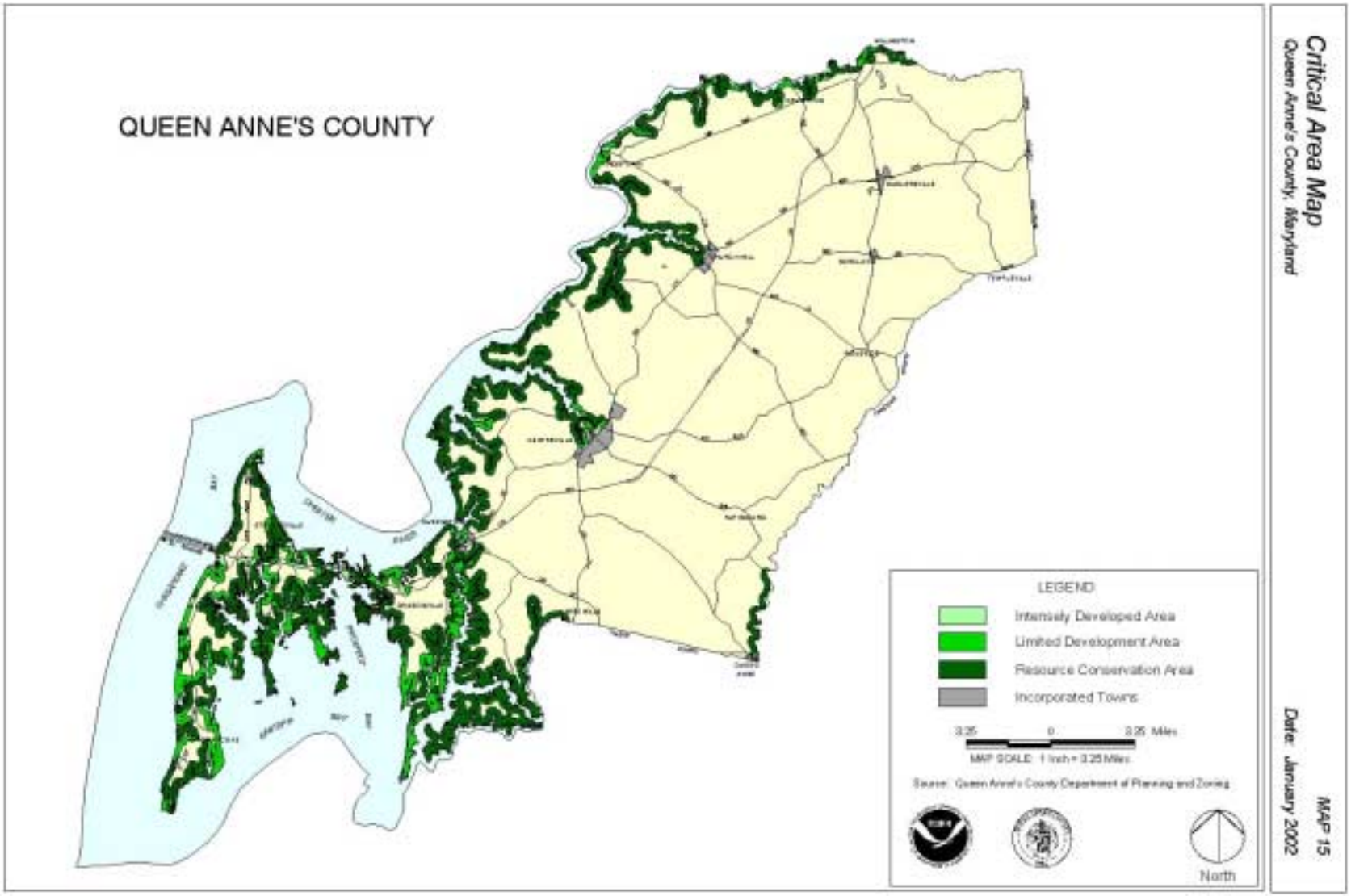
The Chesapeake Bay is North America's largest estuary and is home to more than 3,000 species of plants and animals. The bay holds more than 15 trillion gallons of water. Half is saltwater from the Atlantic Ocean and the rest is freshwater that drains into the bay from some 150 major streams and rivers. Preserving the Chesapeake Bay and its tributaries by managing land use is the underlying rationale for the passage of the State's Critical Area legislation and the County's Critical Area Program and Chesapeake Bay Critical Area Ordinance. The ordinance regulates development activities and land use in the Critical Area, defined as land within 1,000 feet of the tidal influence of the Chesapeake Bay.

Approximately 40,000 acres or 17 percent of the County's overall 237,990 acres are in the Critical Area. These lands are divided into three types of development areas: Intensely Developed Areas, Limited Development Areas, and Resource Conservation Areas. Map 14 shows the location of the County's Critical Area.

Within the Critical Area there is a minimum 100-foot buffer protected area from tidal waters, streams and tidal wetlands where no new development activities are allowed. In some cases, County regulations require the buffer to be expanded to 300 feet.

Intensely Developed Areas (IDA) comprise 765 acres or less than one percent of the County's total acreage and about two percent of the County's Critical Area. These areas are predominantly located in the Fourth Election District. IDA's consist of 20 or more contiguous acres and are characterized by residential, commercial, industrial and/or institutional development with relatively little natural habitat. IDA lands also have one of the following characteristics:

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



Map 15: Critical Area

Limited Development Areas (LDA) comprise approximately 8,825 acres or about two percent of the total County acreage and 22 percent of the County's Critical Area. LDA includes any area developed in low and moderate intensity that also contains areas of natural plant and wildlife habitat and where the quality of run-off from these areas has not been substantially altered or degraded. In addition, LDA has at least one of the following characteristics:

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

Most of the LDA is located on Kent Island and along the County's northern edge along the Chester River.

Resource Conservation Area (RCA) comprises approximately 30,500 acres or 13 percent of the County's total acreage and 76 percent of the Critical Area. These lands are distributed around the County. RCA lands are characterized by the predominance of wetlands, forests, and forestry activities, abandoned fields, agriculture, and fishery activities. In addition, RCA lands have at least one of the following features:

- Housing density less than one dwelling unit per five acres;

- The dominant land use is agriculture, wetland, forest, barren land, surface water or open space.

RCA does not include State tidal wetlands.

Critical Area Growth Allocation

The State's Critical Area Criteria provide for some lands that were originally designated as RCA to be re-designated to LDA or IDA. This is called "Growth Allocation" and is limited to five percent of the County's RCA. The County's general policy is to assign its Growth Allocation in designated growth areas within and adjacent to its municipalities. The County has "pre-mapped" potential areas for growth allocation within the Stevensville, Chester and Grasonville growth areas. The incorporated Towns of Centreville and Queenstown are also allotted a specified acreage for potential growth allocation. "Pre-mapped" sites are typically adjacent to developed lands and are zoned to accommodate future development. "Pre-mapping" of growth allocation in conjunction with the growth area plans is consistent with State and County objectives to concentrate growth and direct it to existing communities. As of July 2001, the County has awarded 129 acres of its Growth Allocation for development, leaving a balance of about 1,247 acres.

Endangered Species and Habitat Areas

The location of State-designated threatened and endangered species and their habitats as well as other habitat areas that need special protection within Queen Anne's County, according to the Maryland Department of Natural Resources (DNR), are identified on Map 15. These species include:

- Bald Eagle nesting sites
- Delmarva Fox Squirrels
- Various waterbird nesting sites and waterfowl staging areas
- Oyster bars
- Anadromous fish spawning areas (anadromous fish are those that primarily live in the ocean but travel upstream to fresh waters to spawn and are an important part of the County's natural heritage)

Bird-watching at Horsehead Wetland Center

Not mapped, but also protected are submerged aquatic vegetation (i.e., areas that provide nursery areas and habitat for a range of Chesapeake Bay species).

The County, State and Federal governments regulate development in these areas to reduce impacts on these species and habitats. Techniques used to minimize impacts include the sensitive locating of structures, timing and extent of clearing and grading, and the location of stormwater management outfalls. The County closely coordinates with DNR regarding protection of State threatened and endangered species. The County cannot regulate or enforce the Federal Endangered Species Act.

Forest Protection

Approximately 63,660 acres or 20 percent of the County is forested. Of this amount, almost 7,000 acres are within the Critical Area. These areas provide for wildlife habitat, water quality and watershed protection, air quality improvements, recreation and a small commercial timber harvesting industry. State and local laws govern clearing and are applicable based on whether the site is within or outside of the Critical Area. Most of the County's forests are comprised of various kinds of trees in the oak-hickory association and to a lesser extent oak-gum and oak-pine associations. Other prevalent trees are elm, ash, red maple, black gum, and sweet gum. Some Virginia pine is also present.

Forest and Woodland Protection Implementation

Maryland's Forest Conservation Act established standards for local authorities to enforce during land development. The intent of the Queen Anne's County Forest Conservation Ordinance is to ensure high quality forested areas are retained and appropriate areas afforested in areas outside the Critical Area. In addition to the County's Forest Conservation regulations, the Zoning Ordinance and the Critical Area Ordinance regulate the County's forest conservation.

Wetlands

Restrictions on disturbance, dredging and filling activities in wetlands are regulated by federal and State law. As a result, development potential in wetland areas is severely limited. Queen Anne's County has almost 8,000 acres of tidal wetlands including shrub swamp, fresh marsh, brackish marsh, open waters sandbars, mudflats and submerged aquatic vegetation. The County's non-tidal wetlands are typically hydric soils (these are saturated soils or periodic high ground water levels). These lands are subject to flooding. The County has approximately 86,000 acres of hydric soils or 36 percent of the County lands.

The County has almost 8,000 acres of tidal wetlands.

Other Sensitive Areas

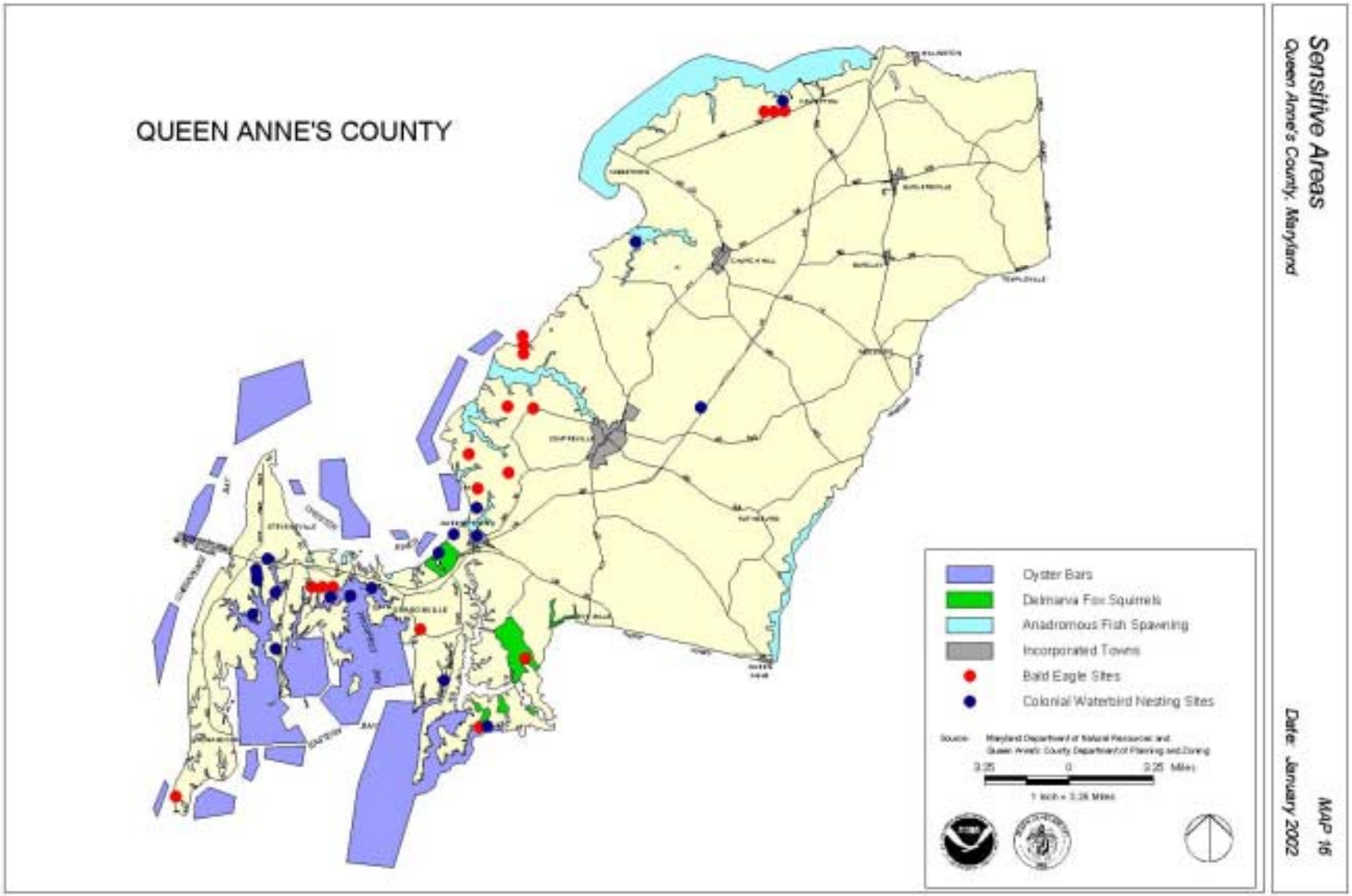
Other valuable natural resource areas not mentioned above are protected via numerous federal, State and local regulations. The County's coastal and riverine floodplains are regulated via the County's Floodplain Management Ordinance as well as other County regulations. Streams and their buffers are regulated and protected by the County's Chesapeake Bay Critical Area Ordinance and Zoning Ordinance. The County's few steep slopes are regulated and protected by the Chesapeake Bay Critical Area Ordinance as well.

➢ *Mineral Resources*

The development of extraction industries and the identification of future resources are an important component to the economic development of some counties. However, the only useable mineral resource within Queen Anne's County is sand and gravel. Due to the extensive cost of transporting these materials, excavations are predominantly used for local needs. No shortage of these resources is projected and the location of deposits does not conflict with any current or future development centers.

Geology of Queen Anne's County. Lying within the Coastal Plain physiographic province, mineral formations within Queen Anne's County consist of sediments ranging from the Cretaceous Period (175 million years ago) to the present. The crystalline rocks on which these sediments were deposited lie about 2,000 feet beneath the surface of Queen Anne's County. Due to the gradual erosion of the Piermont physiographic region to the west, the deposits form overlapping, gently southward dipping beds. Only three of the Coastal Plain sediments are present at the surface of the County: the Aquia Formation of the Eocene age (fine-grained quartz and glauconite), the Calvert Formation of the Miocene age (fossilifernous sand and montmorillonitic clay), and the Columbia (or Wicomico) Formation of the Pleistocene age (glacial sedimentation).

Impact of Water Bodies on County's Geology. The changing course of the Susquehanna River and the subsequent creation of new rivers greatly influenced the geologic character of the County and created the Talbot Formation. Consisting of reworked sediments from the Wimomico Formation, the Talbot Formation masks the outcrop of Aquia and Calvert Formations are present along the Chester River. Presently, new formations are forming in estuaries, rivers, and streams from erosion. Since the establishment of human settlement and agriculture practices, the rate of accumulation has dramatically increased.



Map 16: Sensitive Areas

➢ *State-of-the-Art Growth Management and Planning Techniques*

This matrix includes a listing of planning and growth management tools and techniques. Each technique is described along with its objective, purpose and how it relates to the Comprehensive Plan document. Techniques in place or partially in place in Queen Anne's County are indicated and noted with the Code or Plan reference and with a "✓".

Technique	Description	General Purposes	Objective	Relation of Plan to Tool
1. Public Acquisition				
Fee simple acquisition	Acquisition of full title to property for a public purpose such as a park, open space or school	control development of new areas to ensure coordination with existing and proposed capital facilities; avoid environmental problems; preserve open space; preserve historic/cultural resources; prevent sprawl; provide flexibility to meet future needs	type; location; amount of development	Plan should specify areas to be acquired
Land banking	Advance public acquisition of land where urban expansion or infill is expected or where retention of the land for an appropriate public or private sector use is necessary	control development of new areas to ensure coordination with existing and proposed capital facilities; preserve open space; prevent sprawl; provide flexibility to meet future needs	rate/timing; type; location of development	Plan should specify areas to be acquired and priorities. Capital program should specify funding sources and amounts needed
Compensable regulation	Combination of restrictive zoning with payment of compensation at less than full value	preserve neighborhood character; address environmental problems; preserve open space; preserve historic/ cultural resources	type; location; density/intensity of development	Plan should specify appropriate areas and allowable densities
Less than fee simple acquisition	Developmental easements and the purchase of development rights; allow landowner certain restricted uses of the property or prevent certain uses on the property; primarily used to protect open space and environmental resources	conserve agricultural land; protect environmental resources; preserve open space; preserve historic/ cultural resources; prevent sprawl	type; location; density/intensity of development	Plan should specify appropriate areas for use; allowable densities/intensities; capital program should specify funding sources and amounts needed
2. Public Improvements				
Facility location ✓not in Code, but growth areas have been designated in accordance with State law	Choosing the location of facilities (e.g., roads, sewer and water) to influence the location of development; success depends on the necessity of the facilities to support development of certain types and/or densities/ intensities	avoid inefficiencies and economic burdens of dispersed growth; control location of development to ensure coordination with existing and proposed capital facilities; maintain or improve the level of community service; reduce traffic congestion; avoid facilities overload	location; timing; rate; amount; density/intensity of development	Plan should include a capital improvements element and individual elements for each major capital facility type. Plan should specify Level of Service (LOS) standards for each facility type
Access to facilities ✓limited application with access management polices, ə 18-1-117	regulating access to such public facilities as sewer or water lines; limiting curb cuts on major streets or highways through a permit-issuing process	control location of development to ensure coordination with existing and proposed capital facilities; maintain or improve the level of community service; reduce traffic congestion; avoid facilities overload	location; density/intensity of development	Plan should specify access requirements for each facility; and conditions of access

Technique	Description	General Purposes	Objective	Relation of Plan to Tool
Capital programming ✓not in Code, but County maintains and updates a CIP	timed and sequenced provisions of public infrastructure investments through which the community meets its projected capital facilities needs; also specifies the costs of the improvements, and details the sources and methods of financing	provide local fiscal responsibility and security; avoid inefficiencies; maintain or improve the level of community service; reduce traffic congestion; prevent sprawl; provide for flexibility to meet future needs; avoid facilities overload	rate/timing; type; location; density/intensity of development	Plan should include a capital improvements element and a CIP
Adequate Public Facilities Ordinance/Concurrency Management	requires that all necessary public facilities are available and adequate at the time of development	to insure that development does not cause a reduction in level of service standards; to insure that facilities are adequate when the impacts of the development will be felt	location and timing of development	Plan should include facility requirements and level of service standards
Utility Phasing	Phase and sequence utilities consistent with land use, timing and sequencing policies of Comprehensive Plan	Avoids over consumption of facility capacity and provides incentives and disincentives for development	Location and timing of development; adequate public facilities	Need to ensure that extension policy does not violate any duty-to-service principles.
Official Mapping	Allows County to withhold building permits in public facility corridors so that it may commence condemnation proceedings	put developers on notice of planned improvements and commits County to new facilities	adequate public facilities	Plan should include location of planned streets and public areas based on physical or aerial surveys
Impact Fees ✓ э 18-1-305 - charged only for public schools and emergency services	Fees charged to ensure that new development pays its fair, pro rata share of facilities costs necessary to accommodate such development at established level of service standards	to shift the capital facilities costs associated with new development to that development; fiscal responsibility; avoid economic burdens of growth	location of development; fiscal impact development; adequate public facilities	Plan should include facility level of service standards; designate impact fee districts and subdistricts; project growth and development Capital program should specify public facilities to be provided with impact fee funds.
3. Environmental Controls				
Performance zoning environmentally sensitive lands ✓ э 18-1-078	Protection of natural processes such as flooding, stormwater runoff, and groundwater recharge; prevent development on sensitive lands and in sensitive resource areas	prevent environmental degradation; promote public health, safety and welfare	amount; type; location of development	Plan should designate environmentally- sensitive lands and designate permissible development by type, density/intensity; etc.
Critical areas designation ✓ Title 14	Environmentally sensitive areas where the public interest extends beyond the local jurisdiction; such areas are typically regulated and controlled by a higher governmental authority, usually the State	prevent environmental degradation; promote public health, safety and welfare; preserve open space; provide natural areas and greenbelts	amount; type; location of development	Plan should designate environmentally-sensitive lands and designate permissible development by type, density/intensity; etc.
Best Management Practices (BMP's) ✓ required by Title 14 for agriculture and stormwater management	Prescribes structural and nonstructural approaches for reducing pollution	Prevent environmental degradation; public health, safety and welfare	Performance	Plan should designate environmentally sensitive areas and any BMP's needed beyond existing requirements. BMP requirements should be consistent with State

Technique	Description	General Purposes	Objective	Relation of Plan to Tool
stormwater management				environmental standards.
Stream, shore or wetland buffers ✓ э 18-1-081, -084	Undisturbed areas designed to filter and cleanse stormwater runoff	Prevent environmental degradation; public health, safety and welfare	Location; Performance	Plan should designate environmentally sensitive areas and any required buffers.
Steep slope protection ✓ э 18-1-080	Requirement that development avoid construction on steep slopes	Prevent environmental degradation; public health, safety and welfare	Location; performance	Plan should inventory steep slope areas, describe consequences of development on steep slopes, and recommend levels of protection
Environmental Threshold Standards/Carrying Capacity Zoning	Establishes the maximum amount of development that may occur without degrading an environmental resource.	Prevent environmental degradation; public health.	Amount; location of development	The Comprehensive Plan should identify the designated environmental resources, as well as the carrying capacity thresholds.
Purchase of Development Rights; Conservation Easements ✓ MALPF Program	Legal restrictions on title which prohibit development on all or part of the property.	Prevent environmental degradation; protect open space	Amount and location of development	The Comprehensive Plan should identify conservation and agricultural resources, and prioritize these for acquisition or purchase of conservation easements.
Forest Preservation ✓ э 18-201 et seq.	Where it requires preservation or conservation of trees on a development site.	Prevent environmental degradation; storm water management.	Amount of development; performance	The plan should provide a justification for preservation and describe the types of resources that need to be protected.
Landscape Ordinances ✓ э18-1-089 et seq.	These ordinances require landscaping of a portion of the property in a designated location.	Prevent environmental degradation; appearance.	Performance	The plan should set forth policies for continuation or modification of the existing landscaping provisions.
Conservation subdivisions	Requires development to retain open space or designated environmental resources; typically more visually accessible than performance standards.	Establishes standards for site design to preserve open spacing and environmental resources.	Type and location of development; performance	The Comprehensive Plan could establish policies for site design
Mitigation of development impacts	Requires developers to identify and mitigate impacts for infrastructure, environment, and/or housing.	Insures that the new development does not degrade existing or planned resources.	Physical impact; adequate public facilities	The types of resources that should be protected, as well as a justification for mitigation standards, should be provided in the Comprehensive Plan.
Pollution controls	air and water pollution standards; stormwater management standards	to prevent environmental degradation; to protect the public health, safety and welfare	location; type; rate/timing; density/intensity of development	Plan should reference key federal and State standards and requirements and provide ways to implement
4. Flexible Zoning Techniques				
Bonus/incentive zoning	allows the local government to grant	enhance character of community; promote infill	amount; density/intensity of	Plan should establish locations and

Technique	Description	General Purposes	Objective	Relation of Plan to Tool
✓ §18-1-162 to –166 low-income housing.	bonuses, usually in the form of density or floor area ratio, in exchange for developer-provided amenities not normally obtainable via zoning regulations	development; improve housing opportunity, diversity and choice; preserve open space; protect tax base; historic/cultural preservation	development	areas in which bonus/incentives can be offered; set limits on the amounts by which normal standards can be exceeded; and establish conditions as needed to protect areas adjacent to or in the vicinity of areas receiving bonuses/ incentives
Conditional or contract zoning (note: contract zoning is of dubious legality in Maryland)	contract zoning requires a landowner to enter into an agreement with the municipality which subjects the property to restrictions in exchange for a desired rezoning; conditional zoning allows the governmental unit, without committing itself, to place conditions on the use of the property	enhance community character; maintain or improve level of community service; protect tax base and economy; reduce traffic congestion; avoid facilities overload	amount; density/intensity; quality of development	Plan should State generally where conditional zoning should be available
Planned unit development (PUD) ✓ Subtitles 5, 7 & 8	combines some elements of both zoning and subdivision regulation and permits large-scale developments to be planned and built as a unit with flexible design and development phasing	improve housing opportunity, diversity and choice; promote community identity; promote aesthetics, urban design and quality of development; prevent sprawl; provide for flexibility to meet future needs; avoid facilities overload	amount; rate/timing; type; density/intensity; location; quality of development	Plan should State generally where planned unit development should be available/must be used. Plan should establish minimum size for use of PUD
Mixed Use Development ✓ §18-401, Waterfront Village Center District; 18-1-501, Chester Master-Planned Development District	a zoning technique which allows a developer to incorporate 2 or more uses (including residential and non-residential) within a single development	Reduces traffic congestion by providing internal capture of trips; improves appearance of development and sense of community.	Type, density and quality of development.	Plan should provide policies for mixing uses as well as locations (only locational standards) for designating new mixed-use communities.
Flexible zoning ✓ Title 18	cluster and average density are techniques which allow for an adjustment in the location of dwelling units on a site so long as the total number of dwelling units does not exceed the number otherwise permitted by the zoning district	preserve open space; promote aesthetics, urban design and quality of development; provide flexibility in development design	quality; location of development	Plan should State generally where flexible zoning may be used
Sliding scale subdivisions ✓ §18-1-041	Restricts the number of lots in subdivisions in certain locations.	Protect environmental or agricultural resources while providing housing opportunities and economic return for landowners	The amount and type of development.	Plan should provide policies for continuation or modification of a sliding scale subdivision provisions.
Performance standards	Specification of acceptable levels of nuisance or side effects rather than specification of acceptable uses, e.g., amount of glare, smoke, or emissions	to maintain or improve level of community service; promote community identity; preserve open space; protect tax base; promote aesthetics, urban design and quality of development; reduce traffic congestion;	quality; fiscal impact of development	Plan should establish the bases and documentation for the performance standards included in the zoning ordinance

Technique	Description	General Purposes	Objective	Relation of Plan to Tool
	acceptable from an industrial use	promote public safety; prevent sprawl; avoid facilities overload		
Floating zones ✓ §18-1-124 et seq. UR zone only	zones which are identified in the zoning ordinance text but which are not yet shown on the zoning map because it is uncertain as to where the zone should be applied absent a specific development proposal	to provide flexibility to meet future needs	location; type of development	Plan should specify areas or types of development which would be susceptible to use of floating zone
Conditional use permit ✓ §18-1-024, -025, -129 et seq.	used in those instances where particular land uses should be permissible in a zoning district, but, where due to the nature or impacts of the use, special controls are required	to provide flexibility to address land uses with special requirements or impact	type; quality of development	Plan should specify types of uses and/or areas in which special permits should/must be used
Site plan approval ✓ §18-1-207 et seq.)	requires the developer to present detailed information on project design features, open space, layout, public access, parking, landscaping, buffering and other requirements as a condition of development approval	to preserve character of the community; control development of new areas to ensure coordination with existing and proposed capital facilities; avoid environmental problems; promote aesthetics, urban design, and quality of development; preserve historic or cultural resources	type; quality of development	Plan should establish uses and/or areas in which site plan approval should/must be required
Development Rights Transfer ✓ §18-1-145 et seq.	the transfer of unused development rights from one parcel to another through purchase and resale via a development rights bank or through direct purchase/resale between property owners	conserve agricultural land; protect environmentally-sensitive lands; preserve open space; preserve historic/ cultural resources	Amount; location; density/ intensity of development	Plan should specify "sending" and "receiving" areas or zones and establish a mechanism and procedures to value the rights transferred
5. Subdivision Regulations				
Off-site facilities requirements	linking police power controls of zoning, subdivision and environmental regulations to ensure that development does not prematurely or permanently burden facilities and services that are impacted by the proposed development	avoid economic burden of growth; control development of new areas to ensure coordination with existing and proposed capital facilities; maintain or improve the level of community service; protect the tax base and economy; reduce traffic congestion; prevent sprawl; avoid facilities overload	Location; fiscal impact of development	Plan should specify off-site facility standards and requirements. Capital program should specify off-site facility needs
Exactions	requirement of on-site land dedication, payment of money in-lieu thereof, where such dedication is inappropriate, impact fees, or construction and dedication of public facilities	avoid economic burdens of growth; control development of new areas to ensure coordination with existing and proposed capital facilities; maintain or improve the level of community service; promote community identity; preserve open space; provide flexibility to meet future needs; avoid facilities overload	location; fiscal impact; quality of development	Plan should specify off-site facility standards and requirements. Capital program should specify off-site facility needs
6. Permanent Controls & Design Standards				

Technique	Description	General Purposes	Objective	Relation of Plan to Tool
Exclusive agriculture or non-residential zones	zones which exclude residential uses to reduce the land area of the community available for housing and, therefore, limiting population	conserve agricultural land; preserve open space; prevent sprawl; provide flexibility to meet future needs	type; location; density/intensity; amount of development	Plan should identify appropriate amounts of land to meet projected population and associated housing needs
Buffer yards ✓ §18-1-096 et seq.	Requires undisturbed or vegetated areas between designated uses.	Prevent incompatible development. Buffer yards can interfere with the development of community centers or workable neighborhoods by segregating uses which should be functionally connected.	Performance	The Plan should provide policies for uses which require buffering, as well as modification or elimination of buffer requirements where needed to promote mixed-use or workable neighborhoods.
Minimum lot size	used to control development density in areas designated in the comprehensive plan for rural or low density development; limits demand for facilities and services	avoid overcrowding; preserve open space	density/intensity; quality of development	Plan should identify appropriate areas for low density development and rural development
7. Urban Design Standards				
Maximum lot size / minimum densities	Establishes a minimum number of dwelling units/FAR or a maximum lot size that may be platted.	Prevents degradation of agricultural or environmental resources from incompatible large-lot development, and provides adequate densities where pedestrian activity or public transit is needed.	Type, density/intensity of development	The Plan should provide a justification for the densities needed in given areas, as well as the situations where minimum density should occur.
Maximum densities ✓ Title 18	Establishes a maximum density or minimum lot size for a development site.	Protects agricultural or open space, restricts human activities at a given location	Density/intensity of development	The Plan should provide maximum densities given agricultural or environmental resources, or other restraints on development
Apartments above retail ✓ §18-1-025 "commercial apartments"	Allows apartments for other residential uses to be located above ground-level, commercially or other non-residential uses.	Promotes a traditional style of living.	Type, density/intensity of development	The Plan should provide a justification for promoting traditional neighborhood development patterns.
Maximum parking restriction reduced parking ratios. ✓ Subpart 6	Establishes the maximum number of parking spaces or impervious coverage devoted to parking uses	Prevents automobile dependency by restricting parking opportunities and avoiding conflict between pedestrians and parking areas.	Performance	The Plan should provide justification for such restrictions, as well as a description of how parking contributes to traffic congestion.
Traditional Neighborhood Development (TND) districts ✓ §18-601, Town Center District	The zoning district classification which provides for development focused on a town center with an interconnected street system consistent with pre-WW2 development patterns.	Promotes a sense of community and provides for more compact development patterns; produces less traffic than conventional traffic development styles.	Type, density/intensity of development	The Plan should document any problems with conventional development patterns, and provide a justification for TND development standards.
8. Street & Parking Standards				
Narrower streets rights-of way	Provides for street widths smaller than conventional streets in order to	Provide opportunities for pedestrian activity and avoid increases in traffic (but not necessarily traffic congestion)	Performance	The Plan should provide suggested rights-of-way and cartway widths, as

Technique	Description	General Purposes	Objective	Relation of Plan to Tool
✓ Subtitles 5, 7 & 8	promote pedestrian activity, provide for street trees and other pedestrian amenities, and to provide traffic calming.			well as a justification from departing from existing standards.
Tighter horizontal curve radii	Restricts open, gentle curves in roads which encourage speeding	Protects health and safety and promotes a more traditional pattern of development	Performance	The Plan should suggest revised horizontal curb radii with justifications.
Tighter corner radii	Subdivision regulations may define a smaller curb radii which narrows the distance between intersections.	Provides traffic calming and promotes pedestrian activity through shorter intersection crossings.	Performance	The Plan should suggest revised curb radi with justifications
Traffic calming	Provides for speed bumps/humps, speed tables, chokers, round-abouts/traffic circles to slow vehicular movement	Reduces traffic speeds and empowers pedestrians to utilize roadways	Performance	The Plan should suggest traffic combing measures that may be incorporated into new or existing roadways
New Towns and Rural Village zoning	Provides for a mixing of various land uses on greenfield sites.	Promotes a mixing of development uses at a scale compatible with surrounding development	Type, location and performance of development	The Plan should lay out policies for designating sites for new towns or establishing rural village overlay districts.
Cash-Out Parking	Permits developers to provide cash in lieu of compliance with parking requirements	Improves the quality of development by allowing the County to locate central parking facilities rather than surrounding each building with separate parking	Performance	The Plan should provide policies for County involvement in the financing of new parking facilities.
Shared Parking ✓ Subpart 7	Allows uses which generate peak parking at different times of the day to combine required minimum parking spaces.	Reduces the amount of surface area devoted to parking.	Appearance and performance of development.	The Plan policy should require continuation or a modification of existing shared parking standards.
Structured Parking	Provides incentives for provision of structured parking in lieu of surface parking	Allows smaller amounts of surface area to be devoted to parking uses	Appearance and performance of development	The Plan should provide some policy guidance on appearance and performance of new parking facilities.
Connectivity requirements ✓ Subtitles 5, 7 & 8	Requires secondary access and/or a ratio street notes to links	Promotes an interconnected street system	Appearance and performance of development; addresses traffic concerns	The Plan should provide a suggested connectivity ratio or other policies to address the connectivity issues.
9. Tax and Fee Systems				

Technique	Description	General Purposes	Objective	Relation of Plan to Tool
Differential taxation	distinguish between areas, e.g., urban v. rural, by level of service provided and therefore the level of taxation that will be imposed to fund the provision of facilities and services	preserve open space; prevent sprawl; maintain a greenbelt; ensure efficient provision of facilities and services	amount; type; location; fiscal impact of development	Plan should identify urban v. rural demarcation and differential levels of facility/service provision and taxation
User and benefit fees	charges imposed by a local government for the provision of a service to users	avoid economic burdens of growth; maintain or improve the level of community service; protect tax base; promote public safety; avoid facilities overload	rate/timing; location; type; fiscal impact of development	Plan and capital improvements program should specify facilities and services to be provided/funded by user fees
Special assessment ✓ used in Kent Narrows, Cloverfields & Bay City	allocation of the cost of a facility (e.g., road improvement, sewer line, water line) partially or fully against benefited property based upon a reasonable measure of the benefit received	to avoid placing economic burdens of growth or public facilities provision on existing residents or those not specifically benefiting from the improvement; maintain or improve the level of community service; protect tax base; reduce traffic congestion; promote public safety; avoid facilities overload	serviceability/facilities; fiscal impact of development	Plan should specify the types of public facilities and circumstances in which special assessment financing would be appropriate. CIP should include it, as appropriate, in funding sources
Preferential taxation ✓ MD law provides for preferential assessments for agricultural use	taxation of agricultural land at a more favorable rate than other land in the community	to promote the conservation of agricultural land; preserve open space; prevent sprawl	amount; type; location; fiscal impact of development	Plan should indicate where preferential assessment would be most useful in fulfilling plan objectives
Tax Increment Financing	allows real estate taxes attributable to increases in value of redevelopment area to be allocated to infrastructure in those areas	Promotes redevelopment or development in compact centers	Location and timing of development	The Plan should describe priorities for allocation of fiscal resources and in growth areas
10. Annexation ✓ Centreville and Queenstown Growth Area Plans	boundary adjustment to include land previously outside of the territorial limits of a municipal corporation	to maintain or improve the level of community service; preserve open space; prevent sprawl; avoid facilities overload	amount; location; serviceability/facilities; fiscal impact of development	Plan should specify logical areas and time frames for future annexations; and methods by which public facilities and services would be extended and funded
11. Geographic Restraints				
Urban growth boundaries; Permanent growth limit line ✓ All growth area plans	perimeter or boundary beyond which no urban density development shall occur	to encourage full utilization of existing public facilities; to protect environmental resources; to promote community identity; to prevent sprawl	location of development	Plan must delineate the growth limit line and establish the justification and rationale for it; in addition, Plan must indicate available use/ development opportunities for areas outside of the permanent growth

Technique	Description	General Purposes	Objective	Relation of Plan to Tool
				limit line
Short-term growth limit line	identification of areas not to be serviced within the next five (5) to ten (10) years based on the capital program and the comprehensive plan	to control the development of new areas to ensure coordination with existing and proposed capital facilities; to preserve open space; to prevent sprawl; to provide flexibility to meet future needs	rate/timing; location; fiscal impact of development	Plan should establish the short-term limit line and justification therefore; timing of removal of the limit; short-term development and use opportunities
Intergovernmental agreements ✓ Centreville and Queenstown Planning Agreements	Contract between County and municipalities governing the extension of infrastructure, regulation of development or other matters	Provides for more orderly development and transition between incorporated and unincorporated areas; avoids incompatible uses resulting from different zoning regulations; can be used to avoid sprawl.	Location and timing of development	The Plan could provide clear policies for approaching incorporated areas and negotiating compatibility between land use and infrastructure policies.
Tiers	establishment of area boundaries (e.g., urban, urbanizing, future urbanizing areas, rural) and a framework for determining growth management policies to be applied in each of the areas	to preserve rural areas; to conserve agricultural land; to control the development of new areas to ensure coordination with existing and proposed capital facilities; to preserve open space; to prevent sprawl; to provide flexibility to meet future needs	density/intensity; rate/ timing; serviceability/provision of facilities in support of development	Plan should establish and incorporate tier delineations and tier boundaries, as well as key goals and objectives to be achieved in each tier
12. Numerical Restraints or Quota Systems				
Total population cap	absolute limit placed on community's total population holding capacity	to avoid overcrowding; avoid facilities overload	to limit the total amount of development	Plan should establish the bases and documentation for maximum carrying capacity
Permit limits	restriction on growth by establishing a numerical limitation on the number of building permits that can be issued in a designated period	to avoid overcrowding; avoid facilities overload	amount; quality; timing; rate of development	Plan should establish the bases and documentation for the number of permits that will be available in given time periods
Jobs/Housing Balance	attempt to ensure a better balance between homes and jobs for the purposes of reducing air pollution attributable to automobile travel and ensuring that job opportunities are proximate to housing	to attract selected land use types; to avoid facilities overload; to promote fiscal responsibility; to avoid traffic congestion	amount; rate/timing; type; location of development	Plan should establish population, dwelling unit and jobs target based on economic/fiscal analysis
13. Vested Rights Techniques				
Interim zoning and moratoria ✓ Permitted under MD law	prevention or restriction on development until planning has been completed or until permanent controls necessary to implement the plan have been developed and adopted	to preserve the character of the community; to avoid economic burdens of growth; to prevent sprawl; to provide flexibility to meet future needs. Requires legal justification.	amount; rate/timing; density/intensity; fiscal impact of development	Mechanism to protect the planning process
Plat Vacation	allows County to terminate antiquated subdivisions that have not been improved	reassembles parcels for future development and terminates antiquated plats		protects the planning process

Technique	Description	General Purposes	Objective	Relation of Plan to Tool
Use-it-or-lose-it provisions	provides for expiration of permits, subdivision plats and other zoning approvals after designated time period	Protects the planning process by allowing community to identify which developments are likely to be completed	Vested rights	The Plan should describe typical build-out period for developments of various types and sizes
Vested Rights Determination Ordinance	Requires developers to assert vested rights claims when regulations change in such a manner as to preclude development in the determining pipeline.	Protects the planning process by allowing community to identify those projects which are likely to be completed.	Vested rights	The Plan should describe typical build-out period for developments of various types and sizes
Certification of non-conforming use ✓ §18-1-188	Requires a certification from the County in order to continue a non-conforming use	Protects the planning process by allowing community to identify those projects which are likely to be completed.	Vested rights	The Plan should describe typical build-out period for developments of various types and sizes.
Amortization of Non-Conforming Uses ✓ Title 18	allows the local government to eliminate, over time, uses and structures which no longer conform to new planning and zoning standards	to preserve community character; promote aesthetics and urban design; protect investments in land uses and developments	type; quality; use; density/intensity of development	Plan should establish need for amortization and reasonable amortization periods
14. Variety of Housing Choices				
Affordable Housing Program	Establishes a variety of funding sources or institutional mechanisms for providing affordable housing.	Actively involves the County in the process of providing affordable housing	Amount and type of housing	The Plan should provide an overview of housing costs, cost burdens, and housing needs. The Plan should clearly prioritize housing needs for the County.
Linkage Programs	Requires developers to pay a fee to be applied to a housing trust fund for the provision of affordable housing	Provides a resource for the provision of affordable housing and mitigates development impacts	Mitigation	The Plan should identify the need for new affordable houses created by the development of non-affordable housing.
Zoning for Manufactured Housing ✓ §18-1-025	Permits manufactured housing as of right in residential zoning districts.	Provides for a form of low-cost, single family shelters	Type of housing	The Plan should provide clear policy direction as to the types of housing that may be used to provide for affordable housing needs.
Zero-lot line and flexible lotting patterns ✓ §18-1-044	Allows units to adjoin on common property lines or to be arranged in flexible lotting patterns	Reduces development costs by providing for the flexible arrangement of housing units and minimizing infrastructure costs	Type of housing	The Plan should provide clear policy direction for the situations where development standards must be modified in order to provide affordable housing
Farm worker dwellings ✓ §18-1-156 to –159				

Technique	Description	General Purposes	Objective	Relation of Plan to Tool
Density bonus (optional inclusionary zoning) ✓ э18-1-162 et seq.	Permits higher densities in exchange for the provision of housing for designated income groups	Mitigates development impacts and provides additional affordable housing, offsetting the increased costs of affordable housing to the developer.	Location of housing	The Plan should provide clear policy direction as well a discussion for the need for affordable housing which is generated by new-affordable housing.
Mandatory Inclusionary Housing Requirements	Requires developments to set aside a designated percentage of housing for household and designated income groups	Mitigation development impacts and provides a source for the provision of affordable housing	Type and location of housing	The plan should provide clear policy direction as to whether inclusionary zoning may be mandatory or optional.

Source: Freilich, Leitner & Carlisle

Plan Issues and Opportunities (identified by Comprehensive Plan TAC and CAC in June 1999)

Issues

- Providing infrastructure (schools, roads, sewer and water) to serve growth areas and relieve growth pressures on the rural areas.
- Incentives/disincentives to steer growth into growth areas & away from rural areas.
- Increasing the County's employment base
- Designate areas for economic development, some with rail access
- Paying for growth
- Need to revisit/review impact fees study by County consultant Tischler & Associates
- Protecting the environment, rivers and streams
- Beautification
- Protecting and improving agriculture and the seafood industry
- Addressing future commercial needs outside the growth corridor
- Need to look at the regional context
- Streamlining County Development Ordinances
- Maintaining/improving the quality of life – leisure time activities, parks & recreation, schools, health and human services, activities for young people
- Need for supply of affordable housing and for senior housing
- Preserving rural character and open space
- Need/desire to designate a northern growth area?
- Long term viability of an all- volunteer E.M.S./Fire
- Need to address/revisit storm drainage districts and stormwater management

Opportunities

- Capitalize on rural lifestyle, natural amenities and environment
- Strategic location to capture more tourism dollars
- Increase 2nd home market/retirees
- Identify and preserve lands for employment and bay access
- Increase share of higher end housing
- Establish new rules of the game for larger-scale corporate developers
- Take advantage of new political leadership and momentum

Queen Anne's County Building Permit Data 1989-2000

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Totals	% of Total Homes
ED1	**12**	**22**	**18**	**30**	**16**	**13**	**19**	**23**	**15**	**11**	**16**	**15**	**210**	**4.5**
Single Family	6	17	9	22	8	11	9	14	10	7	12	9	134	
Mobile Home	6	5	9	8	8	2	10	9	5	4	4	6	76	
ED2	**20**	**26**	**25**	**18**	**22**	**26**	**28**	**31**	**14**	**23**	**35**	**32**	**300**	**6.4**
Single Family	18	26	23	18	20	25	25	28	14	21	32	31	281	
Mobile Home	2	0	2	0	2	1	3	3		2	3	1	19	
ED3	**34**	**29**	**46**	**45**	**29**	**35**	**35**	**42**	**51**	**56**	**46**	**49**	**497**	**10.6**
Single Family	32	26	44	42	27	30	34	40	49	52	43	49	468	
Mobile Home	2	3	2	3	2	5	1	2	2	4	3	0	29	
ED4	**261**	**62**	**111**	**102**	**130**	**266**	**259**	**231**	**208**	**191**	**209**	**195**	**2225**	**47.3**
Single Family	135	61	88	71	66	198	241	176	164	116	156	155	1627	
Multi-Family	122	0	20	28	63	65	17	55	44	70	50	39	573	
Mobile Home	4	1	3	3	1	3	1			5	3	1	25	
ED5	**73**	**51**	**65**	**85**	**85**	**130**	**75**	**47**	**54**	**50**	**70**	**77**	**862**	**18.3**
Single Family	64	42	45	47	60	74	67	36	51	46	67	69	668	
Multi-Family		2	16	34	20	51		0			0		123	
Mobile Home	9	7	4	4	5	5	8	11	3	4	3	8	71	
ED6	**10**	**12**	**13**	**25**	**33**	**19**	**16**	**17**	**19**	**28**	**24**	**21**	**237**	**5.0**
Single Family	8	9	11	25	31	17	15	17	19	25	22	19	218	
Mobile Home	2	3	2	0	2	2	1			3	2	2	19	
ED7	**43**	**30**	**29**	**31**	**21**	**38**	**19**	**22**	**37**	**37**	**35**	**26**	**368**	**7.8**
Single Family	27	19	16	18	11	19	8	12	23	21	25	17	216	
Mobile Home	16	11	13	13	10	19	11	10	14	16	10	9	152	
Total SF	290	200	236	243	223	374	399	323	330	288	357	349	3612	
Total MF	126	2	36	62	83	116	17	55	44	70	50	39	700	
Total MH	41	30	35	31	30	37	35	35	24	38	28	27	391	
Total by Year	**457**	**232**	**307**	**336**	**336**	**527**	**451**	**413**	**398**	**396**	**435**	**415**	**4703**	

Source: Queen Anne's County, Department of Planning & Zoning

Buildout Potential – Work Sheets

Total Potential New Non-Residential Development
In Non-Growth Areas
Queen Anne's County, Maryland

Zoning District	Undeveloped Acres	Gross Density	Maximum Potential Sq Ft	Probable Sq Ft Potential (50% of Maximum)
Suburban Industrial	375.08	0.40	6,535,394	3,267,697
Light Industrial Highway Service	100.00	0.40	1,742,400	871,200
Village Center	68.80	0.30	899,078	449,539
Suburban Commercial	158.94	0.30	2,070,625	1,035,313
Totals	*702.33*		*11,247,497*	*5,623,749*

Source: Queen Anne's County Department of Planning and Zoning and MD Property View 2000
Compiled by LDR International, Inc.

Notes:

1. Totals are calculated for all undeveloped lands outside the growth areas of Queen Anne's County
2. Non-residential includes retail, office, industrial and institutional uses.
3. Probable maximums are based on estimated yields after consideration of natural resource constraints, critical area designations, and market factors that reduce the maximum yield permitted under the zoning ordinance.

Buildout Potential – Work Sheets

Chester Growth Area
Undeveloped Land Buildout Analysis

Zoning District	Undeveloped Acres	Res%	Residential Gross Density	Residential Maximum Res. Unit Potential	Residential Probable Unit Potential (75% of Maximum)	Residential Probable Unit Potential (50% of Maximum)	Non-Residential Non-Res%	Non-Residential Gross Density	Non-Residential Maximum Sq Ft Potential	Non-Residential Probable Sq Ft Potential (50% of Maximum)
Existing Res. Infill - NC-8	2	100%	5.45	11	8	5	0%		-	-
Existing Res. Infill - NC-20	18	100%	2.18	39	29	20	0%		-	-
Existing Res. Infill - 1	8	100%	1	8	6	4	0%		-	-
Existing Res. Infill - SE	15	100%	1.5	23	17	11	0%		-	-
CMPD*	573	90%	6	3,094	2,321	1,719	10%	0.25	623,997	311,999
Town Center**	154	25%	4.5	173	130	86	75%	0.4	2,012,472	1,006,236
Totals	*770*			*3,348*	*2,511*	*1,845*			*2,636,469*	*1,318,235*

Source: Queen Anne's County Department of Planning and Zoning, Compiled by LDR International, Inc.

Notes:
1. Non-residential includes retail, office, industrial as well as institutional uses.
2. Maximum yields are based on the acreage times the zoning density/intensity.
3. Probable maximums are based on estimated yields after consideration of natural resource constraints, critical area designations, and market factors that reduce the maximum yield permitted under the zoning ordinance.

Buildout Potential – Work Sheets

Centreville Growth Area
Undeveloped Land Buildout Analysis

Zoning District	Undeveloped Acres	Residential					Non-Residential			
		Res%	Gross Density	Maximum Res. Unit Potential	Probable Unit Potential (75% of Maximum)	Probable Unit Potential (50% of Maximum)	Non-Res%	Gross Density	Maximum Sq Ft Potential	Probable Sq Ft Potential (50% of Maximum)
Town Single Family Res.	87.42	100%	3	262	197	131	0%		-	-
Town PUD (in town)										
R-1	137.3	100%	3	412	309	206	0%		-	-
R-2	47.7	100%	5	239	179	119	0%		-	-
R-3	53.04	100%	7	371	278	186	0%		-	-
Town PUD (outside town)	1382.86	100%	3.5	4,840	3,630	2,420	0%		-	-
Town Planned Bus. Park	119.46	0%		-	-	-	100%	0.25	1,300,919	650,460
County Planned Unit Dev	681.8	100%	3.5	2,386	1,790	1,193	0%		-	-
County Planned Bus. Park	257.5	0%		-	-	-	100%	0.25	2,804,175	1,402,088
Totals	*2767.08*			*8,510*	*6,383*	*4,255*			*4,105,094*	*2,052,547*

Source: Queen Anne's County Department of Planning and Zoning, Compiled by LDR International, Inc.
Notes:

1. Non-residential includes retail, office, industrial as well as institutional uses.
2. Maximum yields are based on the acreage times the zoning density/intensity.
3. Probable maximums are based on estimated yields after consideration of natural resource constraints, critical area designations, and market factors that reduce the maximum yield permitted under the zoning ordinance.

Buildout Potential – Work Sheets

Grasonville Growth Area
Undeveloped Land Buildout Analysis

Zoning District	Undeveloped Acres	Residential					Non-Residential			
		Res%	Gross Density	Maximum Res. Unit Potential	Probable Unit Potential (75% of Maximum)	Probable Unit Potential (50% of Maximum)	Non-Res%	Gross Density	Maximum Sq Ft Potential	Probable Sq Ft Potential (50% of Maximum)
Existing Res. Infill - NC-15	6.01	100%	2.9	17	13	9	0%		-	-
Existing Res. Infill - NC-20	33.77	100%	2.18	74	55	37	0%		-	-
Existing Res. Infill - SR	6.65	100%	1.45	10	7	5	0%		-	-
Existing Res. Infill - The Woods*				75	75	75			-	-
GPRN**	473.2	90%	3.5	1,491	1,118	745	10%	0.25	515,315	257,657
GNC***	13.31	90%	3.2	38	29	19	10%	0.3	17,394	8,697
GVC			3.2	-	-	-		0.5	-	-
Ex. Commercial/Infill - UC	29.99	0%		-	-	-	100%	0.4	522,546	261,273
Commercial/Inst. Dev - UC	50.82	0%		-	-	-	100%	0.4	885,488	442,744
Low Density Residential - Homeport				16	16	16			-	-
Totals	*613.75*			*1,721*	*1,313*	*906*			*1,940,742*	*970,371*

Source: Queen Anne's County Department of Planning and Zoning, Compiled by LDR International, Inc.

Notes:
1. Non-residential includes retail, office, industrial as well as institutional uses.
2. Maximum yields are based on the acreage times the zoning density/intensity.
3. Probable maximums are based on estimated yields after consideration of natural resource constraints, critical area designations, and market factors that reduce the maximum yield permitted under the zoning ordinance.

* The Woods expects a full build-out of 75 additional units.
** GPRN - allows only for institutional non-residential uses - not commercial and is expected to have 10% of institutional uses to support residential
*** GNC - assumes maximum of 10% of total acreage will be used for commercial uses to support the residential component of the area.

Buildout Potential – Work Sheets

Kent Narrow Growth Area
Undeveloped Land Buildout Analysis

Zoning District	Undeveloped Acres*	Residential					Non-Residential			
		Res%	Gross Density	Maximum Res. Unit Potential	Probable Unit Potential (75% of Maximum)	Probable Unit Potential (50% of Maximum)	Non-Res%	Gross Density	Maximum Sq Ft Potential	Probable Sq Ft Potential (50% of Maximum)
	0	0%		-	-	-	0%		-	-
	0	0%		-	-	-	0%		-	-
Totals	*0*			-	-	-			-	-

Source: Queen Anne's County Department of Planning and Zoning, Compiled by LDR International, Inc.

* There are very limited undeveloped lands in the Kent Narrows Growth Area

1. Non-residential includes retail, office, industrial as well as institutional uses.
2. Maximum yields are based on the acreage times the zoning density/intensity.
3. Probable maximums are based on estimated yields after consideration of natural resource constraints, critical area designations, and market factors that reduce the maximum yield permitted under the zoning ordinance.

Buildout Potential – Work Sheets

Queenstown Growth Area
Undeveloped Land Buildout Analysis

Zoning District	Undeveloped Acres	Residential					Non-Residential			
		Res%	Gross Density	Maximum Res. Unit Potential	Probable Unit Potential (75% of Maximum)	Probable Unit Potential (50% of Maximum)	Non-Res%	Gross Density	Maximum Sq Ft Potential	Probable Sq Ft Potential (50% of Maximum)
Town Center										
Town Low Density Res.	22.8	100%					0%		-	-
R-1	6.34	100%	3.5	22	17	11	0%		-	-
R-2	9.27	100%	6	56	42	28	0%		-	-
Town Medium Density Res.	3.6	100%	6	22	16	11	0%		-	-
Town Reg. Comm. - Outlet Expansion*	67.71	0%		-	-	-	100%		400,000	400,000
Town Bus. Park - SR	74.01	0%		-	-	-	100%		-	-
Town Comm./Ind. Mixed Use - SI	11.2	0%		-	-	-	100%	0.25	121,968	60,984
Suburban Infill										
Suburban Planned Dev.**	857.5	95%	4	3,259	2,444	1,629	5%	0.25	466,909	233,454
Suburban Bus. Park	48.41	0%		-	-	-	100%		-	-
Suburban Regional Commercial	3.8	0%		-	-	-	100%		-	-
SI		0%		-	-	-	100%		-	-
Resort Development	42.11	0%		-	-	-	100%		-	-
Totals	*1146.75*			*3,358*	*2,518*	*1,679*			*988,877*	*694,438*

Source: Queen Anne's County Department of Planning and Zoning, Compiled by LDR International, Inc.

Notes:
1. Non-residential includes retail, office, industrial as well as institutional uses.
2. Maximum yields are based on the acreage times the zoning density/intensity.
3. Probable maximums are based on estimated yields after consideration of natural resource constraints, critical area designations, and market factors that reduce the maximum yield permitted under the zoning ordinance.

* Outlet Mall expansion is an established square footage of 400,000.

Buildout Potential – Work Sheets

** Suburban Planned Development - assumes maximum of 5% of total acreage will be used for commercial uses to support the residential component of the area.

Stevensville Growth Area
Undeveloped Land Buildout Analysis

Zoning District	Undeveloped Acres	Residential					Non-Residential			
		Res%	Gross Density	Maximum Res. Unit Potential	Probable Unit Potential (75% of Maximum)	Probable Unit Potential (50% of Maximum)	Non-Res%	Gross Density	Maximum Sq Ft Potential	Probable Sq Ft Potential (50% of Maximum)
SHVC*	7	90%	3.2	20	15	10	10%	0.4	12,197	6,098
Existing Res. Infill - SE	40	100%	1.5	60	45	30	0%		-	-
Existing Res. Infill - E	33	100%	0.5	17	12	8	0%		-	-
Existing Res. Infill - NC-20	6	100%	2.18	13	10	7	0%		-	-
Existing Res. Infill - NC-8	3	100%	5.45	16	12	8	0%		-	-
Existing Res. Infill - White Pines**		100%		74	74	74	0%		-	-
Existing Res. Infill - CS	3	100%	0.2	1	0	0	0%		-	-
SMPD*	863	90%	3.5	2,718	2,039	1,359	10%	0.25	939,807	469,904
Comm - UC	48	0%		-	-	-	100%	0.4	836,352	418,176
Bus/Employment - SI	91	0%		-	-	-	100%	0.4	1,585,584	792,792
Public/Inst. - KISC	15	0%		-	-	-	100%		-	-
Totals	*1109*			*2,919*	2,208	1,497			3,373,940	1,686,970

Source: Queen Anne's County Department of Planning and Zoning, Compiled by LDR International, Inc.

1. Non-residential includes retail, office, industrial as well as institutional uses.
2. Maximum yields are based on the acreage times the zoning density/intensity.
3. Probable maximums are based on estimated yields after consideration of natural resource constraints, critical area designations, and market factors that reduce the maximum yield permitted under the zoning ordinance.

Maryland Population And Housing Unit Growth By County 1990 To 2000

County	1990 Population	2000 Population	Absolute Change	Percent Change	1990 Housing Units	2000 Housing Units	Absolute Change	Percent Change
Allegany	74,946	74,930	-16	0%	32,513	32,984	471	1%
Anne Arundel	427,239	489,656	62,417	15%	157,194	186,937	23,743	19%
Baltimore	692,134	754,292	62,158	9%	281,553	313,734	32,181	11%
Calvert	51,372	74,563	23,191	45%	18,974	27,576	8,602	45%
Caroline	27,035	29,772	2,737	10%	10,745	12,028	1,283	12%
Carroll	123,372	150,897	27,525	22%	43,553	54,260	10,707	25%
Cecil	71,347	85,951	14,604	20%	27,656	34,487	6,805	25%
Charles	101,154	120,546	19,392	19%	34,487	43,903	9,416	27%
Dorchester	30,236	30,674	438	1%	14,269	14,681	412	3%
Frederick	150,208	195,277	45,069	30%	54,872	73,017	18,145	33%
Garrett	28,138	29,846	1,708	6%	14,119	16,761	2,642	19%
Harford	182,132	218,590	36,458	20%	66,446	83,146	16,700	25%
Howard	187,328	247,842	60,514	32%	72,583	92,818	20,235	28%
Kent	17,842	19,197	1,355	8%	8,181	9,410	1,229	15%
Montgomery	757,027	873,341	116,314	15%	295,723	334,632	38,909	13%`
Prince George's	729,268	801,515	72,247	10%	270,090	302,378	32,288	12%
QUEEN ANNE'S	**33,953**	**40,563**	**6,610**	**19%**	**13,944**	**16,674**	**2,730**	**20%**
St Mary's	75,974	86,211	10,237	13%	27,863	34,081	6,218	22%
Somerset	23,440	24,747	1,307	6%	9,393	10,092	699	7%`
Talbot	30,549	33,812	3,263	11%	14,697	16,500	1,803	12%
Washington	121,393	131,923	10,530	9%	47,448	52,972	5,524	12%
Wicomico	74,339	84,644	10,305	14%	30,108	34,401	4,293	14%
Worchester	35,028	46,543	11,515	33%	41,800	47,360	5,560	13%
Baltimore City	736,014	651,154	-84,860	12%	303,706	300,477	-3,229	-1%

Maryland Population And Housing Unit Growth By Region 1990 To 2000

Region/County	Population Change 1990 to 2000 Number	Percent	Housing Units Change 1990 to 2000 Number	Percent
Baltimore Region				
Baltimore City	-84,860	12%	-3,229	-1%
Howard	60,514	32%	20,235	28%
Anne Arundel	62,417	15%	23,743	19%
Baltimore	62,158	9%	32,181	11%
Carroll	27,525	22%	10,707	25%
Harford	36,458	20%	16,700	25%
Washington Suburban Region				
Montgomery	116,314	15%	38,909	13%`
Frederick	45,069	30%	18,145	33%
Prince George's	72,247	10%	32,288	12%
Southern Maryland Region				
St Mary's	10,237	13%	6,218	22%
Charles	19,392	19%	9,416	27%
Calvert	23,191	45%	8,602	45%
Western Maryland Region				
Garrett	1,708	6%	2,642	19%
Washington	10,530	9%	5,524	12%
Allegany	-16	0%	471	1%
Upper Eastern Shore Region				
Talbot	3,263	11%	1,803	12%
Kent	1,355	8%	1,229	15%
Caroline	2,737	10%	1,283	12%
QUEEN ANNE'S	6,610	19%	2,730	20%
Cecil	14,604	20%	6,805	25%
Lower Eastern Shore Region				
Worchester	11,515	33%	5,560	13%
Wicomico	10,305	14%	4,293	14%
Dorchester	438	1%	412	3%
Somerset	1,307	6%	699	7%`

Acronym Glossary

AADT	Annual Average Daily Traffic
AG	Agricultural Zoning
APFO	Adequate Public Facilities Ordinance
CAC	Citizen Advisory Committee
CDBG	Community Development Block Grant
CMP	Corridor Management Plan
CS	Countryside Zoning
ESLC	Eastern Shore Land Conservancy
FTE	Full-Time Equivalent
FY	Fiscal Year
HSC	Historic Sites Consortium
IDA	Intense Development Area
KN/S/G	Kent Narrows, Stevensville and Grasonville Sewer Treatment Plant
LDA	Limited Development Area
LDR/HNTB	Consultants assisting with Comprehensive Plan
LOS	Level of Service
MALPF	Maryland Agricultural Land Preservation Foundation
MDE	Maryland Department of Environment
MDP	Maryland Department of Planning
MET	Maryland Environmental Trust
MTA	Maryland Transportation Authority
MWSP	Master Water and Sewer Plan
RCA	Resource Conservation Area
SHA	State Highway Administration
TAC	Technical Advisory Committee
TDR	Transfer of Development Rights
TEA-21	Transportation Equity Act for 21st Century