## **CHAPTER 4 - MUNICIPAL GROWTH ELEMENT**

## INTRODUCTION

This document serves as the Town of Denton's Municipal Growth Element mandated through House Bill 1141 by the Maryland State Legislature in 2006. House Bill 1141, Land Use – Local Government Planning, requires that each municipality that exercises planning and zoning authority add a Municipal Growth Element and Water Resources Element and to its Comprehensive Plan.

One of the goals of Denton's growth element is to provide a growth roadmap within and around the current Denton corporate limits. Another goal is to integrate components of Denton's Municipal Growth, Land Use, and Community Facilities Elements to ensure association among them, that is, each element meshes with the others. Lastly, where appropriate and achievable, obtain Caroline County's support for Denton's planned growth.

Collectively, the three aforementioned Denton comprehensive plan elements provide a comprehensive, long-term vision which identifies growth via annexations, infill development, and redevelopment. Population is addressed in the context of historical growth, various future projection scenarios, land capacity and its constraints, facilities and their constraints and services whether Town or County provided.

Denton's growth element incorporates the following Smart Growth Principles, "Maryland's Building Blocks for Quality Communities":

- Employ a mix of land uses
- Take advantage of compact building design
- Create a range of housing opportunities and choices
- Create walkable neighborhoods
- Foster distinctive, attractive communities with a strong sense of place
- Preserve open space, farmland, natural beauty, and critical environmental areas
- Strengthen and direct development toward existing communities
- As best possible, provide a variety of transportation choices
- Make development decisions predictable, fair, and cost-effective
- Encourage community and stakeholder collaboration in development decisions

Denton is a small urban center of approximately 4,000 residents in rural, agrarian-based Caroline County. Denton has a unique heritage as the County's seat and its location on the Choptank River (refer to Chapter 2 - Community Characterization). Until recent annexations, the Choptank River acted as a natural boundary. However, in 2004 the Town annexed approximately 850 acres west of the Choptank River, thereby significantly enlarging its land capacity while, at the same time, creating considerable challenges for servicing growth. After a decade of annexations which grew Denton's incorporated area significantly, this growth element provides a unique opportunity to complete an overdue situation assessment and formalize an acceptable growth plan. Much of the basis for the proposed growth plan came from a Town survey to 100 percent of the property owners (37.5% response rate), conducted in the summer of 2009. Its results were

enlightening and provided a context for the Town Council, the Planning Commission and planning staff on what constituted acceptable growth.

#### A VISION FOR DENTON

The overall vision for Denton, as expressed in the Comprehensive Plan introduction, is the integral unifying component throughout the document. The vision underscores the key community expectations and provides a conceptual benchmark for future Town decision-making. The Town has developed the following vision statement to guide growth and development in a manner that supports the values of the community and the goals and objectives of the Comprehensive Plan.

# **Denton's Vision**

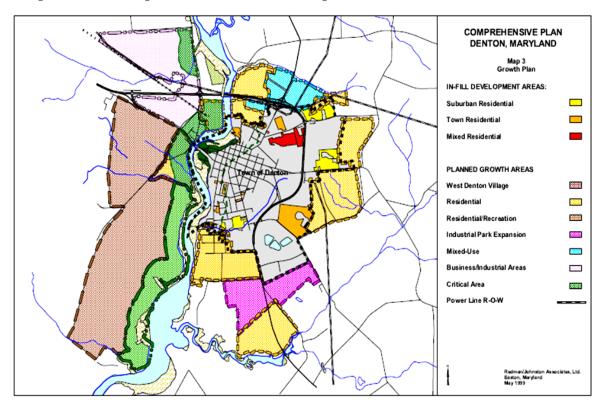
Denton will be an innovative, healthy, safe, well-balanced community that protects its historical integrity, preserves its unique natural resources, enhances its economical vitality and maintains its unique small town character. Denton's population will increase at an acceptable rate consistent with the ability of the Town and County to provide basic services and facilities.

## **DENTON'S GOALS**

Denton will remain a rural County seat and major population center suitable for sustainable growth as advocated under Maryland's statutory planning visions and in the framework of Caroline County comprehensive planning goals. Growth within the Town shall represent a collaborative effort between the Town and the County to suitably plan development, annexations and urban/rural boundaries (greenbelt); to protect environmentally sensitive areas and the Town's character; to provide adequate and safe water and wastewater services; and to offer exceptional and dependable services and facilities.

## SITUATION ASSESSMENT

When the Town last adopted a Comprehensive Plan (1997), the town was comprised of 1,382 acres, all east of the Choptank River. At that time, the Planning Commission identified future growth areas beyond the corporate limits; including a large area west of the Choptank River approximately of 859 acres (Map 4-1). The 1997 Comprehensive Plan also described the general land use types planned for each property both within the existing corporate boundary and in the growth area. The 1997 planned town growth area was approximately 3,456 acres (a 350 percent increase over the incorporated area at that time).

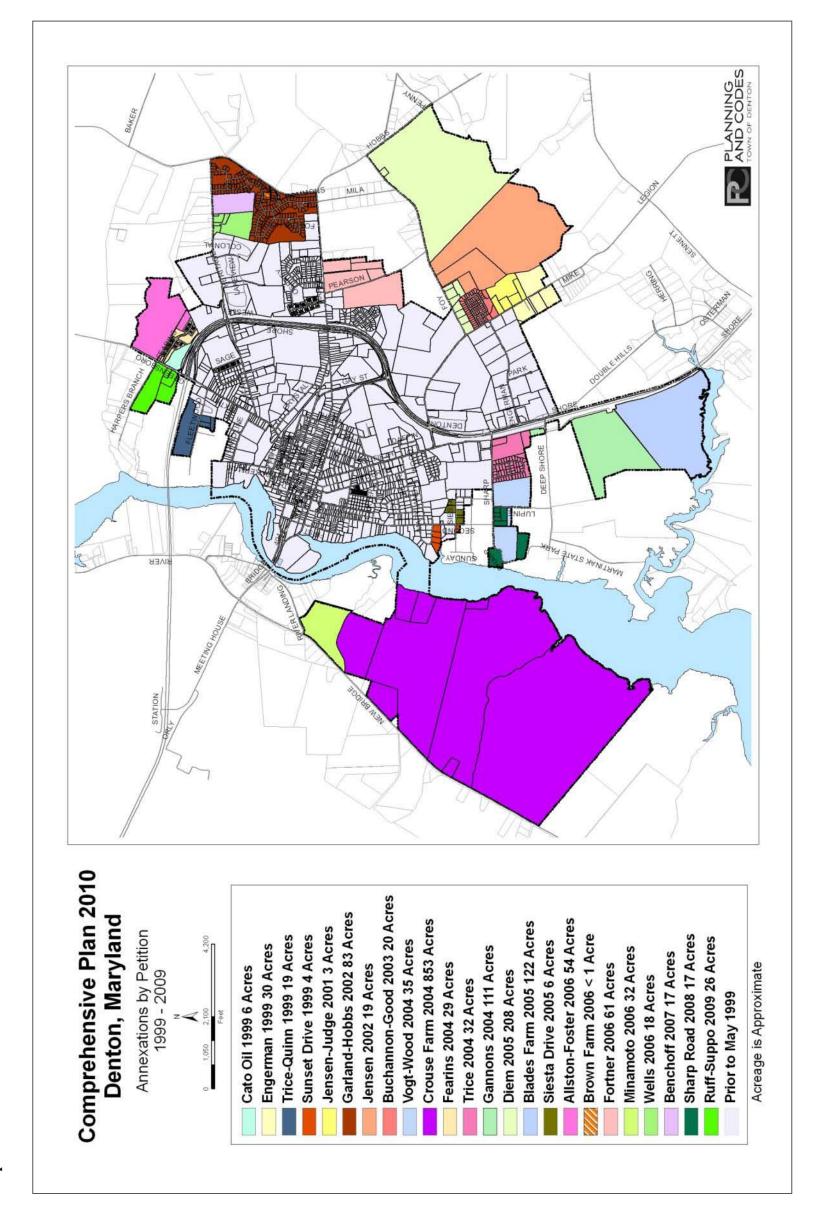


Map 4-1: 1997 Comprehensive Plan Growth Map

Source: Denton 1997 Comprehensive Plan

Since 1997, the Town annexed approximately 1,890 acres (Map 4-2) in the targeted growth areas (a 138 percent increase). The Town's annexation of a significant portion of its growth area during the last decade raised questions concerning Denton's ultimate size in terms of dwelling units (households), population and the impacts upon community facilities, taxes, and quality of life.

Map: 4-2 Annexations



A 2006 Draft Comprehensive Plan was authored and indicated, due to the aforementioned decade of annexations, that the town's population at build-out would exceed 31,000 people. Upon realization of that revelation, the draft plan was shelved at the request of the sitting Town Council, and the Planning Commission and planning staff were instructed to revisit the plan in such a way to reduce the projected growth to a more acceptable level.

Subsequently, House Bill 1141 became law. Fortunately, the Maryland Department of Planning (MDP) provided the necessary guidance to comprehensively address municipal growth in context of its impact upon community facilities, land use, and water resources. The following portions of Denton's Municipal Growth Element and the Water Resources Element (Chapter 5) address these components.

In preparing the Land Use, Growth and Water Resources Elements of the 2010 Comprehensive Plan; the Planning Commission and planning staff re-examined projected growth projections in Caroline County and the Town's fair share as promulgated in State Smart Growth policies. The interrelationships among land use, population growth, and impacts on public facilities and services associated with projected growth are examined below.

# **GROWTH MANAGEMENT GOALS**

Denton has experienced growth in most sectors within the Town over the last several decades. This growth is evident in the size of our population and the spatial area consumed as development occurred. The pace, location, and quality of our past and potential future growth are of concern to many citizens of Denton (refer to Town Survey, Appendix 1). As a result, the Town began focusing on strategies to manage change in a less disconcerting and more manageable manner. To this end, those charged with the Town's planning used their knowledge and skills, supplemented by MDP advice and counsel and the survey results; to revisit proposed land uses, better address natural constraints, and reduce the growth area significantly.

## **Natural Resource Conservation**

The cumulative impact of Denton's growth and development on the natural environment may well be significant and detrimental without proper planning and implementation. To sustain our community, to balance the built and natural environments successfully, the Town must commit to protection of its and surrounding natural features. There is recognition of the need for additional passive and active recreation parks and open spaces. Denton's adjacency to the Choptank River, a significant tributary of the Chesapeake Bay, requires Town protection of its component within the Upper Choptank River Watershed; the river; and all local and regional natural features and ecosystems.

## **Public Facilities Planning**

Community growth increases demand for community services. New homes and businesses require potable water provisioning, new stormwater systems and sanitary sewers, new roads and sidewalks, more police and fire protection, schools, and parks. Denton will need to address these services in the context of their impacts to taxpayers. To minimize inequitable fiscal impacts, the Town must be prudent in infrastructure and services investments while allowing for growth at an

appropriate pace and place. Denton must ensure that it provides high quality public services to all of its citizens.

## **Transportation**

As growth and development continue in Denton and surrounding towns, citizens have an ever-growing array of destinations from which to choose, some discretionary, and others mandatory (e.g, work related). Most often, the only option that the transportation system provides for reaching out-of-town destinations is the automobile. To improve traffic and its associated impacts, Town residents will require more transportation options. Within Town, spatial distances can be reduced between destinations by integrating land uses, exploring public transportation options, and implementing a network of bicycle and pedestrian pathways.

# **Community Character**

What is the community character of Denton? One may have an idea of what this means, but it is ultimately a concept that is quite difficult to quantify succinctly. It is quite improbable that a precise definition can be agreed upon. However, people seem to know it when they see it: It's in the historic architecture of the Downtown; it's in the streetscape of the Downtown; it's in the Town's rural setting and location on the Choptank River; it's in the working-class, agricultural, and entrepreneurial business opportunities in the Town of Denton, that residents cherish. All of these aspects and more are crucial elements of what Denton calls its community character. Everyone must work together to protect, nurture, and enhance these characteristic qualities in the future.

# **Inter-Jurisdictional Cooperation**

The points of view given above do not stop at the Town limits. All perspectives must be addressed in the context of the Caroline County, the Eastern Shore, Chesapeake Bay region, and the State of Maryland. Community success depends substantially upon cooperation among local units of government. A positive working relationship with Caroline County is essential. The entire greater community benefits from compatible policy and process agreements.

# **How Should the Town Grow?**

The Land Use Plan map shown in the Land Use Element (Chapter 3) reaffirms the belief that Denton should serve as a major residential, commercial, employment, and institutional center for Caroline County and surrounding markets. It also acknowledges that growth for growth's sake alone will not result in the type of community that the residents desire. As a consequence, the Planning Commission re-examined the Town's planned growth (from both the adopted 1997 and 2006 draft Comprehensive Plans) and revised it according to the following growth management principles:

- The planned growth areas are the "build-out" limits for the Town, i.e., they represent an urban growth boundary beyond which the Town does not plan to grow;
- This urban growth boundary should be reinforced with a "greenbelt" area along the perimeter consisting of forest, agriculture, open space, very low density rural residential uses and other compatible low-intensity uses. This area should be mutually acceptable to Caroline County and the Town of Denton; and

• The planned use of future growth areas should be specified in the Comprehensive Plan, including substantial areas for future economic development and employment uses to achieve a better job-housing balance for local (Town and County) residents.

# **Priority Funding Areas**

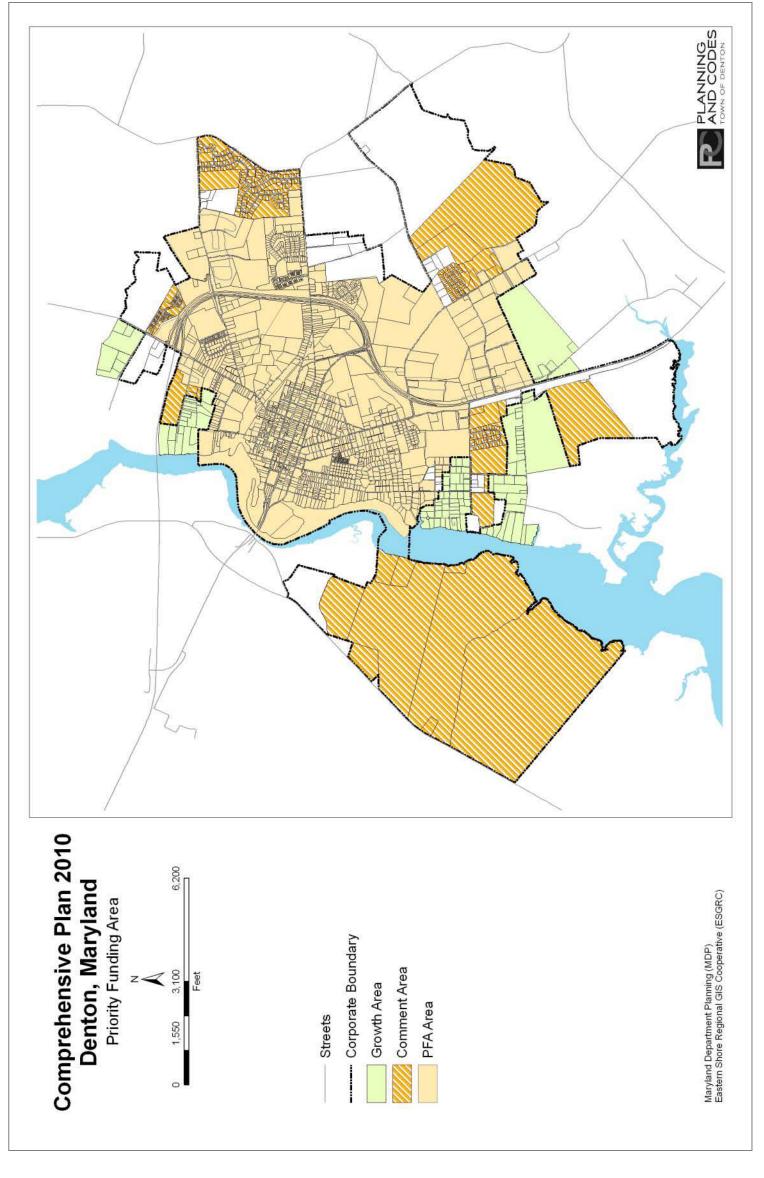
Priority Funding Areas were established by the 1997 Priority Funding Areas Act (the Smart Growth Act). This Act authorized counties and municipalities to designate areas appropriate for growth as Priority Funding Areas (PFA). Priority Funding Areas reflect Maryland's commitment to direct future development in the State into established communities that are supported by existing or planned public services and infrastructure and protect our natural resources. PFA's are areas defined under State law and designated by local jurisdictions to provide a map for targeting State investment in infrastructure. The law directs the use of state funding for roads, water and sewer plants, economic development, and other growth-related needs to Priority Funding Areas.

There have been many significant changes to the process of designating PFA's as a result of the passage of HB1141 in 2006. Beginning on October 1, 2006, an area certified as a PFA by a municipality shall be based on an analysis of the capacity of land areas available for development, including in-fill and redevelopment and an analysis of the land area needed to satisfy demand for development at densities consistent with the master plan.

Denton is a designated growth area, property within the Town boundaries as of January 1, 1997, is automatically considered to be PFA regardless of its zoning status. For any property subsequently annexed, the property and the zoning applied to that property must satisfy certain criteria set forth in the Priority Funding Act. It is important to note that as of October 2006, new municipal annexations seeking PFA designation must be submitted to the Maryland Department of Planning (MDP) for "PFA Certification." According to MDP, County properties annexed into the Town that currently have PFA status, do not retain such status and do not automatically become PFA's if annexed.

The Town is currently working with the Maryland Department of Planning to update Denton's PFA's to determine if revisions are needed. The State of Maryland Task Force on the Future for Growth and Development are looking to ascertain changes to the PFA's by examining ways in which the PFA law could be revised to promote better outcomes for development and State spending.

Denton's existing PFA's, those under scrutiny for designation (comment areas) and other areas not yet determined are illustrated on Map 4-3 – Priority Funding Areas.



Map: 4-3

## **GROWTH PRINCIPLES**

The following principles are addressed in the Land Use section but are also incorporated and stressed as Growth Element principles:

- Preserve open space, a smart growth goal that can bolster local economies, preserving critical environmental areas, improving our community's quality of life, and guiding new growth into existing communities.
- Insure that new development does not adversely impact the provision of Town services and facilities. Work with the County to address impacts of new development on the provision of County facilities and services.
- Insure new residential neighborhoods are fully integrated into the community, reflect the positive characteristics of existing residential neighborhoods and provide connectivity between new and existing neighborhoods.
- Insure a user-friendly and efficient urban transportation network: This should include
  public transportation (subsidized if necessary); alternative transportation modes such
  as bike paths, sidewalks, and more extensive pedestrian options; and mechanisms that
  encourage good traffic flow (fewer cul-de-sacs, more through streets, and more use of
  planning and street grid systems).
- Work with the County to insure that development along the Town/County borders
  creates a positive overall community image. Support efforts of the County to manage
  growth outside of the municipal growth area so that the County can remain essentially
  rural.
- Accommodate future growth primarily through infill and redevelopment within the Town and through appropriate annexation of land included in the Town's designated growth area.
- Support Caroline County's implementation of its Transfer of Development Rights (TDR) and Purchase of Development Rights (PDR) programs.
- Reinforce the urban growth boundary with a "greenbelt" area, along the perimeter, consisting of forest, open space, very low density rural residential uses, and other compatible low-intensity uses.
- Preserve environmentally sensitive areas and natural resources; and
- Conserve open spaces and preserve forested lands to help decrease nutrient sediment runoff.

Throughout the process of creating the Denton growth plan, individuals have weighed in with their own vision for the Denton of tomorrow. While many of those visions are not the same as others, many common themes have come to the surface. One of the areas of mutual commonality is population growth.

As mentioned earlier in the narrative, the Town of Denton conducted a 100% property owner survey in the summer of 2009. The survey received a 37.5% return rate (entire survey, results and comments are listed in Appendix 1). Some survey questions were included to gain insight about property owners' opinions on how large the Town of Denton should ultimately be and their preferences for growth. The responses were also grouped by zoning districts (primarily residential) to determine if property owners had differences of opinion (findings were that they mostly did not).

In response to the question asking respondents to choose the best statement that describes their preference for future growth of the Town (Question 20), 45% supported limiting growth to maintain small town character and 47% supporting controlled/managed growth to increase amount of services and tax base. When asked their preference for the Town's future population, (Question 22), 81% responded that population should be in a range of 3,800 - 10,000, while 19% responded with a preference for a future population range of 10,000 - 20,000.

## GROWTH PLAN OBJECTIVES AND ASSUMPTIONS

As a result of the overall situation assessment and in deference to the majority of Town residents' wishes, the maximum population for this plan will be constrained to no more than 10,000 residents.

Due to the abundance of vacant infill area associated with the past decade of annexation activity and sizeable redevelopment area within Town, future residential growth will occur within the existing Town boundary.

Planned growth area annexations shall be those which prioritize commercial/industrial land uses first followed by somewhat densely populated areas currently serviced by private wells and septic systems.

## THE GROWTH OF DENTON

# **Population Trends**

Between 1940 and 1990, Denton's population increased from 1,938 to 2,977, a 53.6% increase, with the predominant amount of growth occurring from 1980 to 1990 (Chart 4-1). Chapter 2, Community Characterization, of this comprehensive plan addresses Denton's historical population trends in greater detail.

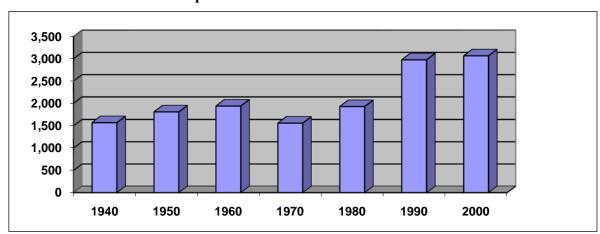


Chart 4-1: Denton Historical Population Increase - 1940 - 2000

Source: U.S. Census Bureau

As shown in Table 4-1, population counts from the 2000 Census indicate that between 1990 and 2000, the population of the Town increased by 3.0%. The population of Caroline County increased during that same period by 10.1%. Population estimates prepared by the Maryland Department of Planning in the report, "Population Estimates for Incorporated Places in Maryland within Jurisdictions: April 1, 2000, to July 1, 2008," indicate that during that period, Denton's population grew from 3,066 to 4,022. The total population increase in those eight years was 956. This growth represents an average percent yearly change of 3.9%.

Table 4-1: Population Growth Trends - Denton and Caroline County

	1990	Percent of Total	April 1, 2000	Percent of Total	Increase 1990 - 2000	2008	Percent of Total	Increase 2000 - 2008	Average % Change 2000 - 2008
Caroline County	27,035	100.0%	29,772	100.0%	10.1%	33,138	100.0%	11.3%	1.2%
Denton	2,977	11.0%	3,066	10.3%	3.0%	4,022	12.1%	31.2%	3.9%

Source: Maryland Department of Planning, Maryland State Data Center: Population Projections: Population Estimates for Incorporated Places in Maryland within Jurisdictions: April 1, 2000 to July 1, 2008

The Maryland Department of Planning population projections for Caroline County from 2008 to 2030 are shown in Table 4-2. Projections for Denton assume that Denton's share of the total

County population (12.14 %) in 2008 (as shown in Table 4-1) will remain constant through the end of the planning period (2030), a simple geometric growth. The population numbers for Denton in Table 4-2 are based on past data relationships naïvely projected into the future.

**Table: 4-2: Population Projections Denton and Caroline County** 

	2008	2010	2015	2020	2025	2030	Percent Change 2008-2030	Average Annual % Change 2008-2030
Caroline County	33,138	33,562	36,676	39,682	42,515	45,228	36.5%	1.66%
Denton	4,022	4,074	4,452	4,817	5,161	5,491	36.5%	1.66%
Denton (% of County)	12.14%	12.14%	12.14%	12.14%	12.14%	12.14%		

Source: Maryland Department of Planning, Population Projections, Maryland State Data Center, Historical and Projected Household Population for Maryland's Jurisdictions (Revisions, February, 2009)

Table 4-3 shows alternative population projections for the Town using projections obtained from the Maryland Department of Planning, Strategic Development Department. The projections were calculated using many different techniques, including the "selected" MDP population projection. These techniques were grouped into two broad categories, "naïve" and "development pressure."

Table: 4-3: Population Projections from Maryland Department of Planning

Table: 4-5. Topulation Trojections from Maryland L	epui tinci	it of I lam	<del>~~</del>		
	2010	2015	2020	2025	2030
Constant Share Method	3,456	3,775	4,084	4,378	4,661
Lowest Naïve Method (shift share_1990_00)	3,119	3,189	3,254	3,314	3,371
Highest Naïve Method (shift share_1980_90)	3,764	4,280	4,812	5,354	5,908
Ave. All Naïve Methods	3,423	3,702	3,969	4,221	4,462
Ave. All Naïve Methods (w/o High & Low)	3,408	3,670	3,919	4,153	4,375
Lowest Development Pressure Method (97_05, .125 miles)	3,461	3,795	4,126	4,449	4,770
Highest Development Pressure Method (00_05, .5 miles)	3,472	3,832	4,205	4,585	4,974
Ave. Development Pressure Methods (MDP Selected)	3,466	3,811	4,160	4,508	4,858
Ave. Development Pressure Methods (w/o High & Low)	3,466	3,810	4,158	4,505	4,854

Source: Maryland Department of Planning, Strategic Development Department

Table 4-4 illustrates four projections using a compound annual rate ranging from 2% - 5%. A compound annual rate was chosen, rather than a straight line rate, for calculations because the function more closely resembles what is believed to depict the nature of future growth. Comparison of the projections is made to MDP's "selected" projection (last row on the table). Each of these growth projections assumes no water or wastewater capacity constraints.

**Table 4-4: Alternative Population Projections** 

Compound rate increase 2010 - 2030	2008	2010	2015	2020	2025	2030
2%	4,022	4,184	4,620	5,101	5,632	6,218
3%	4,022	4,267	4,947	5,734	6,648	7,707
4%	4,022	4,350	5,293	6,439	7,834	9,532
5%	4,022	4,434	5,659	7,223	9,218	11,765
MDP's "selected" projection *	3,177	3,466	3,811	4,160	4,508	4,858

<sup>\*</sup> Source: Maryland Department of Planning, Strategic Development Department, Municipality Population Projections, January, 2010

The growth rate from 1990 to 2000, as shown in Table 4-1, calculated an increase of 2.98% (3.0% rounded). The population change between 2000 and 2008 showed at average annual increase of 3.9%. Taking into consideration the recent economic downturn, it is the planning staff's opinion that any future growth will start out at a slow pace. Consequently the best methodology for projecting population is to use a compound growth rate, as illustrated in Table 4-4. The 2030 projections shown in Table 4-4 demonstrate a projected population range beginning with an estimate of 4,858 (MDP's "selected projection") increasing to a severe growth estimate of 11,765 (based upon a compound rate increase of 5%). Taking into consideration all of the information that has been compiled, as shown in Tables 4-1 through 4-4, the "staff's best" planning population projection for Denton would be to assume a compound rate increase of 2%, which would ultimately put Denton in the year 2030 at a population of 6,218. The Town of Denton governing body has indicated that they prefer slow and managed growth; they have also indicated that the water and wastewater capacity for Denton will not be increased. As discussed later in this chapter, the population projection that is constrained by the Town's capacity to provide water and wastewater, reaches a population projection of 6,125 by 2030, and it is this projection that will be used for planning purposes throughout the Comprehensive Plan document.

## **Growth within Current Town Boundary**

# Municipal Development Capacity Analysis

The following residential development capacity analysis should not be confused with population projections used for planning purposes. Residential capacity analysis estimates are simply a means of measuring potential "land" and "use" capacity to accommodate future population growth whenever such population growth may occur.

A development capacity analysis, sometimes referred to as "build out-analysis" or "buildable lot inventory," is an estimate of the total amount of development that may be built in an area under a certain set of assumptions, including applicable land-use laws, policies (e.g., zoning), and environmental constraints.

## Data Used

Listed below are the data used to complete the Town of Denton's Development Capacity Analysis. This information was obtained from various sources, including the Eastern Shore Regional GIS Cooperative (ESRGC), Caroline County, Maryland Property View (MDPV), as well as The Town of Denton's Planning and Codes Department.

- High Resolution Aerial Photography aerial imagery dated April 2009 was used for the aerial interpretation of the analysis.
- Digital Tax Parcel Layer Using the most recent digital parcel layers dated May 2009 that included newly annexed land and recent subdivision plats. The parcel layer is from Maryland Property View 2009 and created by the ESRGC.
- Corporate Boundary Town of Denton's 2009 Corporate Boundary was used and updated based on April 2009 aerial imagery.
- Official Zoning Map The Town of Denton 2009 Comprehensive Plan official zoning map was used to determine zoning districts.
- Zoning Ordinances The Town of Denton Table of Density and Dimension regulations. This table included the Minimum Lot Area (MLA), dimensions, density, and yard requirements.
- Addressable Building footprints The building footprint layer was created by digitizing addressable buildings from aerial imagery; done by ESRGC.
- Address Points The Caroline County Department of Emergency Management supplied a Denton Address Point layer obtained from 911 Maps.
- Environmental and protected features These layers include the Chesapeake Bay Critical Area (CBCA) developed by the ESRGC in 2006 and Forested Interior Dwelling Species (FIDS).
- Water and Wastewater Treatment Plant capacity information Information regarding the gross flow capacity, utilized capacity, and the net capacity of Denton Wastewater Treatment Plant facilities. The rated Denton-specific and County approved average of flow per dwelling was also included.

#### Methodology

The first step in creating the development capacity analysis was to identify any vacant land. To classify as vacant, a combination of field surveys, Maryland tax assessment records, and remote sensing was used, an extraction of those parcels were made. An evaluation of existing zoning district layers was done using the Official Zoning Map for Denton Maryland 2010

comprehensive draft plans. Queries were made for each zoning district based on minimum lot area and the number of existing dwelling units for maximum density calculation; and maximum lot area and the number of existing dwelling units for the minimum density calculation. Using the zoning districts' layers to recognize land that could be redeveloped or developed with greater intensity through infill and sub-dividing lots, layers were created based on attributes. These layers were merged with vacant lot extractions for each zoning district. The maximum and minimum lot area was used in later calculations in order to determine the number of potential dwelling units a parcel could support. The existing dwelling units for each parcel were taken into account in order to calculate the development capacity. There were various fully approved subdivisions (or extended by Maryland's tolling legislation) with remaining unimproved lot inventories that were excluded from the vacant lot calculations. These were excluded from the zoning district square foot calculations because these lots available for infill were already platted. The total number of vacant lots from the various subdivisions were added to the dwelling unit and population calculations (Tables 4-7 & 4-8).

# **Environmental Overlay**

For this analysis, a "protected environmental" overlay was used to deduct any land that was deemed environmentally sensitive and therefore not developable. A planning assumption was used whereby all environmental constrained land was not to be used for calculating development potential. In other words, the net area, devoid of environmentally constrained land, not the gross area, was used for calculating potential dwelling units.

The 1,000 foot Chesapeake Bay Critical Area (CBCA) buffer line, derived from the mean high tide level was used to determine intersections with parcel polygons and to bisect them wherever the line lay. The areas that lay inside the Chesapeake Bay Critical Area line were considered built-out\* (i.e., there would be no growth allocation if sub-dividable)\*\* and the areas outside remained potential parcels for growth. The Forested Interior Dwelling Species (FIDS) areas were overlaid and clipped out of the available parcels, as were stream buffers and wetlands, leaving a remainder of land unconstrained for development. Note that hydric soils and steep slopes were not considered constraints due to the former being servable by wastewater treatment plants and the latter nearly non-existent outside the CBCA.

#### Dwelling and Parcel Comparison

Once the aforementioned steps were completed, the total number of dwelling units were calculated. This process required obtaining a total count of existing dwelling units per parcel. A combination of address points, addressable building footprints, 2009 aerial photos and the 2009 Maryland Property View was used to establish these numbers. The address point and building footprint layers were used to identify and locate dwelling units within a specific parcel. The aerial photos were then used to confirm these findings. If any questionable dwelling unit was found, Maryland Property View was referenced and a field survey was conducted to validate its existence. The parcel land areas and acreages were closely examined through the attribute tables and the Maryland Property View figures. If a parcel area was debatable, the ArcGIS/ARCMAP measure tool and shape area was used to determine the correct parcel dimension.

<sup>\*</sup>within the RCA, one dwelling unit per 20 acres will be allowed

<sup>\*\*</sup>growth allocation requests will be considered by Town Council, Caroline County and Critical Area Commission.

The next step was to determine the number of potential dwelling units the parcels could support at 100% development capacity. This was done by summing the land area (square feet) of all the parcels in a selected zoning district and dividing by the zoning districts' classified minimum lot area and maximum lot area. The numbers of existing dwelling units were subtracted from that result in order to derive the count of potential dwelling units. The zoning districts which had overlay zoning for planned neighborhoods (PN), as part of an annexation agreement, were excluded from that zoning district's total area and calculated based upon the density criteria for the PN overlay zoning area.

# **Calculations and Extractions**

The remaining parcels, after the aforementioned extractions, consisted of those areas that were eligible for new development and subdivision. For these parcels that have the potential for development, the following assumptions were used to determine development capacity.

The development capacity was considered for three mutually exclusive scenarios: full capacity (100%), partial capacity (75%), and limited capacity (55%).

The following equations were executed for each zoning district's eligible parcels to determine a development capacity for each scenario. Full capacity is not realistic, but used to determine a base number.

Scenarios and Equations:

- 1. 100% capacity (full):
  - (Parcel Area / MLA) # of existing DU's = Raw # of available DU's, rounded to nearest whole number
- 2. 75% capacity (partial):
  - Raw # of available DU \* 0.75, rounded to nearest whole number
- 3. 55% capacity (limited):
- Raw # of available DU \* 0.55, rounded to nearest whole number *Note: MLA is Minimum Lot Area, DU is Dwelling Unit.*

The results of the above calculations were used to determine the number of dwelling units each parcel could support at these varying capacities. Planning assumptions were made to utilize a partial capacity of 75% to account for infrastructure improvements for all zones except PN zones; which were built out at limited capacity of 55% to account for both infrastructure, and its commercial and retail components.

To calculate the "change in population" from the number of available dwelling units, an average household size is used. Table 4-5 shows Maryland Department of Planning's estimate for Caroline County average household size from the year 2000 through 2030. The average household estimate shows a decline from 2.64 persons per household in 2000 to 2.47 in 2030. A comparable decline was calculated for Denton. All calculations for population growth discussed in the Comprehensive Plan based on dwelling units, will use the constant 2.17 persons per

household the calculated average of the 20 year period, using this projection will show a more realistic representation for future growth.

**Table 4-5: Average Household Size** 

	2000	2010	2015	2020	2025	2030
Caroline County	2.64	2.57	2.54	2.52	2.49	2.47
Denton	2.29	2.22	2.19	2.17	2.14	2.12

Source: Maryland Department of Planning, Planning Data Services, February 2009, Town of Denton Planning & Codes Department.

Table 4-6 identifies an inventory of 519 buildable (vacant) lots from currently approved subdivisions.

**Table 4-6: Approved Lot Inventory** 

Developer	Subdivision Name	Total Lots	Lots Finished	Lots Available
	Approved Final Subdiv	isions		
Real Estate General	Trice Meadows	45	16	29
Cypress Custom Homes	Sandy Meadows	58	46	12
Stanley Halle Communities	Parkview Estates	26	7	19
Garland & Hobbs LLC	Savannah Overlook	161	161	0
Mallard Homes	Mallard Landing	187	186	1
Lacrosse Homes	Fearins Crossing Phase I	60	0	60
The Gardens Land Group, Inc.	The Gardens	62	0	62
Lacrosse Homes	Fearins Crossing Phase II	12	0	12
Garland & Hobbs LLC	Savannah Overlook Phase IV	2	0	2
Chris Coile Development D	Glenfield	41	0	41
	Sub Total - Final	654	416	238
	Approved Preliminary wi	th DRRA		
Gannons Purchase, LLC	Village at Watts Creek	257	0	257
Sub-To	otal Approved (no expiration)	911	416	495
	Pending Final			
CIII Builders, LLC	Gay Street Redevelopment	24	0	24
	Sub Total	24	0	24
	Grand Total	935	416	519

Source: Denton Planning and Codes, 2010

The maximum density development calculation for the existing Town boundary is shown in Table 4-7. Using the minimum lot allowance scenario for the zoning districts, the available buildable land area could accommodate 3,234 additional dwelling units. Adding the 519 approved vacant lots from Table 4-6 indicates that 3,754 dwelling units upon the current buildable land inventory are possible. This analysis illustrates that Denton's population could potentially grow to 12,167 within its current boundaries.

The calculation for the proposed growth area would add another 419 persons, which equates to a total projection population of 12,588 persons.

Table 4-8 shows a similar analysis using **minimum density scenario** to calculate dwelling units and population. With this scenario, the existing Town boundary can accommodate a population of 10,043 persons. The total projected population for the minimum density scenario, including the growth area, results in a total population of 10,464.

Table 4-7: Town of De	enton Development Ca	pacity Results for Minimu	ım Lot Allowa	ance (Maximum	Density)
Zoning District	Parcel Area (sq ft)	MLA (sq ft) Note 1	# of Parcels	# of Existing DUs	Development Capacity (DUs)  Notes 2 & 3
PN	36,749,732	8,712	13	10	2,315
CC	92,709	8,000	12	0	9
CM	50,611	8,000	6	3	2
GC	640,286	8,000	12	8	54
TR	1,123,726	8,000	92	14	95
SR	4,302,542	10,000	56	39	293
MR	1,885,732	3,000	467		
Total	44,845,338	_	321	80	3,234
Approved Vacant Lots	_	_	519	0	519
		Total Development Capacity			3,753
		Population Increase Note 5			8,145
		Existing Population			4,022
		Total Population Note 6			12,167
		Percent Increase			203%
		EAST AND WEST DENTON IN	IDIVIDUALLY		
West Denton (PN)	25,878,767	8,712	7	4	1,632
Approved Vacant Lots	_	_	0	0	0
		Total West Denton Develop	ment Capacity		1,632
		Total West Denton Populati	on Increase Note	e 5	3,541
East Denton (non-PN)	8,095,606	Variable	299	54	920
East Denton (PN)	10,870,965	8,712	15	6	683
East Denton	18,966,571	Variable	314	60	1,602
Approved Vacant Lots	10,500,571	Variable	519	0	519
Approved vacant 2015		Total East Denton Developm		Ů	2,121
		East Denton Population Incr			4,603
	RES	IDENTIAL GROWTH AREA (EAS		I V)	4,003
SR	1,805,124	10,000	16	15	124
TR	558,525	8,000	9	6	48
TOTAL	2,363,649	Variable	25	21	172
TOTAL	2,303,043				
		Growth Area Population Inc	rease (develop	able land) Note 5	373
		Existing Population Note 7			48
		Total Growth Area Population	, ,,	<u> </u>	421
тот	AL POPULATION GROWTH	H (EXISTING BOUNDARY PLUS		4)	
		Combined Population Increa	ise Note 9		8,566
		Existing Population Note 4			4,022
		<b>Grand Total Population incu</b>	ding Growth A	rea Note 10	12,588
		Percent Increase			213%
Note 1 - MLA - Minimum Lot Are	ea ea				
		ield in accordance with the Maryland D		ng Guidelines (75%)	
	4,022 from Maryland Department	evelopment capacity to account for com of Planning, Population Projections, Ma		Center, Historical and Pro	jected Household Population for
Note 5 - Population Increase is b	pased on (2.17 persons per house	hold)			
Note 6 - Total Population is base	ed on Note 4 + Projected Growth (	Excluding Growth Area)			
	opulation is based on 2.29 average				
# of existing DUs)	•			population (based on 2.2	9 average persons per household * the
		n the existing corporate boundary and t	ne growth area		
Note 10 - Grand Total Population	n is based on Note 4 + Projected (	orowtn in Town + Growth Area			

36,749,732 92,709 50,611 640,286 1,123,726 4,302,542	12,446 8,000 8,000 8,000	13 12	10	1,619	
50,611 640,286 1,123,726	8,000	12			
640,286 1,123,726	· · · · · · · · · · · · · · · · · · ·	8,000 12 0			
1,123,726	8,000	6	3	2	
		12	8	54	
4 302 542	8,000	92	14	95	
1,302,312	10,000	56	39	293	
1,885,732	7,500	130	6	184	
44,845,338	_	321	80	2,255	
_	_	519	0	519	
, T	otal Development Capacity	'		2,774	
Р	opulation Increase Note 5			6,021	
				4,022	
	<u> </u>			10,043	
	•			150%	
		NDIVIDUALLY			
			4	1,141	
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18,300,371	variable			519	
<u>-                                    </u>	- Fotal Fast Donton Dovelons		U		
	•			1,633	
			11/	3,545	
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		+		124	
		1		48	
	•	crease (develop	able land) Note 5	373	
				48	
		<u> </u>	<u> </u>	421	
POPULATION GROWTH	(EXISTING BOUNDARY PLUS		A)		
	Combined Population Incre	ase Note 9		6,442	
	<u>_</u>			4,022	
	Grand Total Population incu	iding Growth A	rea Note 10	10,464	
	Percent Increase			160%	
	•	•	ng Guidelines (75%)		
			Center, Historical and Pro	ojected Household Population for	
sed on (2.17 persons per househo	ld)				
on Note 4 + Projected Growth (Ex	cluding Growth Area)				
		he estimated current	population (based on 2	29 average persons per household *	
ease is the sum of growth within	the existing corporate boundary and	the growth area			
	PP E T T P 25,878,767  - 18,095,606 10,870,965 18,966,571  - 18,05,124 558,525 2,363,649  POPULATION GROWTH  Capacity is calculated at 55% develocation of the company of t	Population Increase  Existing Population  Total Population Note 6  Percent Increase  EAST AND WEST DENTON II  25,878,767  12,446  —  Total West Denton Develop  Total West Denton Populat  8,095,606  Variable  10,870,965  12,446  18,966,571  Variable  —  Total East Denton Developr  East Denton Population Increase Developm  Combined Population Increase Developm  Existing Population Note 7  Total Growth Area Population Increase Development Capacity is calculated at 55% development capacity to account for concapacity is calculated at 55% development capacity to account for concapacity is calculated at 55% development capacity to account for concapacity is calculated at 55% development capacity to account for concapacity is calculated at 55% development capacity to account for concapacity is calculated at 55% development capacity to account for concapacity is calculated at 55% development capacity to account for concapacity is calculated at 55% development capacity to account for concapacity is calculated at 55% development capacity to account for concapacity is calculated at 55% development capacity to account for concapacity is calculated at 55% development capacity to account for concapacity is calculated at 55% development capacity to account for concapacity is calculated at 55% development capacity to account for concapacity is calculated at 55% development capacity to account for concapacity is calculated at 55% development capacity to account for concapacity is calculated at 55% development capacity to account for concapacity is calculated at 55% development capacity to account for concapacity is calculated at 55% development capacity to account for concapacity is calculated at 55% development capacity to account for concapacity is calculated at 55% development capacity to account for concapacity is calculated at 55% development capacity is calculated at 55% development capacity is calc	Population Increase Existing Population Total Population Note 6 Percent Increase EAST AND WEST DENTON INDIVIDUALLY 25,878,767 12,446 7	Population Increase Existing Population Total Population Note 6  Percent Increase  EAST AND WEST DENTON INDIVIDUALLY  25,878,767 12,446 7 4  0 0  Total West Denton Development Capacity  Total West Denton Development Capacity  Total West Denton Population Increase Note 5  8,095,606 Variable 299 54  10,870,965 12,446 15 6  18,966,571 Variable 314 60  519 0  Total East Denton Development Capacity  East Denton Population Increase Note 5  RESIDENTIAL GROWTH AREA (EAST DENTON ONLY)  1,805,124 10,000 16 15  558,525 8,000 9 6  2,363,649 Variable 25 21  Growth Area Population Increase (developable land) Note 5  Existing Population Note 7  Total Growth Area Population (existing plus growth) Note 8  POPULATION GROWTH (EXISTING BOUNDARY PLUS GROWTH AREA)  Combined Population Increase Note 9  Existing Population Note 4  Grand Total Population Projections, Maryland State Data Center, Historical and Profection (2.17 persons per household)  on Note 4 + Projected Growth (Excluding Growth Area)  Jalalon is based on 2.29 average persons per household)  on Note 4 + Projected Growth (Excluding Growth Area)  Jalalon is based on 2.29 average persons per household)  role test such current population (based on 2.20 average persons per household)  nother test such current population (based on 2.20 average persons per household)	

## WATER/WASTEWATER CAPACITY ANALYSIS

After the initial land-based development capacity analysis was completed, a secondary analysis was conducted to account for the Water and Wastewater Treatment Plant (WWTP) capacities. The goal was to identify the amount of development the current Water/WWTP capacities could support (net of what is currently utilized or allocated to approved development). The information necessary for the analysis was provided by Denton's Department of Public Works. Data included the current Water/WWTP's gross and net capacities in gallons per day (gpd), and the average flow per day per dwelling.

The first step of this analysis was to identify the number of dwellings the current Water/WWTP capacity could support. This was completed with a simple equation (see calculations below). The Water/WWTP net available capacity (Table 4-9) was divided by the town's average flow per day per dwelling unit. The result was the maximum number of dwelling units the current net capacity could support. The equations are below the table.

Table 4-9: Water and Wastewater System Capacities, Usage and Availability

	Water Flow 2009 Gallons per Day (gpd)	Sewage Flow 2009 Gallons per Day (gpd)
2007	419,000	346,000
2008	401,000	420,000
2009	397,000	418,000
Average Flow	405,667	394,667
Permit	770,000	800,000
Balance Available	364,333	405,333
Allocated	11,905	11,107
Net Available	352,428	394,226

Source: Town of Denton, Planning & Codes, 2010

#### Calculations:

Note: Limiting factor is water due to its lesser remaining capacity (352,428 gpd).

Dwelling Units supported by current water flow net capacity:

352,428 gpd (net available) / 225 gpd (average flow per DU)

Resultant Dwelling Units = 1,566 additional DU's

Population supported by current water flow net capacity:

2.17 persons per dwelling unit (census average population per household) \* Number of DU's Resultant Population Growth =3,399persons

The previous calculations represent the potential dwelling units and increased population the water system spare capacity can support. Daily flow capacity available currently is 352,428 gallons per day. This capacity is capable of supporting an additional 1,566 dwelling units. An additional 3,398 persons could be added to Denton's population by allocating 100% of the available water capacity to residential-only growth.

Land west of the Choptank River has no planned facilities and cannot be connected cost effectively to existing facilities serving the community east of the river. At the present time, there are no plans by the Town of Denton or developers to permit or construct facilities west of the river. Consequently all projected growth, dwelling units and population, will be east of the river and supported by existing facilities at current capacities or future increments as may be approved by Denton.

Any growth of Denton will have significant effects on the capacities upon both water and sewerage facilities. These effects are addressed in much more detail within this comprehensive plan's Water Resource Element (Chapter 5).

## **GROWTH ANALYSIS**

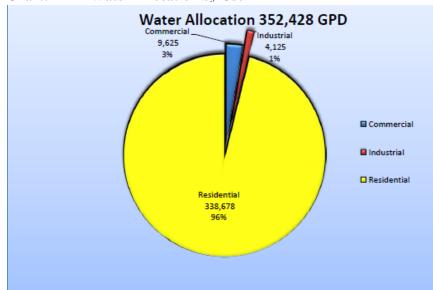
# **General Considerations**

The residential capacity analysis determined that there are 321 developable parcels, an estimated 44,845,338 sq ft. or 1,030 acres of buildable land in Denton. This amount of available land can yield between 2,255 - 3,234 additional potential dwelling units (minimum & maximum density), which equates to 4,893 – 7,020 additional residents. (This count assumes a mix of 55% zoning yield in PN zones and a 75% zoning yield for all other zoning districts, and does not included approved subdivision or growth area.)

Using the Town of Denton's estimation of 2.17 persons per household; the potential population growth with full build-out, including approved vacant subdivision lots, growth area, and unconstrained by facility provisioning; is capable of reaching a population between 10,464 - 12,588 by the year 2030 (minimum and maximum densities respectively). Growth at this scale is impossible due to existing infrastructure capacity limitations, i.e., Denton's water and wastewater systems. Furthermore, all potential growth is confined to east of the Choptank River and without significant capacity upgrades to the WWTP/water systems; Denton is constrained to 1,566 new eastside-only potential dwelling units and an estimated 3,398 additional residents. Added to the current population estimate of 4,022, Denton's population is constrained to 7,421 eastside residents (assumes all capacity allocated to residential growth).

The area of Denton west of the Choptank River is not scheduled to be serviced by water and sewer during this planning cycle. An estimated 570 "buildable" acres in this area will remain in buildable inventory until a developer is willing to supply the requisite infrastructure with Town concurrence. It is estimated that this buildable inventory can accommodate minimally 1,141 dwelling units and 2,477 persons or maximally 1,632 dwelling units and 3,540 persons depending on residential density (3.5 to 5.0 dwellings per acre respectively).

**Chart: 4-2 – Water Allocation by Use** 



Source: Town of Denton, Planning and Codes, 2010

For this planning cycle, Denton has opted not to increase the capacities of either the water system or the WWTP systems (not to confused with pending **ENR** upgrade which enhances the removal of total nitrogen phosphorus). addition, to augment the Town and County employment opportunities and stimulate economic opportunity, the planning assumption is to prioritize the remaining water and

WWTP capacities first to commercial and industrial growth, and then to residential. As a consequence of this priority, four percent of the remaining systems' capacities, sufficient for future non-residential water and wastewater needs, will be reserved for commercial and industrial purposes (Chart 4-2).

POPULATION GROWTH CONSTRAINED BY WATER CAPACITY 8,000 7,421 Ρ 7,000 6,456 0 6,125 Р 6,000 5,617 5,567 U 5.059 5,000 4,598 4,252 4,179 4,022 4,022 Α 4,000 Т 3,000 0 2,000 Ν 1,000

2015

2020

**■ COMMERCIAL ALLOCATED FIRST** 

**Chart: 4-3 – Population Growth Constrained by Water Capacity** 

Source: Town of Denton, Planning and Codes, 2010

2008

2010

■ ALL RESIDENTIAL

**YEAR** 

2030

2025

Table 4-10: Population Projection Constrained by Water Capacity

Tubic . Io. I opulation I I o	,		j i i dice cu	P		
	2008	2010	2015	2020	2025	2030
Population with Commercial / Industrial allocated first	4,022	4,179	4,598	5,059	5,567	6,125
Population with allocation for residential only	4,022	4,252	4,887	5,617	6,456	7,421

Source: Town of Denton, Planning & Codes, 2010

Chart 4-3 (previous page) and Table 4-10 illustrate two population projections both of which are constrained by water allocation: 1) commercial/industrial uses as first priority, and 2) without any preferential allocation toward commercial/industrial uses. The 2030 population projections are 6,125 and 7,421 with and without commercial/industrial priority respectively.

The planning assumption is that commercial/industrial uses have first priority and their allocations are reserved (i.e., receive priority over residential). Earlier in this chapter, the population projection analysis discussed a 2% increase compound rate projection that reached a population in 2030 of 6,218. The projection is just that, an estimate using historical data of the Town and County's population growth pattern. Because the Town has a firm plan to direct and constrain growth by not implementing water/wastewater capacity increases, the population throughout the planning period is assumed to be constrained to 6,125 persons.

# **Infill and Redevelopment**

Infill refers to new development in a Priority Funding Area on vacant, bypassed, and underutilized land within built-up areas of existing communities, where infrastructure is already in place. Redevelopment of lots, all in these Priority Funding Areas, recognizes the need to revitalize non-vacant land.

Redevelopment of property can bring revitalization to a neighborhood that is just beginning to show signs of neglect or property that has been totally abandoned. Neighborhood revitalization can use many of the same techniques as other development projects, which require a good plan and incentives to help with the implementation. When looking at areas to be redeveloped, it is also appropriate to determine the cause of the degradation. Some of the reasons could be traffic flow, closures of nearby employment centers, closures of schools, crime, or even the current zoning in an area could be deterrence in the rehabilitation effort. Another key in the success of neighborhoods is the availability of retail and private services. Denton will consider all of these factors as the Town continue to encourage revitalization and infill of vacant lots.

Denton's infill area consists of the vacant and underutilized lands that are classified in the Priority Funding Area (PFA). Updates to the PFA are currently being discussed with the Maryland Department of Planning. Infill lots may also qualify as "receiving areas" for Caroline County's Transfer of Development Rights Program, which is discussed later in this chapter. The Town and Caroline County are currently reviewing the opportunity and feasibility of designating "infill" lots to the program.

The Town's zoning ordinance adopted Residential and Commercial Infill and Redevelopment Guidelines in 2004, which will apply to these areas, insuring that any development, is designed to be "context sensitive," taking into account its impacts on adjacent properties. Infill can minimize the need for new infrastructure, and more efficiently utilize emergency and public safety services for the Town.

The following are some goals for infill and redevelopment:

- Encourage appropriate infill and redevelopment.
- Encourage restoration and improvement of deteriorated, dilapidated, unsanitary and unsafe structures to avoid the need for demolition.
- Reinforce the existing neighborhood fabric with appropriate infill and redevelopment.
- Make efficient use of existing infrastructure.

In 2006, the Town adopted an "Eligible Redevelopment District" floating zone, which is proposed to be enlarged by this Comprehensive Plan. This district is intended to permit rehabilitation and redevelopment of properties within the Town that are considered blight, slum, or less than an optimal use of the land pursuant to State law and the Town's ordinances and regulations. The intent of this district is to establish a land policy basis for flexible development regulations in order to encourage reinvestment in properties. This zone permits redevelopment with the approval of a master development plan approved by the Town Council. The master development plan shall apply development standards, which if approved, have the flexibility to reduce lot areas, lot frontage, lot widths and yards, and increase in height. The Town Council may apply the Redevelopment District to any lands identified on the Official Zoning Map as being eligible for the Redevelopment District floating zone designation.

To date, there is one approved "Applied" Redevelopment District Floating Zone. The properties are located at the 500 block of Gay Street. This plan proposes a mixture of residential structure types and incorporates the Town's design standards and the Residential Infill Guidelines. The current redevelopment district is a 10-acre area of approximately 58 lots and lies mainly east of the Central Business District. The proposed expansion of the Redevelopment Eligible District as shown in Map 4-4, encompasses a much larger area that extends along Gay Street to MD State Highway 404, and then along MD Route 313 nearly to MD State Highway 404. The proposed expansion of the district increases the total acreage for the district to approximately 285 acres.

PLANNING AND CODES CHESPPEAKE SHORE TENTH HTWIN FLEETWOOD FIFTH LOCKERMAN EDENTON BUTLER ACADEMY 2001 **GRIHT** CAROLINE SECOND 2,200 Comprehensive Plan 2010 Denton, Maryland Redevelopment Zone Redevelopment Applied Redevelopment Eligible - Corporate Boundary 1,100 Feet Choptank River Town Parcels 550

Map 4-4: Redevelopment Area

# **Proposed Rezoning of Properties within Current Town Boundary**

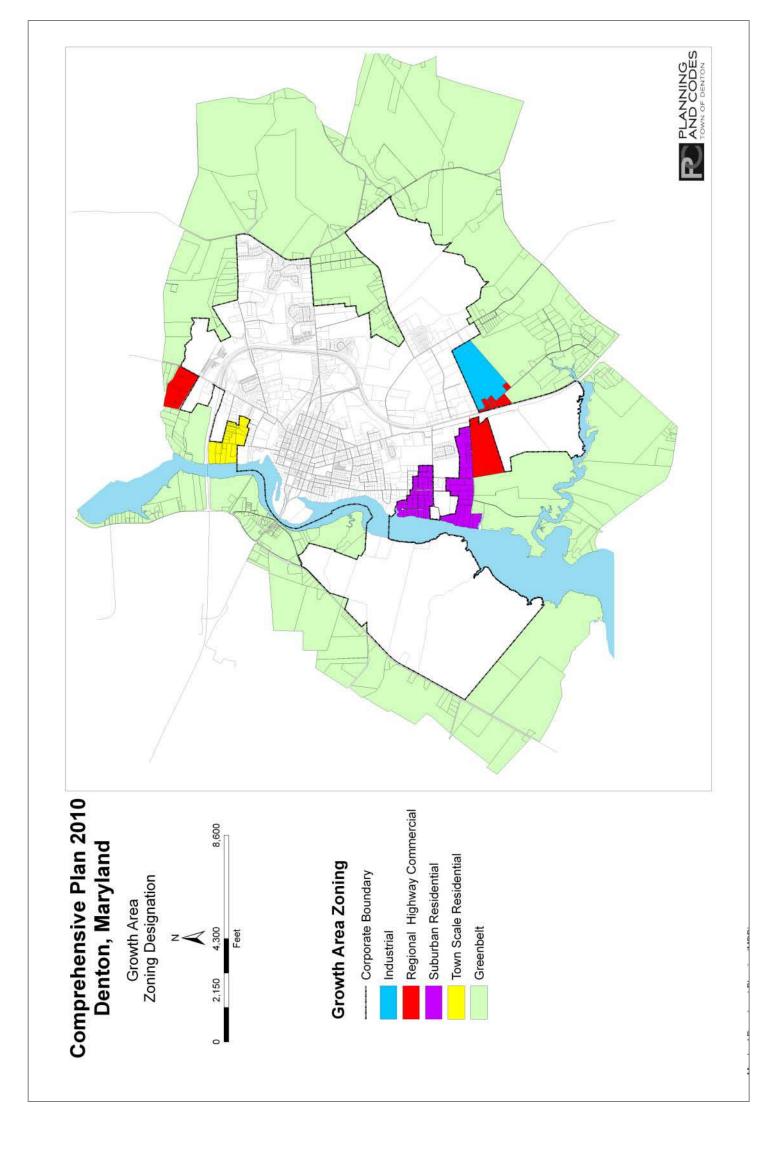
The Town's policy to limit residential growth due to water and wastewater system capacity constraints shall be accomplished by a three-tiered priority system. First, growth priority is assigned to all redevelopment and any centrally-located infill where infrastructure currently exists. Second, infill growth priority will be assigned to preferred uses and areas by appropriate rezoning. Finally, growth in the remaining infill areas (usually those not centrally-located) and currently devoid of existing infrastructure may be accommodated by development-funded infrastructure extensions with concurrence by the Town. The second and third prioritizations are not necessarily mutually exclusive.

The rezoning strategy is detailed within the Land Use Chapter 3 of the Comprehensive Plan. The rezoning plan decreases residentially zoned area from approximately 1,701 acres to 1,236 acres (a 27% reduction), increases commercial zoned area from approximately 314 acres to 399 acres (a 27% increase), and increases industrial zoned land to 318 acres from 237 acres (a 34% increase). These changes will give the Town the ability to expand its private sector employment base through the provision of greater business opportunities without adversely impacting housing or population growth. The current residential acreage of 1,701 equates to approximately 5,103 dwelling units, a population of 11,074. The proposed reduction of residential acreage will reduce the calculation to 3,723 dwelling units, a population of 8,079 (27% population capacity reduction).

# **Growth Area Outside of Current Town Boundaries**

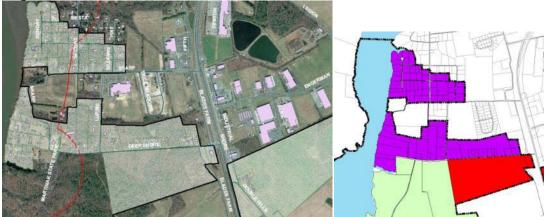
The total growth area acreage is approximately 315 acres (9.6% increase). The growth area contains 111 parcels; 51 parcels are less than 1 acre, 55 parcels are between 1 to 10 acres, 3 parcels between 10 to 20 acres, and 2 parcels over 50 acres in size. Some parcels in the growth area are located in the Chesapeake Bay Critical Area where subdivision is constricted by State and local regulations.

Map 4-5, illustrates the Town's total proposed growth area via future annexations. The proposed zoning is Regional Highway Commercial on 115 acres, Industrial on one 76 acre parcel and Residential on the remaining 183 acres. Of the residential properties, 111 acres will be Suburban Residential, and 41 acres Town Scale Residential. Although the Town has excess residential development capacity within its current corporate boundary, future growth area parcels served by septic systems located along the eastern border of the Choptank River within the Critical Area, may be given annexation preference. Out of the 111 acres of residential growth area, because of Critical Area restrictions and the number of existing residential units, the capacity for additional dwelling units has been calculated at 172 units.



Map 4-5: Growth Area Zoning Designation

Map 4-6: Growth Area 1



Source: Town of Denton, Planning and Codes, 2010

Maps 4-6 and 4-7 illustrate the proposed growth area located along the southeastern boundary of the current Town limits. As depicted in Map 4-6, lands indicated in purple have a proposed zoning of Suburban Residential allowing for residential maximum density of 4.3 dwelling units per acre. Those parcels west of the red line are within the Chesapeake Bay Critical Area. Map 4-7 shows parcels in red planned to be zoned Regional Highway Commercial. Lastly, one 76 acre parcel, shown in aquamarine, is planned to be zoned Industrial.

Map 4-7: Growth Area 2

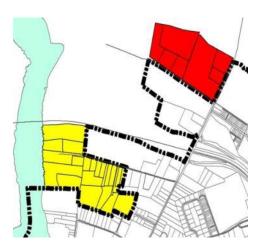


Town of Denton, Planning and Codes, 2010

Map 4-9 illustrates some parcels northwest of the current Town boundary with a proposed zoning of Town Scale Residential (yellow) that allows for single family homes with 4.3 dwelling units per acre density. Some of these parcels are inside the Chesapeake Critical Area (west of the red line). The parcels on the Town's northern boundary (red) are proposed with a zoning of Regional Highway Commercial.

Map 4-9: Growth Area 3





Source: Town of Denton, Planning and Codes, 2010

## **IMPACTS OF GROWTH**

In implementing its Comprehensive Plan, including annexation and development of properties identified as future growth areas, the Town of Denton is facilitating the process of land conversion from an essentially rural to an urban character. This conversion process not only fulfills an essential role in the overall growth scheme for Caroline County by providing a place to accommodate population growth in compact areas where infrastructure can be extended most efficiently; it enables development of regional commerce, service, and employment centers while supporting the "Smart Growth" principles of the State.

Population growth will impact public services and facilities provided by the Town of Denton. The population projection of 6,125 (constrained by water system capacity) by the year 2030 will be used to calculate the impacts on public facilities and services such as schools, libraries, police, recreation land demand, and fire and rescue (emergency services). The Town does not anticipate development on the west side of Denton within the next twenty years because of proposed zoning, environmental constraints, and the absence of Water/WWTP infrastructure. This growth scenario is the most reflective of the Town's goal to restrain growth during the planning period and protect Denton and the County's natural resources. To illustrate what impact full build-out (maximum density) could have on the Town's resources, the full build-out population of 12,588 will also be addressed.

# **Sensitive Areas within Growth Area**

Article 66B of the Annotated Code of Maryland requires that every county and municipality adopt policies to address the protection of environmentally sensitive areas, including:

- Streams, wetlands, and their buffers;
- (2) 100-year flood plains;
- Habitats of threatened and endangered species;
- Steep slopes;
- Agricultural and forest lands intended for resource protection or conservation; and
- Other areas in need of special protection, as determined in the plan

Denton's growth area is comprised of many parcels along the Choptank River; some of these areas are within the Town's Chesapeake Bay Critical Area (CBCA) and are subject to applicable land use regulations. The CBCA district imposes specific regulations for the development, use, and conservation of land within that area.

The Town's Zoning Ordinance includes a section requiring compliance to certain environmental standards for all subdivisions and development requiring site plan approval. These standards include:

- Perennial stream no-disturbance buffer
- Intermittent stream no-disturbance buffer
- Sensitive soil no-disturbance buffer
- Nontidal wetland buffer

- Steep slopes
- Habitats of rare, threatened, and endangered species, reviewed by the Maryland DNR and Maryland Department of Natural Resource's Heritage and Biodiversity Conservation Program (HBCP)

# Steep Slopes

Steep slopes are considered sensitive because of their potential for soil erosion, slope instability, and for the increasing speed with which runoff is carried into adjacent streams and rivers. The degrees to which these lands are developed depend on the density of development and the carrying capacity of the slope due to the underlying geology. Since most steep slopes in Caroline County are near or along tidal rivers and streams, the Chesapeake Bay Critical Area District regulations protect these areas along with the Town's Environmental Standards ordinance addressed under the Buffer paragraph. Map 4-10, Topographic Contours demonstrates areas of close contour lines, potential areas of steep slopes.

## **Buffers**

Buffers serve as protection areas adjacent to streams to preserve some of the biological and hydrological integrity of the stream basin. These areas act as run-off and groundwater pollution control systems by filtering pollutants through the soil and root zone of natural growth. For example, microscopic organisms that inhabit the soils in a forested buffer assist in the decomposition of pollutants much like microbes in a sewage treatment plant. Buffers along wetlands, shorelines, and streams are currently governed by federal, state, and local regulations. Section 128-149 of the Denton Town Code, Environmental Standards for all subdivisions and development requiring site plan approval governs buffer requirements for the Town:

#### A. Perennial stream no-disturbance buffer.

- 1) A one-hundred-foot natural buffer from all perennial streams shall be required for all development. Permanent or temporary stormwater and/or sediment control devices shall not be permitted in this buffer.
- 2) This buffer requirement may be reduced to no less than 50 feet by the Planning Commission for the following:
  - a) If evidence is provided that the design, construction and use of the site will provide the same or better protection of water quality as the one-hundred-foot buffer, and if evidence is provided that said development will meet all other applicable requirements, as required.
  - b) Road crossings, if disturbance is minimized.
  - c) Other public or community facilities provided disturbance is minimized in so far as possible.

#### B. Intermittent stream no-disturbance buffer.

- 1) A fifty-foot buffer from all intermittent streams shall be required for all development. Permanent or temporary stormwater management and sediment control devices shall not be permitted in this buffer.
- 2) This buffer requirement may be waived by the Planning Commission for the following:

- a) Road crossings, if disturbance is minimized.
- b) Other public or community facilities provided disturbance is minimized in so far as possible.
- C. Sensitive soil no-disturbance buffer. The one-hundred-foot perennial stream buffer shall be expanded to include contiguous one-hundred-year floodplain and nontidal wetlands. In addition, the one-hundred-foot perennial stream buffer shall be expanded to include hydric soils, highly erodible soils and soils on slopes greater than 15% that are contiguous with the perennial stream, any one-hundred-year floodplain adjacent to the stream, or any nontidal wetlands adjacent to the stream to a maximum distance of 300 feet.
- D. Nontidal wetland buffer. A twenty-five-foot setback from all nontidal wetlands shall be required for all development around the extent of the delineated nontidal wetland except as permitted by the U.S. Army Corp of Engineers and the State of Maryland, Department of Natural Resources, Nontidal Wetland Division.

## E. Steep slopes.

- 1) No structure or impervious surface shall occur on any slope with a grade of 15% or more covering a contiguous area of 10,000 square feet or more.
- 2) On slopes between 15% and 25%, good engineering practices shall be used to insure sediment and erosion control and slope stabilization before, during and after disturbance activities and to minimize cut and fill.
- 3) A minimum fifty-foot buffer shall be established between development and the crest of slopes in excess of 25%.

The Forest Conservation Act is regulated by the Maryland Department of Natural Resources, but implemented and administered by local government. Chapter 60 of the Denton Town Code serves as authority for implementation of the Forest Conservation Act. The Town's Forest Conservation ordinance requires at least a 50 foot buffer adjacent to intermittent and perennial streams for afforestation and reforestation. The Town also addresses buffer requirements in the Critical Area Program; a 100 foot buffer is required where a tract of land borders tidal water, tidal wetlands or tributary streams and which is proposed for development.

Comprehensive Plan 2010 Denton, Maryland 7,200 Caroline County Planning and Codes United States Geologic Survey (USGS) Eastern Shore Regional GIS Cooperative (ESRGC) Topographic Contours Countour lines 1,800 - 1 - 5 feet 10 - 13 - 14 - 17 - 18 - 21 Elevations 6-9-

Map 4-10: Topographic Contours

# 100 Year Floodplains

The Federal Emergency Management Agency has designated 100-year floodplains in the vicinity of the Choptank River and tributaries for Denton. The 100-year floodplain is the land area along a stream that is susceptible to inundation by a flood of a magnitude that would be expected to occur on average only once every 100 years as a result of rainfall and runoff from upland areas. To state it another way, it is a flood that has a 1% chance of occurring in any given year.

The Town Code, Chapter 58, Floodplain Zones, provides a unified, comprehensive approach to floodplain management which addresses natural floodplain functions and the federal and state programs concerned with floodplain management. Floodplains are an important asset to the community. They perform vital natural functions such as temporary storage of floodwaters, moderation of peak flood flows, maintenance of water quality, groundwater recharge, prevention of erosion, and habitat for diverse natural wildlife populations, recreational opportunities, and aesthetic quality. These functions are best served if floodplains are kept in their natural state. Wherever possible, the natural characteristics of floodplains and their associated wetlands and water bodies should be preserved and enhanced.

# **Public Schools**

Denton is currently served by three public schools, Denton Elementary (Grades K-5, 635 Students), Lockerman Middle School (Grades 6-8, 781 Students), North Caroline High School (west of and outside Denton's corporate limits) (Grades 9-12, 1168 Students), and one private school, Wesleyan Christian School. The public school system in total is currently over-burdened and includes elementary schools in Greensboro (Grades K-5, 672 Students), Ridgely (Grades K-5, 524 Students), Preston (Grades K-5, 418 Students), and Federalsburg (Grades K-5, 462 Students); another middle school, Colonel Richardson Middle (Grades 6-8, 415 Students) in American Corner and another high school, Colonel Richardson High, (Grades 9-12, 576 Students) in American Corner. A Career and Technology Center (Grades 9-12) is also part of the North Caroline High School complex.

The Caroline County Board of Education has begun to observe a growing student population problem that is now challenging the capacities of three northern county elementary schools, including Denton's.

The mid-2008 population estimate for Denton is 4,022; the projected population for the year 2030 is 6,125, constrained by water capacity with commercial development given priority and 12,588 unconstrained. To illustrate school capacity at the worst case scenario the Town has decided to use the population projection of 7,421 which gives water allocation priority to residential development. The analysis for full build-out is only a planning scenario and not the goal of the Town to reach full build-out population.

The projected dwelling unit growth amounts are 1,566 (constrained) and 3,926 (unconstrained).

Student population projections for both scenarios are:

• Constrained: 1,566 DU over the next 22 years \* 0.476 = 745 total students

• Unconstrained: 3,926 DU over the next 22 years \*0.476 = 1,869 total students

The number of additional students per year for each school is determined by the projected new dwelling units multiplied by the student yield calculator for Caroline County schools.

Additional growth in Denton will exacerbate certain schools' overcrowding. Below are student population calculations by type of school:

#### Constrained:

Elementary: 337 students or 15 per year (1,566 DU \* 0.215)
 Middle: 167 students or 8 per year (1,566 DU \* 0.107)
 High School: 241 students or 11 per year (1,566 DU \* 0.154)

#### Unconstrained:

Elementary: 844 students or 38 per year (3,926 DU \* 0.215 elementary)
Middle: 420 students or 19 per year (3,926 DU \* 0.107 middle school)
High School: 605 students or 27 per year (3,926 DU \* 0.154 high school)

**Table 4-11: Denton Elementary Student Projections (Denton impact only):** 

Tuble 111 Benton Diementary See	2008	2010	2015	2020	2025	2030
Students (1,566 du)	578	608	683	758	833	908
Students (3,926 du)	578	654	844	1,034	1,224	1,414
State Rated Capacity	664	664	664	664	664	664
Facility Utilization (1,566 DU's)	87%	92%	103%	114%	125%	137%
Facility Utilization (3,926 DU's)	87%	98%	127%	156%	184%	213%

Source: Models & Guidelines, Volume 25, Writing the Municipal Growth Element to the Comprehensive Plan, May 2007, Caroline County Comprehensive Plan Draft June 2009, North County Elementary Task Force Report, May 2009, Appendix E.

Table 4-12: Lockerman Middle School Student Projections (Denton Impact Only):

table 4-12. Dockerman winding Benoof Budgett Trojections (Benton Impact Only).							
	2008	2010	2015	2020	2025	2030	
Students (1,566 DU's)	795	811	851	891	931	971	
Students (3,926 DU's)	795	833	928	1023	1118	1213	
State Rated Capacity	977	977	977	977	977	977	
Facility Utilization (1,566 DU's)	81%	83%	87%	91%	95%	99%	
Facility Utilization (3,926 DU's)	81%	85%	95%	105%	114%	124%	

Source: Models & Guidelines, Volume 25, Writing the Municipal Growth Element to the Comprehensive Plan, May 2007, Caroline County Comprehensive Plan Draft June 2009, North County Elementary Task Force Report, May 2009, Appendix E.

Table 4-13: North Caroline High School Student Projections (Denton Impact Only):

Table 4-15: North Caroline High School Student Projections (Denton Impact Omy):										
	2008	2010	2015	2020	2025	2030				
Students (1,566 DU's)	1,142	1,164	1,219	1,274	1,329	1,384				
Students (3,926 DU's)	1,142	1,196	1,331	1,466	1,601	1,736				
State Rated Capacity	1,213	1,213	1,213	1,213	1,213	1,213				
Facility Utilization (1,566 DU's)	94%	96%	100%	105%	110%	114%				
Facility Utilization (3,926 DU's)	94%	99%	110%	121%	132%	143%				

Source: Models & Guidelines, Volume 25, Writing the Municipal Growth Element to the Comprehensive Plan, May 2007, Caroline County Comprehensive Plan Draft June 2009, North County Elementary Task Force Report, May 2009, Appendix E.

These projections (Tables 4-11 and 4-13) show that on or before the year 2015 North Caroline High and Denton Elementary could reach 100% capacity under the constrained population projection, simply from Denton student population growth and irrespective of other Caroline County or its municipalities' growth. The North County Elementary School Task Force Report dated May, 5, 2009, discussed a recommendation that a new intermediate school be built on property adjacent to North Caroline High (since revised to consider another location, yet to be determined, served by water and wastewater facilities). This new school is planned by 2015 and will alleviate the overcrowding for Denton Elementary along with Ridgley and Greensboro Elementary Schools. Additional renovations or redistricting of North Caroline High's attendance area could be considered as possible solutions for overcrowding. Clearly, any possible considerations must be consistent with the Caroline Board of Education policies. Lockerman Middle School will reach capacity sometime between 2015 and 2020, again simply from Denton

student population growth and irrespective of other Caroline County or its municipalities' growth.

## Libraries

American Library Association standard is 1,000 square feet of library space needed per 10,000 residents. Consequently, neither a predicted population of 6,125 or 12,588 would facilitate a need for expanding the Denton Branch of the Caroline County Public Library. The conclusion is parochial in nature as it does not address the impacts of growth from other municipalities and the county. The library branch located in Denton has a service area classification of 30,000 residents. *Source:http://library.publiclibraries.org/county/MD/CarolineCounty.html*.

#### Police

The Town of Denton currently provides thirteen (13) full-time officers, one (1) part-time, and two (2) administrative personnel. A national standard used by the International Association of Chief of Police and other agencies calculates needs for police at 2.6 officers for every 1,000 persons. The projected population total of 6,125 residents in 2030 would suggest that a total of sixteen (16) full-time officers would be needed. That would call for an increase of approximately three (3) full-time officers. If the unconstrained population were to increase to 12,588 by year 2030 that would create a need for thirty-three (33) full-time officers, representing an increase of twenty-one (20) full-time officers.

#### Fire and Rescue

The Denton Volunteer Fire Department is located at 400 South Fifth Street. There are approximately 50 active volunteer fire personnel, two ambulances, two fire engines, one tower truck, one rescue truck, and one tanker truck. The Insurance Services Office developed a standard that projects the number of in-service fire engines that would be required, based on population. Using the following formula:

Number of Engines = 0.85 + [0.12 \* (population in 1,000's)]Personnel = 1.59 personnel / 1,000 residents

Source; Managing Maryland's Growth: Writing the Municipal Growth Element to the Comprehensive Plan; Prepared by the Maryland Department of Planning as part of Maryland's Managing Growth Publications May 2007

Denton currently has two fire engines in service. The projected population of 6,125 persons would not require an increase in fire engines. If the unconstrained population reached the projection of 12,588, the requirement would be 2.35(round to 3) engines. Additional personnel would not be required for either growth scenario.

## **Recreation Land Demand**

Denton currently has 157 acres of park and recreation land, which are dedicated public parks serving the existing population. The National Recreation and Park Association recommends a standard of 30 acres per 1,000 persons. A projected population of 6,125 would require approximately 184 acres for recreational uses, an additional 27 acres. An unconstrained projection of 12,588 total residents would require an additional 218 acres of recreational land.

# Financing Mechanisms to Support Necessary Public Services and Infrastructure

Public Services and infrastructure costs are financed through six mechanisms: 1) property taxes, water and sewer allocation fees, 3) impact fees, 4) developers, 5) negotiated exactions associated with Development Rights and Responsibility Agreements (DRRA's), and 6) State funding.

Due to the Town's decision not to increase East Denton water and wastewater capacities during the two-decade planning period, additional debt costs (excluding the WWTP upgrade to ENR) are anticipated to be near zero. Costs associated with the expansion of the distribution components of these systems for development projects will be borne by the developers.

To cover debt and operating costs for the existing water and wastewater systems, water and sewer allocation fees are assessed. These rates vary depending upon use and are payable in two stages: 1) 25% prior to preliminary approval and 2) 75% prior to plat recordation.

Current fees water and sewer allocation fees for single family residences are: \$4,000 for water and \$5,000 for sewer (multi-family dwellings have a different rate). Commercial rates are dependent upon fixtures and equivalent dwelling unit values. Industrial rates are \$4,000 for the first 40,000 square feet and \$1,000 for each additional 20,000 square feet of floor area. Certain areas of the Town have a \$500 per equivalent dwelling unit surcharge.

In 2007, the Town instituted a schedule of impact fees associated with residential and non-residential unit development (excluding farm and public uses). These fees were established to provide a means of financing public facilities needed to accommodate new development in a safe and timely manner. Residential fees are dwelling unit based. Non-residential fees are based on the square feet of floor area and the proposed use. Impact fees are paid as permits are issued.

Currently the impact fees for residential are: \$3,384 for a one bedroom residence and \$4,362 for a two or more bedroom residence. Non-residential rates are: \$1.67 per square foot of office, \$1.12 per square foot of retail, \$1.69 per square foot for live/work units, and \$1.12 per square foot for hotels. Source: An Economic, Fiscal and Capital Asset Impact Analysis of Thirteen Proposed New Developments in the Town of Denton, Maryland, Dean D. Ballas, PhD., President, Urban Analytics, Inc. Alexandria, Virginia

The impact fees are allocated across Town departments according to the schedule in Table 4-14.

**Table 4-14: Schedule of Impact Fee Allocation** 

General Government	Finance	Planning & Codes	Parks	Police	Public Works	Highway	Economic Development	Fire
13%	2%	2%	18%	8%	3%	30%	12%	12%

Denton property taxes, evaluated annually based upon assessed valuations and appropriate rates ensure adequate revenue to cover operational costs as well as capital costs not entirely covered by impact and allocation fees or state-provided funding.

DRRA exactions are determined through negotiations with the developer to ensure adequate funding for provisioning of facilities and other negotiated items. Currently, Denton has only one fully executed DRRA. All future Planned Neighborhoods will require DRRA's.

State grants are awarded for projects within Priority Funding Areas. Each grant is subject to application by the Town. Other state sources of funding are: 1) Highway User Fee for highway maintenance, operations, and debt servicing, 2) State Police Aid, 3) Income Tax, Emissions, and Amusement Tax, 4) Traders' License Fees and Chesapeake Bay Critical Area funding.

## Town's Policies;

There will be no new development approved within the town unless adequate public facilities and infrastructure either already exist or have been planned and funded for construction within a reasonable time period.

Improvements recommended for areas within the Town should receive highest funding priority. The phasing of infrastructure, transportation improvements, and community facilities requiring public investment will occur over time in conjunction with coordinated Town and County Capital Improvement Programs.

# Stormwater Management

Stormwater runoff is generated when rain and snowmelt flow over land or impervious surfaces, and this precipitation does not percolate into the soil. Runoff can accumulate debris, sediment, chemicals, and other pollutants as it moves across surfaces. Pollutants can adversely affect water quality if it is not treated. Any new development that occurs within the planned growth area and infill lots will be subject to the Town of Denton's Stormwater Management standards. These standards specify that no development for residential, commercial, industrial or institutional uses without having provided stormwater management measures that control or manage runoff from such developments.

Denton's current Stormwater Management ordinance was recently updated to meet changes in MDE's Stormwater Management Act of 2007. The Act requires that Environmental Site Design (ESD), through the use of nonstructural best management practices and other better site design techniques, be implemented to the maximum extent practicable (MEP). The goal is to maintain the predevelopment runoff characteristics even after development. The new practices will reduce stream channel erosion, pollution, siltation, and sedimentation, and local flooding, and use structural Best Management Practices (BMPs) only when necessary. A further amendment was adopted to the Town's Stormwater Management ordinance that allows for grandfathering and waiver provisions for existing projects and broadens the applicability of alternative practices for redevelopment projects. There are significant changes within the document that may create a need to update the current development review process.

Within the Critical Area District, development and redevelopment will be required to identify stormwater management practices appropriate to site development that minimize adverse impacts to water quality caused by stormwater and which achieve the following standards:

- 1) Development and redevelopment proposals shall demonstrate that the best management practices for stormwater that result in reduction of 10% of predevelopment pollutant loadings.
- 2) If the required improvement of 10% will not be achieved, then offsets must be provided as approved by the Town. Offsets may be provided either on or off site as determined by the Town, provided that water quality benefits are equivalent, that the benefits are obtained within the same watershed, and that the benefits can be determined through the use of modeling, monitoring, or other computation of mitigation measures. Offsets must first be examined for use on site. Secondly, if it can be demonstrated that due to site constraints offsets cannot be achieved on site, then off-site mitigation, in the Critical Area, shall be used. Lastly, if neither on-site nor off-site mitigation cannot be achieved then a fee-in-lieu, paid to a dedicated Town Stormwater Fund, may be approved.

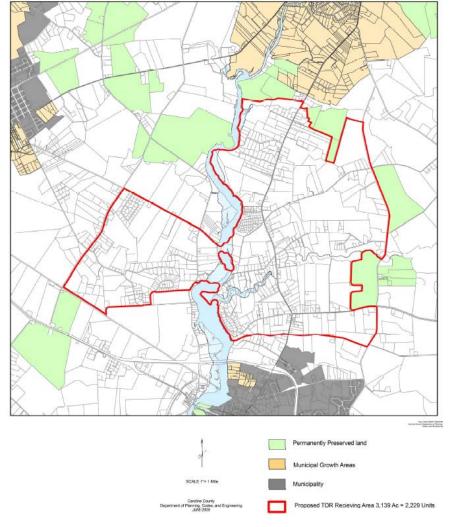
# Transfer of Development Rights (TDR)

In 2006 Caroline County adopted a Transfer of Development Rights (TDR) program that allows the transfer of development rights from areas designated as sending areas to areas designated as receiving areas or municipal growth areas. The TDR program protects and preserves agricultural land and gives the owners of such property an equitable alternative to development, and provides an essential County-wide growth management tool.

TDR programs are used to preserve agricultural land and historic landmarks, to achieve efficient, concentrated growth patterns, to protect sensitive natural environments, to protect water quality, or simply to provide a convenience to property owners. When TDRs are used to protect a resource, the resource area is officially described (by maps or words) and this becomes a "sending area" where development rights may be transferred to another property in a designated "receiving area." The easements recorded in the sending area where rights are transferred serve to permanently protect the resource from development. Where rights are transferred from a parcel (called the sending parcel), an easement or other notation is recorded in the land records to indicate that the development rights cannot be exercised any longer on that parcel.

The parcel to which the development rights are transferred (called the receiving parcel) is now





Caroline County Planning and Codes. Caroline County Comprehensive Plan Draft, June 2009.

eligible to exercise additional development rights. Proof eligibility may take the form of a certificate issued to the purchaser of the development rights, a notation on a subdivision plat, zoning certificate or some other instrument. Source: Smart, Green & Growing Planning Guide Publication No. 2009-001

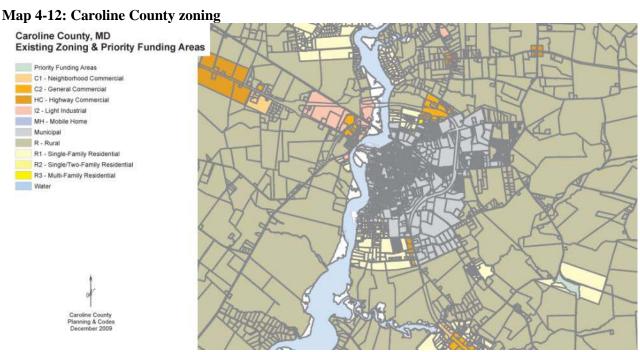
The current TDR area borders the northern limits of Denton; the proposed change (Map 4-11) moves the TDR boundary farther north as negotiated between the County and the Town. The new TDR boundary gives Town the opportunity to expand the greenbelt, with Caroline County's concurrence, to include some additional parcels north of Town. The change also coincides with the Town's growth

area parcels along the northern boundary line. The Town and County are also discussing the feasibility of including "infill and redevelopment" lots as possible "receiving areas" for the County. An inter-jurisdictional agreement will be sought whereby any future dwelling units constructed in Denton will have a "TDR-fee" dedicated to fund land preservation within the County and Town concurred to greenbelt.

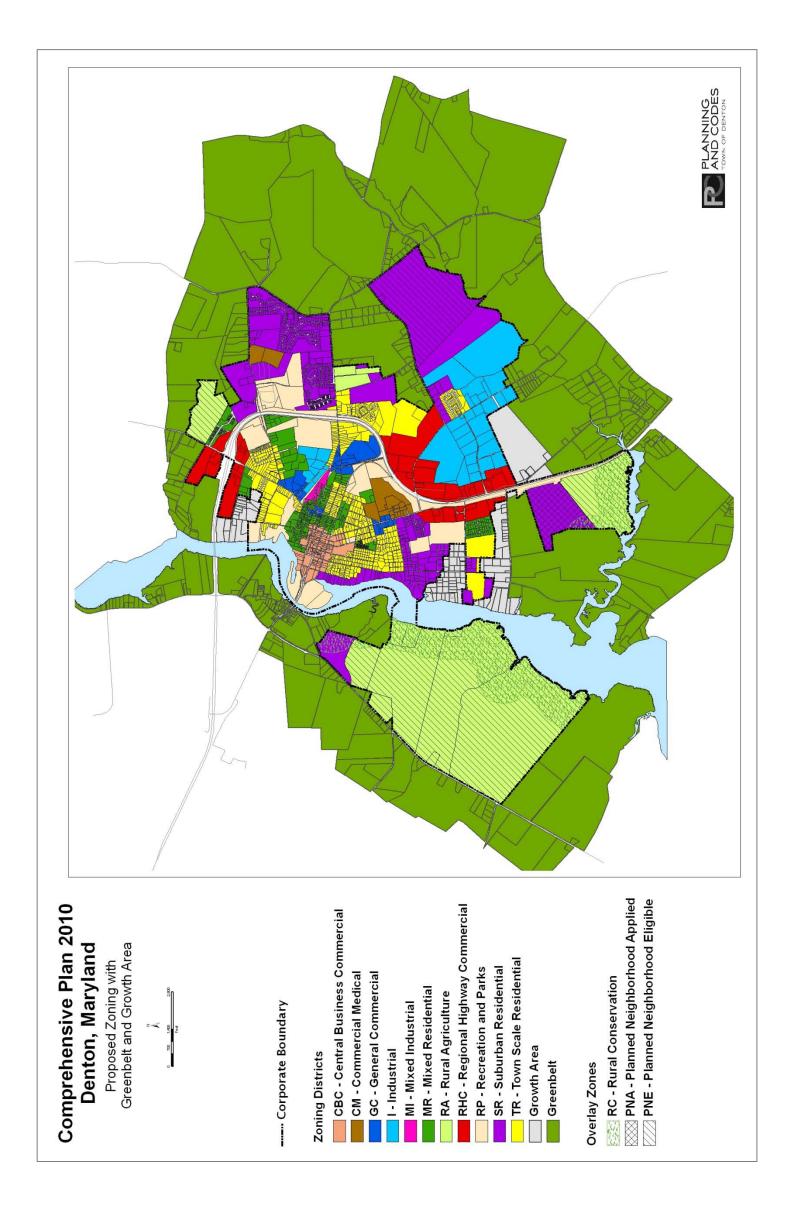
## Greenbelt, Rural/Urban Transition Area

The term "greenbelt" refers to any area of undeveloped natural land that has been set aside near urban or developed land to provide open space, offer light recreational opportunities or contain development. Greenbelts are also important in efforts to limit sprawl, which is the tendency for cities to spread out and encroach on rural lands and wildlife habitat. The Greenbelt shown on Map 4-11 delineates the build-out limits of the Town and shows a place where the Town's vision is for an area to be permanently retained in very low intensity uses, dominated by agriculture, open space and forestry. The Town will work with the County to devise strategies to protect Denton's Greenbelt via the aforementioned inter-jurisdictional TDR agreement, and including prioritizing this land for preservation through the use of Federal and/or State programs.

Land owners in this area will be urged to participate in any of the conservation programs available such as the Maryland Agricultural land Preservation Foundation (MALPF) farm easement purchase program and the conservation easement programs offered by the Eastern Shore Land Conservancy (ESLC), the Maryland Environmental Trust (MET), and the Maryland Historic Trust (MHT). The MALPF allows rural property owners to derive equity from their lands without actually developing them, in return for placing easements on the property which limit or prohibit its future development. The ESLC, MET, and MHT conservation easement programs provide tax credits and estate planning benefits to property owners who voluntarily place lands into these programs.



Map 4-13: Proposed Growth Area/Greenbelt



These conservation areas help create a permanent buffer and greatly limit development in the greenbelt. Map 4-12 illustrates Denton and surrounding parcels that have been clipped from Caroline County's existing zoning map. As shown in Map 4-13, the Town's proposed greenbelt is composed almost entirely of county parcels that are zoned "rural".

## SUMMARY AND RECOMMENDATIONS

During the two decade planning period, Denton's growth is projected to occur entirely east of the Choptank River and will be constrained by the existing capacities of the Wastewater Treatment Plant and Water systems. No growth is projected to occur west of the Choptank River.

East Denton land capacity, based upon proposed land uses and densities, is more than adequate to accommodate projected growth as constrained by the existing systems' capacities. Growth is estimated to increase Denton's total population from 4,022 to 6,125 persons (52% increase) beginning slowly due to current economic conditions and accelerating at a 2.0 percent annual compound growth rate.

Annexation of growth areas will be considered, however prioritized first toward those areas designated for commercial/industrial uses, followed by existing residential areas which may wish to be annexed for the sole purpose of obtaining access to public water and sewer facilities.

Those commercial and industrial uses already within the town boundary and their needs for water and sewer will take priority over residential growth within the current town limits and any annexation sought by property owners within the designated growth area.

Residential projects in the Town's redevelopment areas shall have priority over infill development for residential purposes.

The cost of facilities servicing any development, whether residential, commercial, or industrial will be borne by the developer. Impact fees, water and sewer allocation fees, and developer exactions as negotiated will be collected as development occurs to provide funding for necessary Town facilities, emergency services, parks, police, and emergency services.