

The Dover Plan

From the People – For the People



City of Dover, Delaware 2008 Comprehensive Plan

Prepared by the City of Dover Department of Planning

Adopted by the Dover City Council

February 9, 2009

Adopted by the Dover Planning Commission

December 2, 2008

Certified by the State of Delaware

April 24, 2009

The Dover Plan

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The Dover Comprehensive Plan

From the People – For the People

PREFACE

This Comprehensive Plan's title: *The 2008 Dover Comprehensive Plan: From the People-For the People* signifies the continuing underlying philosophy that the people of Dover should play the most important part in shaping the City's future. This value was realized through an early Citywide "hands on" citizen participation effort that guided experienced City planning staff as they wrote the original plan in 1995-96. The same philosophy has guided the plan update in 2003 and now in 2008. This Comprehensive Plan addresses the concerns of the community and proposes achievable solutions.

A Comprehensive Plan serves many purposes. Initially it serves as a unified advisory document to the City Council and the Planning Commission about the issues and concerns of the community regarding land use, transportation, historic preservation, natural resources, community facilities, housing, and the general future of the City.

The Comprehensive Plan is also an official statement about the future of the City. Readers will find the *2008 Dover Comprehensive Plan* is a positive plan that supports Dover's continued growth and development but is tempered by the people's demand that Dover keep its small town feel and high quality living and natural environment.

The Comprehensive Plan's most important purpose is to serve as an informational document. Future City Councils and Planning Commissions will use it as the foundation for rezoning, annexations, and other land use decisions. Professionals from such diverse fields as economic development, marketing, land development, and finance will find the latest information on population, employment, transportation, housing and the environment.

Ultimately, the Comprehensive Plan is the legal document upon which the City of Dover Zoning Regulations are based. The zoning enabling law: Chapter 3 Municipal Zoning Regulations of Title 22 of Delaware Code, Section 303 Regulations states, "The regulations shall be in accordance with the comprehensive plan." Concurrent with the adoption of *The Dover Plan: From the People-For the People* in 1996, the City Council made over 200 changes to the Zoning Map and the Planning Department launched a comprehensive review of its zoning text. Between 2003 and 2007 a number of important zoning changes were adopted, including revisions to the corridor overlay zone, street regulations and the development of the Traditional Neighborhood Design Zone (TND) along with the Source Water Protection Overlay Zone.

The *2008 Dover Comprehensive Plan* was developed over a one-year period starting in October 2007. The planning staff gathered and analyzed land development trends, demographic data, and environmental information during the first six months. Throughout the spring of 2008, the staff focused on gathering information from the people of Dover through eight community-planning workshops in which nearly 100 people participated. The spring and summer 2008 was spent analyzing and integrating the information collected at the spring meetings into the Goals and

Objectives of the Comprehensive Plan, which include a land development plan and policies for growth and annexation. The new Economic Development Chapter was developed through the coordination of local, county and regional economic development experts during the Dover Economic Development Strategy Committee meetings. In July 2008, a Preliminary Draft Comprehensive Plan was presented to the Dover Planning Commission and City Council. It was also made available for review the public via the City website.

The *2008 Dover Comprehensive Plan* was always intended to be a dynamic document that will change with the needs of the City. This Plan was prepared in response to state legislation and changing conditions within the City. The Plan draws upon the strengths of the previous plan, the vision of Dover's citizens, and a wealth of new information and technology to create a plan that will help the City of Dover meet its needs. It is expected that this plan will be reviewed in five years as required. It is also expected that this plan will be amended from time to time when new information becomes available and the additional planning studies envisioned in the recommendations are completed.



CITY OF DOVER PROPOSED ORDINANCE #2008-44

BE IT ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF DOVER, IN COUNCIL MET:

WHEREAS, pursuant to Title 22 - Municipalities, Chapter 7 - Planning Commission, Section 701 - Establishment; Membership, of the Delaware Code, the City of Dover established a Planning Commission; and

WHEREAS, pursuant to Title 22 - Municipalities, Chapter 7 - Planning Commission, Section 702 - Comprehensive Development Plan, of the Delaware Code, the City of Dover adopted a comprehensive plan update on September 22, 2003; and

WHEREAS, Title 22 - Municipalities, Chapter 7 - Planning Commission, Section 702 - Comprehensive Development Plan, Paragraph (e) of the Delaware Code requires that "At least every five years a municipality shall review its adopted comprehensive plan to determine if its provisions are still relevant given changing conditions in the municipality or in the surrounding areas"; and

WHEREAS, having adopted a comprehensive plan in 2003, the City desires to comply with the provisions of Title 22 - Municipalities, Chapter 7 - Planning Commission, Section 702 - Comprehensive Development Plan, Paragraph (e), of the Delaware Code by reviewing and updating the 2003 Plan; and

WHEREAS, at a special meeting on December 2, 2008, the Dover Planning Commission reviewed and approved the 2008 Dover Comprehensive Plan Final Draft dated October 31, 2008, and has forwarded it, with revisions, to the City Council for adoption; and

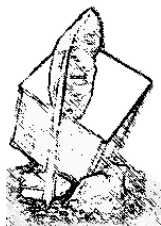
WHEREAS, the City Council held public hearings on the 2008 Comprehensive Plan on January 5, 2009, and February 2, 2009, to consider the Planning Commission's recommended Comprehensive Plan.

NOW, THEREFORE, BE IT ORDAINED THAT the Mayor and Council of the City of Dover adopt The Dover Plan: 2008 Comprehensive Plan "From the People - For the People 2008 - 2013", as amended.

ADOPTED: FEBRUARY 9, 2009

CHAPTER 1

INTRODUCTION



WILLIAM PENN PROPRIETARY AND GOVERNOR OF
YE PROVINCE OF PENNSYLVANIA AND YE
TERRITORIES THERUNTO BELONGING.

I hereby order thee to lay out or cause to be layd out in ye land appointed for ye Town of Dover in ye County of Kent on high street one hundred and fifty foot wide and two back streets each sixty six foot broad to run from ye Water Side through and one Cross Street one hundred and fifty foot broad where ye high road crosseth ye sd Town Land; and to lay out ye Lotts in ye sd Town, so as each may contain One Acre and an half of land; and to Grant to any Person yt shall make Application to thee for a Lott, one Lott in ye sd Town, they building forthwith on ye Same, and pay unto me as a Ground Rent, yearly One Busshel of good Winter Wheat or four shilling and I do also order ye Court Wheat or four shilling and I do also order ye Court House and Prison be built in ye Cross Street of ye sd Town.

Given at Philadelphia,
ye 11th of ye 6th Mo.
1683.

Wm. Penn

As this historic directive indicates, Dover began as a planned community intended to be a center of government and poised for growth. It was not until 1717 that the town was actually platted into lots, streets and a public green that exist to this day. From those early lots and streets, Dover has grown to be the largest and most populated City on the Delmarva Peninsula.

Today Dover is distinguished as the dominant center of employment, commerce, and cultural activities in Central Delaware. The 2000 Census found Dover and the immediate environs to have surpassed a total population of 50,000 people and thus became a designated

Metropolitan Statistical Area. Dover's population during the 2000 Census was 32,043 while the metropolitan region as a whole contained 53,960 persons. By the year 2007, Dover's population had grown to 35,200 according to the Delaware Population Consortium Report, 2007.

The City has grown to an area of over 23 square miles, including 186 miles of roads, 215¹ miles of water mains, and 195 miles of sewer lines. Homes and businesses in Dover produce 40% of the sewage treated by the Kent County Treatment Plant each day. It is estimated that 70% of the jobs in Kent County are located in Dover. Currently, there are over 2700 businesses licensed, and the estimated value of buildings within the City is more than 1.9 billion dollars.

The preceding facts demonstrate Dover's regional importance. Everyday thousands of people come to Dover's shopping malls and stores, recreation facilities, hospitals, medical offices, four major colleges, hundreds of small businesses, and City, county, state, and federal government offices.

Despite its size and growth, Dover's residential areas remain tranquil and have retained their small-town feel. When recently polled, residents of Dover cited the City's beautiful landscaping and trees, its history and historic districts, and its small town atmosphere as what they like best about living in Dover. The City contains a healthy mix of different housing choices. According to the 2000 Census, almost half of the City's housing stock was single family detached homes. Approximately 28% of the housing stock was multi-family apartment buildings, and the remaining homes consisted of duplexes, town homes, mobile homes and single family homes. Since 2000, the City has seen an increase in mixed residential development. The percentage of housing units types in the City is likely to change for the 2010 Census as a result of this increase. Dover is also known for its parks, open space, cultural and recreation opportunities.

City History

Dover's early history was one of slow growth. In 1730 it was said that no more than 40 families lived in Dover. In 1777 after New Castle was captured by the British, Dover became the Capital of the State of Delaware. Modest growth occurred in the 1790s after the construction of a State House bolstered Dover's status as the state capital. However, Dover remained a small market and government town of less than 200 acres. By 1838 no more than 600 people lived within the City limits.

In 1855, a railroad line was extended to Dover allowing it to support a number of industries, including canneries that processed local produce for the large markets now accessible by train. The City experienced its first building boom after the Civil War. Commercial growth began to occur along both State and Loockerman Streets. Residential lots were platted further north and west of The Green, extending the City grid system with many new streets. The growth during this period gave birth to what is now the City's Victorian Dover Historic

¹ Inclusive of proposed city water mains from approved building plans but excluding City water mains outside of City boundaries

District, a National Register Historic District. The Green itself was transformed during this period from a commercial square to the park-like setting of today.

In the early part of the 20th century, Dover's pace of growth slowed, some new industries joined the area and a few pre-World War II suburban style subdivisions were platted around the periphery of the City. It was not until after World War II that Dover began another building boom spurred by the arrival of several large manufacturing companies.

By 1960, the City had grown to over 1000 acres, and yet this was just a prelude. Over the following ten years, the City added 8000 additional acres to its jurisdiction. Through the 1970s, 80s, and 90s, growth continued at a consistently brisk pace. This was mostly due to annexations encouraged by a City policy of withholding services from areas outside the municipal boundaries. This policy enabled Dover to share in the fiscal and other benefits of new growth and allowed the City greater control over the character and quality of surrounding development.

Initial annexation activity during this period was concentrated on the east and south side of the City. Later annexations were conducted on the north and west sides of town. Most of the areas annexed were utilized for residential purposes. However, another significant trend was the development of the US Route 13 corridor as a highway commercial area. Large tracts of land associated with Dover Air Force Base, Dover Downs, Delaware State University, Wilmington University and Delaware Technical & Community College were also annexed during this time.

Through the twenty-first century, the City has focused on "infill" annexations of individual parcels of larger tracts as well as annexations on the north and west sides of the City for residential development. This time period also introduced new zoning classifications as well as several overlay zones through the City.

Through its annexation policy and the natural growth of its institutions, commerce, and industry the City of Dover has grown into the largest metropolitan area on the Delmarva Peninsula.

Comprehensive Plans of the Past

Dover's first modern comprehensive plan was completed in 1960 by Raymond and May Associates for the City Council, entitled the *City of Dover Development Plan 1960*. This plan covered the existing City limits which, generally, were Walker Road, the St. Jones River, the Puncheon Run stream course, and the railroad tracks with an extension into the Lincoln Park and Slaughter Street neighborhoods. This plan laid the foundation for the zoning ordinance and subdivision ordinance which was adopted a year later.

The major goals of the 1960 land use plan included bolstering the downtown retail core, expanding manufacturing and service commercial uses along the railroad, providing housing choices (including higher densities near the commercial core), and emphasizing the "long dreamed" public recreational development along St. Jones River. The transportation element principally focused on improvements to the existing road network. However a "West Dover Connector" aligned west of the railroad track connecting Walker Road to Wyoming Road

was proposed. Other new roads called for included northern and southern extensions of Kirkwood Street.

In keeping with the thinking of the early 1960's, the plan had an "urban renewal" component that called for the conversion of Loockerman Street and its side streets from Reed Street to North Street into a pedestrian shopping mall. The plan showed a civic center, band shell, landscaping, and wide expanses of parking lots. In addition, residential neighborhoods on the west side of town were slotted for spot "renewal" and in some areas "clearance." These components show that there was a real concern for preserving the central area of Dover as a vital part of the community.

Two plans were produced over the 1970s. The first was completed in 1970 in conjunction with the State Planning Office. This plan took on a much more regional tone considering land uses and utility extensions beyond the City boundary. The plan called for a concentric radial street network and a West Dover By-pass. Higher density housing was focused downtown, on the east side of Silver Lake and near major arteries, while lower density housing was determined by various environmental factors. Downtown was seen as an office location, rather than a destination shopping area. A Civic Center was proposed for an area south of the Police Station. The land use proposals were planned to accommodate 80,000 people by 1990 "in a pleasant living environment."

Only five years later, the City of Dover hired Kling Planning, professional planning consultants, to prepare a new Comprehensive Plan because "by 1973 the City found itself unable to deal adequately with development pressures." Like its 1970 predecessor, this plan envisioned the expansion of the City services and boundaries to the north and west and concentric radial roads around the City. There was little discussion of the re-development of older neighborhoods or the central business district. Typical of the period there was a marked concern with environmental and ecology issues related to the City's expansion into outlying areas. The land use proposals were intended to accommodate 70,000 by 1990.

In many ways the 1975 Plan built upon the 1970 Plan by making more specific recommendations for implementation. Examples include the creation of cluster zoning, shopping center zones, enhanced buffering requirements, and medium density residential zones. Other recommendations included more restrictive development controls in ecologically sensitive areas, growth staging through infrastructure control, and stronger informational and procedural requirements for development applications.

Eleven years later the City revised its Comprehensive Plan, again using a planning consultant. Norman Day Associates of Philadelphia were hired to prepare the *1986 Comprehensive Plan*. The 1986 Plan noted that while many of the *1975 Comprehensive Plan's* components remained valid, changes in development pressures and in the actual patterns of development indicated a need for a revision. Population growth did not occur as rapidly as projected and the development pattern was more "piecemeal" than planned. It was also noted that many of the recommended infrastructure improvements did not occur, especially road improvements.

The 1986 Plan continued to express the desire to expand City services and boundaries by considering an even greater planning area than considered in 1975 Plan. The path of the

future was laid out in the plan; SR 1 on the east side of Dover was shown, indicating the demise of the "West Dover By-Pass." Both the Kenton and Saulsbury Road connections to New Burton Road remained from earlier plans. Land use patterns were similar to the 1975 Plan, except for the first time, agriculture was shown as a land use category. The plan called for greater efforts to link greenways (corridors of undeveloped City designed for recreational use) and identify open space preservation areas realistically. Finally, the 1986 Plan recognized the emerging commercial area on Route 8 west.

Some of the specific recommendations of the 1986 Plan were: a pre-determination of zoning outside the City boundaries for future annexations, the establishment of an agricultural zone, a modernization of the industrial zones, enhanced environmental protection regulations, more explicit historic district zone regulations, mobile home park regulations and enhanced buffering near arterial roads. It also recognized the importance of the central business district by calling for a specific central area plan, which was completed in 1989.

In 1991, due to development pressure in west Dover to permit commercial expansion on Route 8 (west), a Corridor Study of Saulsbury Road, Kenton Road and Route 8 was initiated. This resulted in an amendment to the 1986 Comprehensive Plan. The plan designated areas around Greentree Village as most appropriate for commercial development and made recommendations to promote effective development throughout the three corridors.

By the mid 1990s rapid development again prompted City officials to pursue the development of a new comprehensive plan. There was a general concern that the 1986 plan simply did not reflect the values of the community. Funding for the plan was authorized in 1995. In May 1995, the Mayor proposed the plan and the City Council approved, a "Development Policy" that limited new development proposals until a new Comprehensive Plan was completed. Thirteen months later, in June 1996, *The Dover Plan: From the People-For the People* was adopted by the Planning Commission and City Council as the 1996 Comprehensive Plan.

1996 Comprehensive Plan – The Dover Plan: From the People, For the People

The 1996 Comprehensive Plan was a significant change from previous Comprehensive Plans. The development of the 1996 Plan included a strong community participation element. Multiple workshops were held throughout the City in order to ascertain the attributes citizens liked and disliked about living and working in Dover as well as surveys regarding issues and land planning exercises. Despite several challenges including staff vacancies and increases in development activity, the 1996 Comprehensive Plan accomplished many of its objectives and implemented considerable positive changes to the *Zoning Ordinance*. Revisions to existing zones were accompanied by the creation of the Airport Environs Overlay Zone (AEOZ) and a revision to the C2 Central Commercial Zone. Dover's sign ordinance was adopted in 2001 and since that time City Staff has zealously implemented and enforced the new design based principals of the ordinance. Other additions included the Senior Citizen Housing Option in the Planned Neighborhood Design Option, an expansion of Dover's Historic District, and other amendments related to site elements.

The plan of action that was laid out in the 1996 Plan saw many of those programs and suggestions implemented. Among those programs, a tax credit program for historic properties and increased focus on revitalization of the Downtown were included in this Plan.

Government and educational growth was strong during this period with all four colleges and universities in the area expanding their campuses and facilities and the continued enhancement of State and City government buildings.

The Dover Plan – 2003 Comprehensive Plan Update

The 2003 Comprehensive Plan Update was the first to comply with two significant revisions to the state planning enabling legislation regarding comprehensive plans. As in the 1996 Comprehensive Plan, public input was important and a required element in the creation of the Plan. Based on public workshops and the efforts of the Planning Department, each chapter listed goals and recommendations, providing an expanded reference document with implementation guidelines and maps. The importance of this methodology becomes more relevant with each new implementation of the Comprehensive Plan as the citizens of Dover are able to realize and track the progress of City growth and progress over time. Dover's Comprehensive Plan is now a living document which recognizes the input of its citizens and lays out a plan of action with clear and decisive direction for the progress of the City. Between 2003 and 2008 there were several amendments to the 2003 Plan update such as text amendments to the Transportation Plan as well as Land Development Plan map updates.

2008 Dover Comprehensive Plan

The *2008 Dover Comprehensive Plan* takes the essential elements of the 2003 Plan Update and provides a more aggressive plan of action for the City. As in the 2003 Plan Update, citizen participation and public input regarding goals, recommendations and growth and annexation areas played a large part in the formation of this Plan. While many chapters remained consistent in subject, some chapters were expanded upon individually. With the increase in population within the City and the City providing essential services to more residents and businesses, as well as the expansion of the utility system, Public Utilities & Community Infrastructure is now Public Utilities and Infrastructure in order to address all infrastructure and utility system and services within Dover. Facilities and programs offered to residents is now a part of the Community Services and Facilities chapter. This chapter now addresses Public Safety, Parks & Recreation programs and services, and community services.

Economic development is one of the most pressing issues in Dover. To this end, Economic Development is a new chapter and the Community Development component addressed in the 2003 Plan is now a part of the Housing and Community Development chapter.

The *2008 Dover Comprehensive Plan* uses the information gathered and analyzed through public participation workshops, City Commissions and Council input and comprehensive history of the previous five years to set forth goals and recommendations. Table 1-1 provides a brief listing the goals in each chapter and Table 1-2 lists the Land Development Plan goals from Chapter 12.

Table 1-1: Plan Chapter Goals:

Natural Resources and Environmental Protection	Goal 1: Protect the Natural Environment Goal 2: Improve Watershed Quality Goal 3: Encourage Green Development and Sustainable Energy Practices
Historic Preservation	Goal 1: Preserve and Protect Historic Resources Goal 2: Provide and Promote Incentives for Preservation Activities Goal 3: Increase Public Information on Historic Resources Goal 4: Collaborate with Diverse Groups and Governments
Public Utilities and Community Infrastructure	Goal 1: Proactively Maintain Existing Infrastructure and Expand Infrastructure When Beneficial Goal 2: Enhance Infrastructure to Meet Community Needs Goal 3: Meet or exceed the State and Federal requirements of the NPDES permit and Stormwater Management Plan
Community Services and Facilities	Goal 1: Provide a System of Interconnected Open Space Areas and Recreational Opportunities Goal 2: The City must be prepared to face and quickly address potential disasters both natural and man-made. Goal 3: The City should provide and Maintain high quality police, fire, and ambulance services to all residents, properties, and visitors within Dover. Goal 4: The City should work to ensure the protection and preservation of its own resources ranging from natural, historic, and cultural including the physical facilities containing these resources. Goal 5: Protect and Preserve the City Owned Resources
Transportation	Goal 1: Preserve and Maintain the Existing Transportation System Goal 2: Increase Coordination with Agencies Goal 3: Develop and Expand Alternate Modes of Transportation Goal 4: Create Recommendations and Policies for Roadways and Development Goal 5: Air Quality: The Ozone Challenge
Economic Development	Goal 1: Attract and Retain High-Paying Quality Jobs by Targeting Large Firms and Businesses to Major Growth Areas in the City Goal 2: Revitalize Downtown Dover as a Vibrant Town Center Integrating the Hospital, the Colleges & Universities, the State and City Governments with Business (Retail and Professional), Housing and Tourism Goal 3: Ensure that Zoning Requirements Encourage the Uses Desired and Do Not Create Impediments to Desired Business Growth Goal 4: Create an Environment for Long Term Economic Investment in Dover Focusing on Green Technology and Entrepreneurial Businesses Goal 5: Actively Market Garrison Oak

Housing & Community Development	<p>Goal 1: Encourage Balanced Housing Opportunities for All Income Levels and Phases in Life</p> <p>Goal 2: Preserve Existing Housing Stock</p> <p>Goal 3: Provide Safe Livable Neighborhoods</p> <p>Goal 4: Provide Homeownership Opportunities for Low/Moderate Income</p>
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Source: The 2008 Dover Comprehensive Plan

Table 1-2: Land Development Plan Goals

Residential Land Uses	To develop and maintain an adequate supply of housing of varying type, size, and densities that are aesthetically pleasing and located within neighborhoods designed or redesigned to promote convenience, conservation, and access to the greater community, but which are properly buffered through distance and landscaping from incompatible land uses.
Downtown Dover	Enhance the role of Downtown Dover as a major employment, residential and commercial center as well as the symbolic and cultural heart of the community, and recognize its unique heritage and historic resources. Provide for mixed use development allowing greatest variation of uses.
Mixed Use	<ul style="list-style-type: none"> • Continue to facilitate project development processes for construction in accordance with approved Master Plan Pattern Book and TND concept. • Support efforts to implement the road and walking trail connections linking Eden Hill Farm TND to the existing circulation network. • Encourage quality architecture within the development in accordance with the Pattern Book and intent of the TND Ordinance. • Participate in the planning for the project's open space areas including the area of the historic farm complex, alleys, and southern portion of the project near Puncheon Run.
Commercial Land Uses	Maintain and improve the City's position as a regional commercial center, while providing its citizens convenient access to needed goods and services through well designed and spaced community and neighborhood commercial centers.
Government and Institutional Land Uses	Maintain and improve the City's position as a center of government, education, and medicine through support of existing institutions and encouraging well designed campuses that are integrated into the community and have room to expand.
Employment Centers	Create a more vibrant, growing economy with a broader range of job opportunities through an increase in office and industrial development in appropriate and designated areas.
Dover Air Force Base	Create a favorable and compatible environment for Dover Air Force Base through a resolute commitment to provide all reasonable planning

	accommodations to protect the Base.
Public Open Space	Preserve and enhance the existing network of public parks, and expand the public park system to meet the needs of the current and future population. Special consideration should be given to preserving natural features, such as Silver Lake and the St. Jones River, for public use and aesthetic enjoyment, and to make future and existing parks more accessible via a citywide network of bicycle and pedestrian pathways
Private Open Space	Promote the construction of neighborhood parks and playgrounds within new residential developments and cooperate with the private sector and community homeowners associations to help them meet their recreational needs. Support the creation of new private efforts that help meet the recreational needs of the community.
Agricultural Land Uses	Support the continuation of existing active agricultural uses as a viable and important component of the land use and open space mix in Dover, especially where agricultural lands form logical transitions between developed areas in the City and rural, agricultural areas in the County.
Environmentally Sensitive Areas	Protect the natural environment and prevent the destruction of property through the preservation of significant ecological systems which naturally work to enhance the quality of life for residents.

Source: The 2008 Dover Comprehensive Plan, Chapter 12, Land Development Plan

CHAPTER 2

PATTERNS OF CHANGE

A substantial number of plan review and approvals resulting in construction projects have been undertaken over the period of 2003-2008. Nearly 10 million square feet of nonresidential development was approved including several Master Plans outlining phased multi-year projects. Although the City's annexation rate was slower over this period than in the past, Dover remains the commercial and employment core of Delmarva.

Hospitality, institutional and retail land uses have dominated new development. Residential construction has also seen steady development activities. Retail and hospitality development have been concentrated along main transportation corridors, while residential development has been most extensive in suburban west Dover. Institutional uses have expanded to keep pace with the demands of the growing City and Dover's industrial base has continued to expand with numerous industrial park developments and manufacturing facilities being constructed and enlarged. New industrial development has been concentrated in the western industrial area.

Table 2-1 illustrates the number of applications submitted to the City for review between 2003 and 2007. This table, along with subsequent tables, shows the changes in development activity and uses throughout the City.

Table 2-1: Application Count Table 2003 – 2007

Application Type	2002	2003	2004	2005	2006	2007	Total Applications 2003 – 2007
Board of Adjustment	13	9	17	18	25	38	120
Annexations	2	3	5	6	10	4	30
Conditional Use	2	8	8	9	8	7	42
Site Plans	37	37	33	39	49	66	261
Subdivisions	2	10	10	8	7	7	44
Rezoning	5	8	9	7	13	10	52
Miscellaneous	14	11	25	17	17	23	107
Unified Sign	1	2	0	1	0	1	5
Historic District Commission	6	11	7	2	9	7	42
TOTAL	82	99	114	107	138	163	703

Source: City of Dover, Department of Planning and Inspections

Annexations

There were four major annexations to the City over the planning period, totaling 460.27 acres. The trend has been toward infill and slow progress westward. The lands annexed include the lands of Alvin Brittingham on the south side of Hazeletville Road totaling

104.58 acres annexed in 2003. These lands are now under development as the residential subdivision of Nottingham Meadows. The Bush Farm on the north side of Denneys Road along McKee Road was annexed in 2004 for a total of 133.46 acres and is now in the plan review process as the developments of Stonebrook East PND and Stonebrook West PND. Additionally, two large annexations occurred on the south side of Forrest Avenue in 2006. These annexations were comprised of the Carey Farm (101.5 acres) and three parcels adjacent to the Carey Farms (120.68 acres total). A portion of these lands are currently owned by the Capital School District. Additional smaller annexations brought the total annexation between 2003 and 2007 to 595 acres.

Various enclaves in the City have begun to close as property owners surrounded by the City have annexed. Additionally, property owners outside and adjacent to the corporate limits have also sought annexation and the resulting access to City services. Non-residential annexations have been concentrated along US Route 13 north and west of the Dover Mall. The most substantial annexation was a 30.776 acre parcel on College Road belonging to Kent Storage Facilities and Lorelex Co. Residential properties are also being annexed as septic systems fail and residences are required to connect to city water and sewer.

Zoning Changes

Fifty-two (52) rezoning applications resulted in the rezoning of over 545 acres, or roughly 0.86265 square miles. Thus, 4% of Dover's total land area was rezoned over the previous five years. The majority of these rezoning approvals were in concert with the recommendations of the *2003 Comprehensive Plan Update* during the Comprehensive Rezoning Project. One of the major rezonings approved was Eden Hill Farm from Industrial Park Manufacturing (IPM) & Agriculture (A) to Traditional Neighborhood Design (TND). A large percentage of the applications requested the rezoning of residential properties for commercial and office uses. Table 2-2 shows the total rezoning for the period.

Table 2-2: Acreage of Rezoning 1997 – 2007 (rounded)

Year	From						To					
	Residential	Commercial	Office	Industrial	Institutional	Agriculture	Residential	Commercial	Office	Industrial	Institutional	Agriculture
1997-2002	289	32	1	54	0	386	35	90	6	386	14	231
2003-2007	128	74	11	308*	3	15*	341*	100	11	272	13	0*
Total	417	106	12	362	3	401	376	190	17	419	27	231

*Inclusive of 2005 rezoning of Eden Hill Farms from IPM & A to TND (classified as residential) total acreage of 272.04

Source: City of Dover Department of Planning and Inspections, Annual Reports

Table 2-3: Net Gain / Loss of Land by Zoning Category 1997 – 2007

Year	Residential	Commercial	Office	Industrial	Institutional	Agriculture
1997-2002	-254	58	5	332	14	-155
2003-2007	213	26	0	-51	10	0
Total Loss/Gain	-41	84	5	281**	24	-155

(**) Includes 396 acres of Garrison Oak

Source: City of Dover Department of Planning and Inspections, Annual Reports

The 396-acre rezoning of the Garrison Oak for use as a technology park is included in this analysis due to the recommendations from the Economic Development Strategy Committee to aggressively market and master plan this land. The rezoning of the Garrison Oak property to IPM-2 occurred in September 1999. The largest acreage rezoned was from the IPM and A to TND for Eden Hill Farm; however, even with this addition of TND zoning, there was a net loss of 41 acres of residential zoning. Lands of Dover International Speedway also brought a gain of commercial property with their rezoning of residential lands to the Recreational Commercial (RC) zones totaling approximately 49.58 acres.

Existing Land Use and Development Activity

Dover contains a wide array of land use types that vary in extent and intensity across the City. Dover Air Force Base is the single largest homogeneous land use area within the City limits. Residential land use makes up the second largest area and is widely distributed throughout the City. The western portion of Dover has received the vast majority of new residential development since 1985 with a recent surge in residential development activity seen the central-east portion of the City. Commercial districts are primarily located along major arterial roadways and within the traditional downtown business district. National retail franchise and department stores have concentrated along the US Route 13 corridor in the area north and east of the Downtown and convenience retail/service commercial uses have followed residential development along DE Route 8 in western Dover. Additionally, the City is aware of the State policy of discouraging development on lands east of State Route 1.

Governmental and institutional uses are extensive throughout central Dover, including the State Capital Complex, Bayhealth Medical Center, and Wesley College. Major institutional uses outside the traditional core area include Delaware State University, Delaware Technical & Community College, Wilmington University Campus, Delaware Department of Transportation (DelDOT) administrative campus (Danner Campus), and Kent County Levy Court administrative building.

Major industrial uses lie along the Norfolk-Southern railroad line within the south-central planning region and north of Dover Air Force Base. Industrial land uses occupy a small percentage of total area. There are several large industrial complexes including Kraft General Foods, Playtex Products, former Playtex Apparel facility, Enterprise Business Park, Proctor & Gamble and the Kent County AeroPark.

Numerous vacant developable tracts of land exist within the City limits and are distributed throughout the urbanized area. Peripheral areas within and bordering the City are rapidly beginning to develop to the north and west, while the eastern areas of the City have remained predominantly commercial west of State Route 1 and agricultural east of State Route 1, except for two residential subdivisions near the State Route 1 and Route 8 interchange. The southern area of Dover is largely suburban, consisting of numerous single-family neighborhoods.

Residential Development

Residential development over the past five years has been characterized by a few large-scale mixed-use subdivisions, traditional subdivisions, and the addition of four major privatized student-housing complexes. Residential development has not kept pace with the growing commercial sector due to lower development costs beyond City limits. This has led to a situation in which Dover businesses import workers from beyond the municipal limits. The City has added twenty (20) subdivision approvals either in the design or final plan process since 2003. The planning period saw two major proposals for senior housing which are now under construction: Luther Village PND-Senior Housing Option was approved in 2003 for Phase I with Phase 2 approval in 2007 and DoveView PND-Senior Housing Option. Several regular subdivisions are in the review process such as Chestnut Grove Farms and Maidstone. The plan for Eden Hill Farm TND brought the largest mixed-use subdivision into the City in 2005. For apartments, the apartments at Cannon Mill were constructed and the Blue Hen Apartments project is in the plan review process. Table 2-4 shows the number of single-family lots and multifamily units approved from 2003 to 2007.

Table 2-4: Residential Units Approved by Type 2003 – 2007

Year	2003	2004	2005	2006	2007	Total
Single Family Detached	97	414	18	440	107	1,076
Single Family Attached	281	315	10	404	197	1,207
Multi-Family	368*	216	120	216	362	1282*
Totals	746	945	338**	1,060	666	3,755

**300 of the units are classified as apartments but are dormitory apartments at Delaware State University*

***an additional 190 unclassified units in Maidstone included*

Source: City of Dover Department of Planning and Inspections, Annual Reports

Residential Construction

The majority of new residential development has occurred in the suburban areas of west Dover, expanding into agricultural and woodland areas. Detached single-family homes have remained the dominant housing type, representing 54% of all housing units built since 2003. However, over the last seven years, increasing numbers of townhouse, duplex and multi-family dwelling units have been constructed.

A few single family detached housing developments were completed during the period, including Maple Glen. Construction continued in the mixed housing neighborhoods of Village of Cannon Mill, and Village of Westover with build-out of Phases V and VI. New conventional single family detached housing subdivisions approved and under construction include Nottingham Meadows (212 units), Emerald Pointe (107 units,) Maple Glen (34 units), and Four Seasons (43 units). Mixed unit subdivisions still under construction include Clearview Meadows Planned Neighborhood Design (PND), Lexington Glen PND, Patriot Village PND, and Eden Hill Farms TND.

Privatization has come to the universities as schools have allowed private corporations to own and operate apartment buildings on university land. University Courtyard Apartments and University Village, completed in 2005, added a total of 414 apartments and apartment style dormitories for students. Wesley College has contracted with a local developer to build and manage 66 units on the southern end of its campus downtown, creating Zimmerman Hall and Alexander Hall. Both buildings have been completed.

The City has a large number of assisted living providers including Luther Towers, Heritage at Dover, Westminster Village, Owens Manor, Silver Lake, and Courtland Manor. There are senior living facilities in the plan review or approval process such as The Arbors. Two other projects have been targeted by their developers for senior housing: Creekstone and Seskinore. These new senior housing facilities provide more than the adequate number of housing options for the retirement community. Additionally, Dover has 1,228 dedicated senior-living units, of which 489 are independent living facilities or apartments, 450 are nursing home beds, and 290 assisted living beds. These facilities typically require a substantial entry fee and \$1200 to \$2000 per month in rental and services fees.

Table 2-5: Residential Housing Starts 2003 – 2007

Year	2003	2004	2005	2006	2007	Total
Single Family Detached	126	176	218	78	72	670
Single Family Attached	2	54	22	118	112	308
Multi-Family	380*	0	72	82	144	678
Totals	508	230	312	278	328	1,656

**300 units are classified as apartments but are dormitory apartments at Delaware State University*

Source: City of Dover Department of Planning and Inspections, Annual Reports

Commercial and Retail Development

Commercial development activity in Dover surpassed all expectations over the five-year period of this update. A majority of this activity can be attributed to Master Planning efforts at Dover Downs and Dover International Speedway and the increase in hotel construction across Dover. The Planning Commission reviewed and approved applications amounting to over 700,000 square feet of new commercial and retail space. Table 2-6 shows the amount of new square footage approved by year including Master Plans with multi-year project proposals. Map 2-1 Major Developments demonstrates the geographic distribution of development activity for both residential and non-residential activities.

Table 2-6: Non-Residential Floor Area Approvals 2003 – 2007 (rounded)

Year	Institutional	Commercial/ Retail	Industrial	Office	Hospitality/ Entertainment	Total Approved
2003	333,624	9,840	1500	124,023	11,660	480,647
2004	29,380	115,665	1,590	202,231	4,572	353,438
2005	13,572	55,630	41,600	46,714	204,382	361,898
2006	809,610	47,006	17,000	445,308	135,242	1,454,166
2007	225,706	435,608	50,182	152,437	1,761,951	2,625,884
Total	1,411,892	663,749	111,872	970,713	2,117,807	5,276,033

Source: City of Dover Department of Planning & Inspections, Annual Reports

Hospitality and Entertainment

Dover Downs was the largest single contributor to Dover’s economic growth. The addition of the video lottery facility and the completion of the entertainment facility have brought a first class destination facility to Dover that has spawned further hospitality expansion. Dover Downs Hotel & Casino contributed more than one million square feet approved of new hospitality/entertainment space. Additionally, the opening of the second hotel tower, the video lottery facility expansion, and a restaurant and retail component in 2008 completed a number of expansions at the complex.

Dover International Speedway continued to expand and plan for expansion by increasing grandstand seating and skybox seating capacity, site improvements, and various and facility building upgrades. Two unique projects at the Speedway include the Monster Bridge which crosses over the track in turn 3 and the looming “Miles the Monster” statue that greets fans in the Victory Plaza area on the east side of the track.

Other significant developments include the approval of nine hotels throughout Dover for a total approved 364,433 square feet. Those constructed and serving guest include Country Inn & Suites, Marriot Residence Inn, Mainstay Suites, and Sleep Inn with the Hilton Garden Inn scheduled for completion in late 2008.

The US Route 13 corridor from State Street to Scarborough Road has changed with the transition from one-story motels to four and five story hotels and national restaurant chains. Table 2-7 illustrates the major hospitality approvals between 2003 and 2007.

Table 2-7: Major Hospitality/Entertainment Approvals 2003 – 2007*

Location	Square Footage Approved	Total Number of Rooms
Country Inn & Suites	51,402	89 Rooms
Marriott Residence Inn	82,263	96 Rooms
Hilton Garden Inn	64,317	95 Rooms
Haynes Motel	6,400	26 Rooms
Motel 6	29,382	83 Rooms
Sleep Inn	34,133	62 Rooms
Wingate Inn	55,000	100 Rooms
Candlewood Suites	47,936	82 Rooms
Mainstay Suites	53,635	91 Rooms
Dover Downs Master Plan	1,603,660	260 Rooms
Dover International Speedway Master Plan	74,000	170,000 seats
Total	2,031,368	984 Rooms

**Expired plans are not included*

Source: City of Dover Department of Planning and Inspections, Annual Reports

Retail Development

Other restaurant and various food/entertainment establishments were built as either new construction or redeveloped within existing buildings throughout the City. Detailed information on these can be found in the Planning Department's Annual Reports for 2003 through 2007. Retail development continued with the addition of over one million square feet of new floor area. Unlike the 2003 plan, there is no defined area for retail growth other than that along Route 13/113 and portions of the Route 8 corridor. Along Route 13, Dover Crossroads at Leipsic Road adjacent to Dover Downs was approved for a shopping center with 216,000 square feet of retail space; the Kohl's Department Store was approved for 95,566 square feet in 2003 and opened in 2005. There has also been an increase in the number of plan proposals for pharmacies such as CVS and Walgreen's/Happy Harry's. A number of food retail space including fast food was also approved during this five year update period including, Buffalo Wild Wings in 2005; Rita's Water Ice, Sonic Restaurant, and Dickey's Barbeque Pit in 2006; and Philly Soft Pretzel and several Wawa Food Markets.

Governmental and Institutional Development

Major institutions providing essential services to the population have expanded as the City experienced steady and prolonged residential growth. Bayhealth Medical Center has undertaken several renovations and has received approval for its Master Plan for over

570,000 square feet of new space. Healthcare options for the aging population improved with the development of assisted living facilities. The State of Delaware expanded with the construction of over 20,000 square feet and the Kent County Courthouse addition will add 179,860 square feet to the Downtown area. Table 2-8 reflects major institutional development within the City limits.

Table 2-8: Major Institutional Approvals 2003 – 2007

Applicant	Square footage approved
Delaware State University	534,274
Delaware Department of Transportation Campus	5,359,339 (total land approval)
State of Delaware (other)	20,990
Kent County Administration Building	179,860
Churches	240,798
Charter Schools	13,584
Bayhealth Medical Center Master Plan	572,126
Community Buildings	57,666
Capital School District	24,400*

**Tally does not include the new South Dover Elementary School approved in early 2008.*

Source: City of Dover Department of Planning & Inspections, Annual Reports

Education

All college campuses in Dover expanded over the planning period. Delaware State University (DSU) added four new on campus apartment buildings and apartment style dormitories over several applications. DSU also added over 100,000 square feet to its campus with the Wellness Center as well as nearly 80,000 square feet for its Student Center and Pool Addition. Wilmington University opened a new campus building along Route 13. Wesley College expanded its student base and increased the amount of surface parking. Wesley College also brought two new privatized dormitories to North Governors Avenue and North Bradford Street area.

The Capital School District submitted plans for an extensive expansion and renovations of schools within the district. Central Middle School is currently in its construction phase of adding a new gymnasium and auditorium renovation project totaling 24,400 square feet. Construction of a new elementary school on the property at South Dover Elementary was reviewed in early 2008 and is under construction.

Community Service

The community service sector, which includes places of worship, social service organizations, childcare and community based organizations, continued to expand during the planning period. Places of worship increased their floor area by a total of over 13,595 square feet. Elks Lodge added a new building with 17,440 Square Feet in 2005 and a new Masonic

Lodge building was completed on Wyoming Mill Road following its relocation for the Bayhealth Medical Center expansion. The number of Day Care facilities grew significantly. Projects included the relocation of the Kent County Community Action Agency and the new facilities of Kidz Ink and Kids Cottage (completion due late 2008).

Office and Office Park Development

Dover saw significant growth in the office sector over the planning period approving totaling nearly 500,000 square feet. The largest single building approval was Building 1 & 2 as Phase 1 of the Eden Hill Farm TND: Professional Office, Medical, and Financial District. Enterprise Business Park also was approved for two additional office buildings including a credit union facility. Table 2-9 shows these major approvals between 2003 and 2007.

Table 2-9: Office and Office Park Approvals 2003 – 2007*

Location	Square Footage Approved
College Business Park	43,200
Enterprise Business Park	110,832
Eden Hill TND Professional Office, Medical & Financial District	357,993
Bryan Business Park	14,800
Walker Medical Pavilion	24,657
State Street Commons	24,000
Compass Pointe	12,535
Ashburn Homes Office Complex	39,670

**Only those with square footage totaling in excess of 10,000 S.F. are listed. Expired plans are not included*

Source: City of Dover Department of Planning and Inspections

Industrial Development

New industrial approvals were largely for storage and warehousing uses. Several mini-storage facility projects were reviewed; however, none have gone to construction. The major industrial parks within the City added over 50,000 square feet manufacturing space and approvals to the existing industrial facilities included a 1,590 square foot expansion to Proctor and Gamble (Formerly Scott Paper).

Table 2-10: Major Industrial Approvals 2003 – 2007*

Location	Square Footage Approved
Tudor Industrial Park	24,902
Simpson Industrial Park	25,280
Bryan Business Park	7,200
Proctor & Gamble	7,200
Mini Storage Warehouse	46,900
Weston Drive Properties	41,600

**Expired plans are not included.*

Source: City of Dover, Department of Planning and Inspections

CHAPTER 3

POPULATION GROWTH, DEVELOPMENT, AND EMPLOYMENT TRENDS: ANALYSIS AND PROJECTIONS

Past population trends are an important tool for predicting City growth. The City of Dover is by far the largest municipality in Kent County, accounting for 23% of the county's population. The City also serves as a major regional economic center. The Dover Metropolitan Statistical Area (calculated by combining Census tracts immediately surrounding and including the City) contains the vast majority of Kent County's employment and commerce. Dover's growth has continued and the City is expected to continue its role in the center of Delmarva.

Historic Population Growth

When the City of Dover was officially platted in 1717, it consisted of 125 acres of land and a few hundred inhabitants. Thus began nearly three centuries of growth and change, which continues today. As rural lands surrounding Dover converted to urban uses and new people and businesses joined the community over the years, the only thing remaining constant has been change.

Successfully planning for change requires a sound estimate of population, housing and employment within Dover and the surrounding area. These estimates rely on the "natural increase" of the population (how many children will be born to current residents) and the number of new residents expected to move to the City over a given period. These estimates will guide the development of infrastructure, City services, parks and zoning as Dover continues to move forward in the twenty-first century.

The first step in developing a reasonable population estimate is to examine past trends of population growth. By reviewing previous decennial census counts, it is possible to model Dover's historical population growth pattern, which may illuminate future growth.

This task is complicated by the City's aggressive annexation policy (especially during the 1960's, 1970's and 1980's) that redefined Dover's boundaries within the County. In 1960, the City was comprised of approximately 1,000 acres. By 1969, the City had grown to 8,267 acres and by 1971 Dover had grown to 12,287 acres through annexations of adjacent land. Annexations were undertaken more slowly in the 1990's with approximately 551 acres becoming part of Dover. Since 2000 the City has annexed approximately 629 acres. Currently, in 2008, the City consists of approximately 14,909 acres.

The 1950 Census counted 6,223 people living within the boundaries of the City. By 1960, the City contained 7,250 people, an increase of 16.5%. The population of Dover greatly expanded during the 1960s as indicated by the 1970 Census figures. In 1970, the City's population was 17,488, an increase of 141% over the ten-year period. Much of this growth resulted from annexations of the 1960's, which totaled approximately 7,200 acres over the

decade. Many of these new municipal residents of Dover had been living in areas of the County directly adjacent to the City at the time of the 1960 Census. This is supported by Kent County's more modest 24% rate of growth during the same 1960 to 1970 period.

During the period from 1970 to 1980, the population of Dover grew by 6,024 people to 23,512. This represents a 34.4% growth rate. Between 1980 and 1990 the City's population grew at a rate of 17.1% to a total of 27,529 people. From 1990 to 2000, the population of Dover grew by 4,505 people to 32,043² people. The population has continued to increase to 36,359 as of October 31, 2008. (*Delaware Population Consortium Report 2008*) Table 3-1 depicts the growth for Kent County and the City of Dover from 1980 to 2000.

Table 3-1: Population Growth 1980 - 2000

Census Place	1980	1990		2000		Overall Increase 1980-2000	
	Count	Count	Increase From 1980	Count	Increase From 1990		
			People Percent		People Percent	People	Percent
City of Dover	23,512	27,529	4017 17%	32,043	4,606 16%	8,623	37%
Kent County	98,219	110,993	12,774 13%	126,697	15,704 14%	28,478	29%

Source: US Census 2000³

Population Projections

Using the trends found in past data, it is possible to project future population figures. Even the best projections provide only an estimate of future population levels. Many elements of population growth are somewhat difficult to predict across time, such as mortality and migration. Population projections decrease in accuracy in the out years.

This Plan utilizes projections developed by the Delaware Population Consortium (DPC), a group of numerous representatives of state and local planning agencies affiliated with the University of Delaware's Center for Applied Demography and Survey Research. The 2010-2025 projections use numbers from the 2007 Delaware Population Consortium Report and should therefore be relatively reliable.

The 2008 *Delaware Population Consortium Report* figures project continued growth for both the City of Dover and Kent County. Kent County is projected to grow by roughly 5% every five years to a total population of 184,748 in 2025. The City is expected to grow at the slower rate of about 1.5% over each five-year segment, reaching 39,226 by 2025, for a total

² The US Census originally reported a total population of 32,135 for the City of Dover in 2000. City staff and elected officials questioned some of the Census block totals, which appeared to allocate population to areas that had no residential uses. After the Count Question Resolution Process of the Census Bureau, the total population for the City of Dover in 2000 was revised to 32,043. This revision occurred in April of 2002.

³ The 2000 US Census data is used in a number of the tables as it is the most recent US Census data for those tables. The numbers may conflict with the Delaware Population Consortium as the DPC numbers are updated and verified annually.

growth of approximately 9%. Table 3-2 lists the overall growth projections furnished by the DPC through 2025.

The City of Dover and Kent County are expected to continue a steady increase in population through the year 2025. Dover is maturing as a City. Once the existing vacant land is developed, it is expected that population growth will stabilize. The number of people actually living in the City of Dover by 2025 may be greater than the 39,226 projected, depending on annexation policies and development activity.

Table 3-2: Population Projections 2010 - 2025

Census Place	2008	2010			2015			2020			2025		
		People	Increase		People	Increase		People	Increase		People	Increase	
Dover	36,359	37,479	1,120	2.9%	38,053	574	1.5%	38,635	582	1.5 %	39,226	591	1.5%
Kent County	155,299	159,980	4,681	2.9%	169,356	9,376	5.5%	177,817	8,461	4.7%	184,748	6,931	3.7%
Delaware	875,953	896,880	20,927	2.3%	943,924	47,044	4.9%	986,296	42,372	4.3%	1,023,707	37,411	3.6%

Source: Delaware Population Consortium, 2008 Report

Age Distribution

In addition to growth, it is useful to consider the future population's age distribution. This information (such as the number of school age children, elderly, or size of labor force) facilitates appropriate infrastructure planning.

The 2008 DPC Report revealed that Dover will have a relatively stable proportion of people in age groups 0-64 from 2008 and 2020. This can perhaps be attributed to the influence of major institutions located in Dover including Dover Air Force Base, Wesley College, and Delaware State University. Table 3-3 demonstrates that Dover is slightly younger than either the county or the state. There will also be a high proportion of senior adults (65 and older) residing within City limits than the County. This can be attributed to the growth of institutional and retirement communities in Dover.

Table 3-3: Age Profiles 2008

		Percent of Total Population				
Census Place	Total Population	0-19	20-24	25-44	45-64	65+
Dover	36,359	27.9%	10.7%	24.6%	22.9%	13.7%
Kent County	155,299	28.4%	7.4%	26.8%	25%	12.4%
Delaware	875,953	26.8%	6.6%	26.3%	26.6%	14.3%

Source: Delaware Population Consortium 2008 Report

Predicting population demographics is critical to infrastructure planning. The historical trends that are evidenced by comparing the 1990 and 2000 US Censuses combined with

projections from the Delaware Population Consortium provide a foundation for estimation. Table 3-4 depict population trends in the various age groups. This information assists in planning for facilities, housing and other activities that are mentioned in other chapters.

Table 3-4: Age Profiles in Dover, by Percent

Age group	2008			2010			2015			2020		
	People	Percentage of		People	Percentage of		People	Percentage of		People	Percentage of	
		Population	Increase*		Population	Increase		Population	Increase		Population	Increase
0-19	10,154	28%	8%	10,322	28%	2%	10,254	27%	-0.6%	10,520	27%	3%
20-24	3,906	11%	17%	4,037	11%	3%	3,948	10%	-2%	3,676	10%	-7%
25-44	8,946	25%	-0.1%	8,991	24%	0.5%	9,024	24%	0.3%	9,233	24%	2%
45-64	8,353	23%	25%	8,903	24%	6%	9,035	24%	2%	8,815	23%	-3%
65 +	4,999	14%	14%	5,224	14%	4%	5,792	15%	10%	6,390	17%	9%
	36,359		11%	37,479		3%	38,053		2%	38,635		2%

Source: Delaware Population Consortium, 2008 Report

**The 2008 increase % is calculated from the 2000 US Census*

Working age adults (25-64 years of age) are projected to remain relatively steady in percentage of the population and continue to make-up roughly half of Dover's population over the next twelve years. The most rapidly growing projected segment is senior citizens (65+), expected to increase through 2020 to comprise just less than 20 percent of the population. These two trends suggest a potential demand for high-quality and affordable housing.

This increase in the population of older adults may require more specialized services including health care, housing, and transportation. Those of retirement age also tend to move out of larger single family homes back into smaller dwellings or condominium/apartment units, which have fewer maintenance requirements. A portion of the retirement age individuals will move in with family members. Alternative housing options should be evaluated to address this situation. Various retirement communities have already been established in Dover to address the growth in the age 65+ population.

Economic Characteristics of Dover's Population

This segment explores the financial characteristics of Dover. Broadly, the importance of family or household income is important when projecting expenditures to assist quality of life concerns. To determine the economic health of Dover, one must designate the historical trends of median income levels, labor force, industry characteristics, and housing of the working population.

Labor Force Characteristics

Although there are 36,359 people residing in Dover, much of the approximately 64,000-person labor force (from the Delaware Department of Labor) of Kent County comes to work in Dover. This impacts the City in many ways. Daytime workers and regional shoppers have a beneficial impact on local businesses, as the money they spend circulates through Dover's economy. These same workers take advantage of and rely upon, many City services, facilities, infrastructure and amenities (i.e. trash collection, streets, sewers, parks, library, police and fire protection).

Industry, Occupation and Labor Force

It is clear from the previous sections of this chapter that many people call the City of Dover home and maintain residences here. Yet, even more people come to Dover to work. The City and the area that surrounds it are undeniably the primary employment center of Kent County and the central Delaware region. Dover is home to numerous large corporations such as Kraft General Foods, Proctor and Gamble (formerly Scott Paper) and Playtex. The State of Delaware, Dover Air Force Base and Bayhealth Medical Center are also major employers in Dover. There are also a number of colleges and universities (Wesley College, Delaware Tech and Community College, Wilmington University and Delaware State University) as employers. Additionally, there are an abundance of commercial establishments within the City, which serve the whole area and provide a significant amount of employment.

To plan effectively for employment centers in and around the City, it is important to have an estimation of the number of jobs expected in the future. In order to ensure that adequate land is zoned for certain employment types (industrial, commercial, office, institutional) it is helpful to identify local growth industries.

Data on employment trends, the location of jobs, and the type of employment available is difficult to compile. The problem lies in both the consistency of data compiled over time and the way in which employment is reported.

Table 3-5 illustrate that Kent County is projected to gain approximately 16,024 jobs between 2004 and 2014. The increase in projected employment will impact the City of Dover in many areas such as housing, transportation, infrastructure, etc. The two largest increases in occupations are projected to be in the computer and mathematical occupation and the healthcare services occupations.

While the data reflected a strong growth within most sectors of employment, the 2000 Census (in Table 3-6) shows the actual make up of the labor force. The following data lists the number of people eligible for the labor force. A slightly higher rate of unemployment exists in the City than in the County and a slightly larger percentage of people over the age of 16 reside in the County.

Table 3-5: Projected Employment Growth by Occupation in Kent County, by Sector 2004-2014

	2004	2014	Percent increase
Management	2,748	3,455	24.1%
Business & Financial	2,760	3,632	31.6%
Computer and Mathematical	845	1,224	44.9%
Architecture and Engineering	1,043	1,385	32.8%
Life, Physical, & Social Science	639	829	29.7%
Community & Social Services	1,279	1,745	36.4%
Legal	4,029	4,995	24.0%
Arts, Design, Entertainments, Sports & Media	681	898	31.9%
Healthcare Practitioners and Technical	2,652	3,697	39.4%
Healthcare Support	1,738	2,494	43.8%
Protective Services	2,387	2,973	24.5%
Food Prep & Serving Related	5,547	7,352	32.5%
Building & Grounds Cleaning & Maintenance	1,925	2,446	32.3%
Personal Care & Service	1,693	2,343	38.4%
Sales & Related	7,313	8,905	21.8%
Office & Administrative Support	10,621	12,498	17.7%
Farming, Fishing, & Forestry	964	1,057	9.6%
Construction & Extraction	2,981	4,178	4.2%
Installation, Maintenance & Repair	2,965	3,740	26.1%
Production	3,587	3,365	-6.25
Transportation & Material Moving	4,621	5,588	20.9%
Total Employed	63,556	79,580	25.2%

Source: Delaware Department of Labor- Delaware 2014: Occupation and Industry Projections

Table 3-6: Dover and Kent County Labor Force, 2000

	Dover		Kent County	
	Number	Percent	Number	Percent
Population over 16	25,596		95,895	
Labor force	16,320	64%	64,387	67%
Civilian labor force	15,318	60%	61,308	64%
Employed	14,174	55%	57,895	60%
Unemployed	1,144	4.5%	3,413	3.6%
Armed Forces	1,002	3.9%	3,079	3.2%
Not in labor force	9,276	36%	31,508	33%

Source: US Census 2000

Table 3-7 estimates an existing labor force of approximately 64,000 people in all of Kent County and the City of Dover in 2000 based on occupation. The number can be used to see

the proportions that the City will have based upon the data in Table 3-7. The following data concerns a more generalized selection of occupation.

Table 3-7 Occupation of the Labor Force, 2000

Occupation	Dover		Kent County	
	Number	Percent	Number	Percent
Management, professional, and related occupations	5,014	35%	16,516	29%
Service occupations	2,575	18%	9,838	17%
Sales and office occupations	4,089	29%	15,554	27%
Farming, Fishing and forestry occupations	44	0%	385	1%
Construction, extraction, and maintenance occupations	999	7%	6,717	12%
Production, transportation, and materials moving occupations	1,453	10%	8,885	15%

Source: US Census 2000

Dover Demographics

Table 3-8 presents a glimpse of the demographic conditions in the City of Dover, as reported by the U.S. Census 2000, and offers comparisons with conditions in the State of Delaware and Kent County. It should be noted that this table and discussion utilize the original U.S. Census 2000 figures for the City of Dover and do not account for adjusted Census data resulting from the Count Question Resolution process of the U.S. Census Bureau regarding counting discrepancies.⁴

Dover's population is more racially diverse than either the State of Delaware or Kent County's population. According to the most recent Census, approximately 37% of Dover's population identified themselves as black, while only about 20% of County and State residents were reported to be black. The ethnic background of Dover's residents is fairly similar to that of residents at the County and State levels. Approximately 4% of Dover's population was of Hispanic origin in the year 2000, while a slightly higher percentage was of Hispanic origin in the State at large and a slightly lower percentage was of Hispanic origin in Kent County.

Households in Dover are distinguished by a slightly smaller percentage of households with children under the age of 18 than found at either the state or county level. At the same time, compared to conditions across the State and County, a slightly higher percentage of Dover's households were classified as single parent family households. Dover also had a higher percentage of households occupied by residents 65 or older that were living alone. Approximately 8% of households in the State of Delaware and Kent County did not have a vehicle available to them, while 11.4% of Dover's households did not have access to a vehicle.

⁴ The official total population figure for Dover is 32,043, rather than 32,135 as is reflected in these tables. Since the source data for these tables was not amended, we have continued to depict the 32,135 population total for this section only. The difference of 102 persons represents 0.003% of Dover's total population and is not statistically significant for the comparative purposes intended by this section.

Table 3-8: General Demographic Conditions for Delaware, Kent County, and Dover³, 2000

	Delaware	Kent County	Dover
Total Population	783,600	126,697	32,135
Race			
White	74.6%	73.5%	54.9%
Black	19.2%	20.7%	37.2%
Other	6.2%	5.8%	7.9%
Hispanic Origin			
Hispanic	4.8%	3.2%	4.1%
Not Hispanic	95.2%	96.8%	95.9%
Households			
Total Households	298,736	47,224	12,340
Households with children under 18 years	35.4%	39.3%	33.6%
Single parent family households	10.0%	11.6%	13.3%
Households with grandparents raising grandchildren	2.4%	3.0%	2.7%
Householder 65 or older, living alone	9.1%	8.4%	10.6%
Households with no vehicle available	8.0%	7.8%	11.4%
Average household size (# of people)	2.54	2.61	2.35
Housing Units			
Total Housing Units	343,072	50,481	13,357
Single-family, detached units	55.9%	58.4%	44.8%
Multi-family units	18.7%	14.5%	34.8%
Renter occupied units	27.7%	30.0%	47.3%
Vacant units	12.9%	6.5%	6.3%
Median year owner-occupied units built	1974	1979	1974
Units built before 1960	30.2%	24.9%	23.6%
Units built before 1940	10.7%	9.8%	6.9%
Educational Characteristics			
Population 25 and over, High School Graduate or Higher	82.6%	79.4%	83.3%
Population 25 and over, Bachelor's Degree or higher	25.0%	18.6%	28.8%
Economic Characteristics			
Median Household Income	\$47,381	\$40,950	\$38,669
Individuals, below poverty level	9.2%	10.7%	13.8%

	Delaware	Kent County	Dover
Total Population	783,600	126,697	32,135
Individuals 17 and younger, below poverty level	11.9%	14.8%	19.6%
Individuals 65 or older, below poverty level	7.9%	8.8%	10.4%
Selected Characteristics			
Population 21 and over, with a disability	21.5%	22.8%	22.2%
Selected Characteristics			
Population 5 years and over who speak English less than “very well”	3.9%	3.0%	3.7%

Source: US Census 2000, Summary File 1 and 3.

The housing market within the City of Dover since the 2000 Decennial Census has seen a sharp increase especially over the last few years. The number of new housing units has increased since 2000 as a result of construction activity. The information provided in the 2000 Census does not capture the significant changes within Delaware including Kent County and the City of Dover for residential development in the last decade.

Dover’s housing stock is of a significantly different composition than the housing typically found in the rest of the State of Delaware and Kent County. The City provides a larger percentage of multi-family units when compared to single-family units than the State or Kent County. Nearly half of all housing units in the City of Dover were occupied by renters in the year 2000, while renters occupied less than a third of housing in Kent County and the State of Delaware.

Reflective of a well-educated and significant professional workforce, a higher percentage of Dover’s residents have attained a Bachelor’s degree or higher than have done so at the State or County level. However, Dover’s median household income of \$38,669 is less than the median income for the State (\$47,381) and Kent County (\$40,950). Also, a greater percentage of Dover’s residents live below the poverty level than do across the State and County.

CHAPTER 4

CITIZEN PARTICIPATION

Part I - The Process

Community involvement plays an important role in the preparation of the Comprehensive Plan. During this Comprehensive Plan process through the spring and summer of 2008, a series of public workshops were held to engage the community and present recommendations and alternatives for issues addressed within the Plan. The Planning staff was available for questions and copies of the *2003 Comprehensive Plan Update* were available for public viewing. A joint workshop of the Dover City Council, Planning Commission, Historic District Commission, and City Council committees was also held prior to the summer workshops. Additionally, the Planning staff met with state government officials, contingent municipalities, and various City Council committees presenting draft documents. All the public workshops, as well as the joint workshop were facilitated by Andrea Kreiner of A Kreiner Company.

The goal of the 2008 workshops was to offer the public an opportunity to directly input ideas, concerns, and personal experience into the development of Dover's plan for land development and growth in the next ten years. Participation was varied in terms of demographics; however, homeowners, retirees, and members of the business and development community were often represented in identifiable groups depending on the location of the workshop on a given date. Local elected officials, representatives of state agencies and local businesses participated and were available to the public during the workshops.

March Workshops and Related Activities

The first series of workshops was held in March 2008 throughout community centers convenient for the public. These four workshops were advertised in local newspapers and over 1,200 information cards relating the date and location of the meetings were mailed out to citizens and civic organizations. Over 80 people from all over the City participated in these meetings. Participation at community workshops ranged from 10 to 25 people per meeting. The Planning staff presented some of the key concerns of the citizens from the *2003 Comprehensive Plan Update* workshops, goals and research findings as a basis for discussion in order to determine if these issues were still relevant to Dover.

These workshops were comprised of four exercises:

- Dot Map Exercise
- Strengths & Areas of Improvement Listing
- Topic/issue Questionnaire and Economic Development Survey
- Facilitated Presentation/Discussion

The first exercise, known as the "Dot Map" exercise, involved participants marking aerial view maps of the City with colored dots in order to express their views. Each participant

marked the maps with colored coded stickers to address issues of traffic, likes, dislikes, and areas for improvement.

The second exercise coincided with the “Dot Map.” Participants were asked to list strengths and opportunities for improvement for the City. This exercise allowed the community to express their views on likes and dislikes within the City as well as areas that citizens felt needed the most improvement in terms of traffic, roadways, development and other general issues.

Attendees were also given a questionnaire during the workshops. This questionnaire consisted of four parts. The first part asked questions about areas of Dover identified as being important: transportation corridor, traffic and roadways, and the Dover waterways of Silver Lake and the St. Jones River Watershed. The second part of the questionnaire asked participants for their opinions on land use and development, housing, residential growth and annexation, and growth east of State Route 1. The third part of the questionnaire asked participants to rank various areas and concerns regarding the City in general, parks and recreation, and annexations. The fourth part contained the Economic Development Survey asking participants to rank their views on a range of topics related to job growth, green businesses/technology, Downtown Dover developing, etc. This full survey and results are included in Appendix I. Additionally, participants were also asked to write any comments not addressed in the questionnaire or to clarify responses on the areas provided on the form.

A majority of each workshop session was devoted to a presentation given by the Planning staff about the Comprehensive Plan process followed by facilitated discussion with the public. Participants were given an overview of the process, objectives and goals achieved from the *2003 Comprehensive Plan Update* and a development timeline for the 2008 Comprehensive Plan. They were then given an opportunity to ask questions and share concerns regarding the process as well as the future of the City. Issues ranged from parking in the Downtown Dover area and traffic to annexations and growth of the City.

Questionnaire Results

All participants attending any of the four March workshops were given a questionnaire to complete and return to the Planning staff. The results are described below and a full spreadsheet is included in Appendix I.

Downtown Dover

The central or Downtown area of the City makes up a unique environment that includes the State government complex as well as the Historic District. The area involved in this description includes the area of central Dover bounded by the St. Jones River on the east, Mary Street to the north, the area surrounding the railroad tracks to the west, and the Bayhealth campus to the south. Dover’s Downtown area primarily consists of small-scale retail and service firms that tend to provide products to the residents of the Downtown area as well as cultural and recreation centers. It is a mix of institutions, homes, businesses, retail establishments and offices.

Nearly 85% of the respondents strongly agreed or agreed that the new development activity in Downtown Dover is a positive change.

When asked if the City should continue to address the height mass and scale of buildings through the design process for all construction and renovation in the Downtown area, over 70% strongly agreed or agreed with this proposal. Respondents also reacted positively when asked if the City should implement the West Side Study proposal to redevelop the western end of Loockerman Street into a commercial and office area.

Participants were also asked to rank a list of five issues found most challenging in Downtown Dover. Participants reported Crime & Safety (97%) and Property Maintenance (94%) as the highest ranking issues. Filling Vacant Stores (81%) and Parking (81%) were also relayed as challenges by significant numbers of respondents. Additionally, Historic Preservation ranked highly with respondents, with 62% stating that preservation within the City should remain a priority.

Traffic and Roadways

The US Route 13/113 Corridor consists of approximately 14.5 miles of roadways and adjoining land. The corridors are home to hundreds of stores, offices, and other commercial businesses. Some of the most notable facilities along the corridor are the Dover Mall, Dover Downs Hotel & Casino, the Blue Hen Corporate Center, Kent County Administration Building, and the Dover Air Force Base. US Route 13 is the primary north-south arterial highway running through the Delmarva Peninsula.

Delaware Route 8 consists of approximately 5.14 miles within the City and is an east-west State roadway. From the west, Route 8 is named Forrest Avenue then becomes Forest Street. Through the Downtown area Route 8 turns into Division Street. As the road crosses US Route 13, the name of Route 8 changes to East Division Street and North Little Creek Road and continues through the east side of Dover. The aforementioned streets are part of the larger route, Delaware Route 8.

Participants were asked several questions concerning Route 13/113 and Route 8. The questions posed inquired on whether these roads were adequate to handle daily traffic, if the appearance of the roads had changed in recent years, if the individuals' daily commute had changed significantly in the previous five years and if Route 8 specifically was able to handle its daily traffic.

The majority of respondents stated that Routes 13/113 were *not* able to handle its daily traffic present on the roads (69%) and that during peak traffic times during the summer months. Individuals stated on comment sheets that traffic is "unbearable." Respondents also stated that since the Route 8/State Route Interchange opened, the traffic on Division Street has increased and the individual comments stated that this road is not able to handle its daily traffic.

While many participants felt that the appearance of Routes 13/113 had not improved (77%), some respondents felt that the City had adequately curbed new unsightly development along this corridor.

From written comments, many participants felt that traffic had significantly increased throughout Dover, particularly on Kenton Road and North Street. Road improvements, particularly State roads, have simply made it more dangerous for pedestrian and bicyclists due to increased traffic. Many also stated the need for more sidewalks, pedestrian walkways and bike paths.

Silver Lake and the St. Jones River Watershed

Silver Lake is a 167 acre manmade lake centrally located in Dover. It is the largest fresh water lake in Kent County. Around the lake are residential, institutional and commercial uses, as well as parks including a swimming beach. The St. Jones River flows south from the lake. Both the lake and the river are used for boating and fishing. The lake and river watershed cover approximately 20,500 acres of land. Most of the watershed lies northwest of the City and is rural and undeveloped with increasing development activity and pressure.

The quality of the lake's water has been a matter of concern for a number of years. During recent years, Silver Lake has been closed often to swimming due to high bacteria counts and there are restrictions on the amount of fish that can be eaten from the lake.

Workshop attendees were questioned about the importance of Silver Lake and the St. Jones River Watershed. Overwhelmingly, they supported its more stringent environmental regulations (87%) and 70% stated that they strongly agreed with its importance.

When asked about the rental of paddle boats and canoes to encourage and increase activity around the Lake, approximately 61% of respondents were favorable. Many also favored the use of local, state and federal tax dollars to implement water quality improvement projects (86%).

Land Use and Development

When asked whether the Dover area has been growing too rapidly, at an acceptable rate, or too slowly since 2003, the average response indicated that growth was occurring too rapidly, with 57% agreeing and strongly agreeing. Many (30%) stated that the rate of growth was "just right." Dover had recently gone through a strong residential and commercial development period over the past three to four years.

Participants were also asked if the City should continue the policy of discouraging development east of SR 1. An overwhelming number of respondents (79%) agreed with the policy and stated in their comments that lands east of SR 1 should not be developed unless adequate infrastructure was already in place. This response rate was lower; however, than the response in 2003 where 84% agreed with this policy. When given a list of eight different criteria for new development and asked to rate their satisfaction, many found the building appearances to be more than adequate (81%) and the increased use and implementation of sidewalks to be extremely desirable (88%). However, entrances (51%) and site connectivity (55%) leave much to be desired and scored lowest on the scale.

Housing

Unlike the responses from 2003, approximately 51% respondents stated that there was a lack of affordable housing in the City. A number also stated that while there was housing available, there was an inadequate supply for all income and age levels.

When asked about which types of housing are suitable in new developments, responses were as follows: single family homes were most desirable (87%), followed by townhouses/duplexes (73%), apartment complexes (50%), accessory apartments (31%), high rise apartments (30%), and mobile homes (13%). The public in Dover still seems to be most comfortable with the concept of single family homes, but townhouses, duplexes and apartments appear to still be acceptable housing types in the community.

Dover's Community "Likes and Dislikes"

Workshop attendees were asked to participate in a "Dot Map" exercise that allowed them to place color coded dots on an aerial map of the City in order to identify the likes, dislikes, areas of concern and traffic. Concerns ranged from traffic congestion, annexation, parking, lack of bike/walking paths, and Downtown Dover among others.

Participants were also asked on the questionnaire to rank their likes and dislikes with the following areas/services within the City. The list below is not in priority order:

Table 4-1: Likes and Dislikes about Dover

Likes about Dover	Dislikes about Dover
Design & size of the City	Not enough sidewalks
Historic buildings	Poor planning
Low taxes/no sales tax	Lack of downtown parking
High quality of life	Not enough recreational programs
Cultural/seasonal activities	Crime/drug issues
Flowers, trees & landscaping	Not enough bike paths/lanes
Downtown Dover	Too many vacant buildings
Proximity to big cities	Traffic lights
Small town atmosphere	Rapid growth
Mixture of land uses	Traffic congestion

Source: Responses to Questionnaire, Spring 2008 Workshops

The list of participants' likes was fairly consistent throughout the workshops. The majority of respondents felt that the Dover's low taxes and no sales tax in the state were well liked by residents as well as Dover's quality of life and small town atmosphere. Downtown Dover did not rank as highly with participants in the "likes" however. Many stated that the Downtown area needs considerable improvement and revitalization; comments included "too many vacant storefronts" and "lack of parking in downtown area/Loockerman Street." The foremost concern of all participants was crime/drug issues followed by traffic congestion and too many vacant buildings.

Participants were also asked if the City should have the right to annex properties without the owner's consent (primarily, the functional "enclaves" surrounded by City limits). Responses

were split nearly evenly with 41% agreeing and 46% disagreeing; additionally, 3% chose not to respond to the question.

Economic Development Questionnaire

Participants were asked to complete an economic development questionnaire. They were asked to rank areas, through eight statements, where the City should focus its resources in order to foster economic development.

The majority of respondents (75%) ranked highest the need to focus resources on attracting well-paying jobs/and providing good benefits even if it meant attracting fewer jobs to the City. Ranked lowest (32%) was the statement to focus resources on attracting as many jobs as possible to Dover without regard to how much the jobs pay or the benefits provided. Overall participants felt that Dover's resources should be spent on attracting quality high-paying jobs, retaining existing jobs/businesses and focusing redevelopment of the Downtown area.

Part II – Committees and Public Meetings

During the Comprehensive Plan update process, an Economic Development Strategy Committee was formed to evaluate the economic horizons of the City as well as formulate the Economic Development chapter of the Plan. This committee included members of City staff, State and local economic development professionals, and members of the development community. The result of the committee's findings can be found in the Economic Development Chapter.

As a part of its responsibilities related to historic preservation, the Historic District Commission guided the refinement of the goals and recommendations of the Historic Preservation Chapter. The Commission also evaluated the chapter overall.

Joint Workshop

In April 2008, a joint workshop of City Council, Historic District Commission, Planning Commission and Council committees was held to review and discuss the results of the March workshops. Council, Commission and Committee members discussed all chapters of the draft Plan and relayed comments and gave input on goals and recommendations.

June Public Workshops

The second series of workshops in June 2008 consisted of presenting draft goals and recommendations of each chapter along with the draft Land Development Plan Map and the draft Growth and Annexation Plan Map to the public. At each of the four workshops, participants were able to compare 2003 goals and recommendations to the 2008 draft. These workshops were formatted to allow ample time for participants to view the draft goals and objectives, followed by a facilitated presentation and discussion during which time citizens were given the opportunity to comment on the goals and recommendations as well as provide suggestions for improvements and/or changes.

This was also the first time that the public was able to view the updated Growth and Annexation Plan Map as well as the Land Development Plan Map and draft goals and

recommendations for each chapter. While the public participation rate was not as high as the March workshops, it allowed the City to delve into issues in depth with residents, developers and other attendees of the business community.

Part III – Next Steps

A preliminary draft of the 2008 Comprehensive Plan was issued on July 11, 2008. During this time, the preliminary draft was available for public view and for written public comment. Planning Commission held a special session for a public hearing regarding the preliminary draft.

A final draft of the Plan was issued on October 31, 2008. A public hearing before the Planning Commission was held on December 2, 2008. Planning Commission recommend to City Council to adopt the 2008 Comprehensive Plan with a series of revisions.

Part IV – Ongoing and Emerging Planning Issues

Throughout the input gathering phase of the Plan’s development, there were many opportunities to hear concerns of the public from the various hands-on activities, written comments and facilitated discussion.

The following are ongoing and emerging issues that citizens, appointed and elected officials, the development community and Planning staff have encountered. This list is not in priority order:

North Street and West Street Traffic

Participants in the public workshops repeatedly raised concerns about increased traffic on North Street, specifically in areas west of the railroad tracks. During the March and June workshops, many citizens expressed concerns about the traffic congestion on West Street near the North Street intersection and many also proposed the possibility of changing the direction of West Street to one-way southbound. This segment of West Street is a State maintained road.

Congestion/Traffic

Workshop participants were asked several questions regarding Dover’s roadways and traffic. Many participants stated that traffic had significantly increased throughout Dover and the majority stated that major thoroughfares through the City, Route 13/113, were not able to adequately handle the daily traffic. While a number of citizens also stated in their comments that congestion was a problem within the City, this is a problem of perception. When assessing Level of Service (LOS) on Dover roadways by DelDOT standards, the amount of traffic is not so great that it constitutes “congestion.”

Downtown Dover

Nearly all respondents to the questionnaire stated that Downtown Dover needs significant redevelopment and revitalization efforts. A number of citizens stated the excess number of vacant buildings, perception of inadequate parking, personal safety and street lighting as

areas of concern. Many also commended increased mixed-use development within the Downtown area.

Bicycle/Pedestrian Paths

Another area that many respondents agreed upon is the need for additional bicycle/pedestrian paths within the City. Members of the development community requested an update to and implementation of the *1997 Bicycle & Pedestrian Transportation Plan*. Many more strongly urged the City to retrofit existing roadways for bike lanes and continue sidewalk construction along Route 13. The majority of participants were in favor of requiring all new developments and subdivision to include bike lanes, sidewalks and new walking trails within open spaces.

Growth and Development

Citizens at the workshops as well as the joint City Council, Historic District Commission, Planning Commission and Council Committees workshop attendees stated that the City is growing too fast. While the City has experienced significant growth, it is not alone. The region as a whole is growing fast and the City is still below the region's rapid growth rate. At the same time, many commended the City's efforts in staying true to "Livable Delaware" principles of smart growth.

Annexation (Enclaves & Boundaries)

Annexation has long been a sensitive issue within the City. While some citizens believe that annexing enclaves into the City is beneficial, others did not agree with this concept. Many citizens along the boundaries of the City, as well as enclaves, already receive City services and, therefore, more incentives may be needed to entice the annexation. Council, Commission and Committee members agreed that it is economically advantageous for Dover to "round out" its boundaries as well as annex enclave areas to reduce confusion regarding jurisdictional borders while maintaining that adequate facilities are available to all residents.

CHAPTER 5

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION PLAN

Part I – Background Information

Dover's natural environment is one of its greatest assets. Our City is fortunate to have an abundance of mature trees, natural wetland and woodland areas, and a large lake, which defines the central area of Downtown Dover. This chapter's focus is on identifying lands which are important to protect in the context of urban development due to their ecological value and on establishing a framework to prepare Dover for improving the City's stewardship of natural resources. The ecological value of these lands may include their flood storage capability, the ability of wetlands and other buffer areas to filter nutrients and other pollutants from stormwater, the value of the land or water as wildlife habitat, and the air quality benefits of trees and woodlands. Dover's natural resource areas also provide numerous aesthetic and recreational benefits that contribute to the quality of life for all of Dover's residents and visitors. Since these lands are usually least suitable for intense urban development, the strategy of protecting these areas often has the corresponding effect of ensuring that more intense development occurs in areas free of constraints. In an effort to be more responsive to growing environmental concerns and issues, the City is establishing the groundwork for policy and ordinance revisions that will better equip it to address new environmental challenges.

The Natural Environment: Dover's Land and Ground Based Features

Topography

Overall, the Dover area is very flat topographically. There are no significant elevation changes or natural features such as hills, mountains, valleys, or ravines. The western portion of the metro area is the highest, at between 50 and 60 feet above sea level. The traditional Downtown area is around 30 to 35 feet above sea level. Silver Lake is 16 feet above sea level and the St. Jones River (south of the Silver Lake Dam) is at or near sea level. A ridgeline, running near and approximately parallel to the US Route 13/113 corridor at a 40-foot elevation, separates the two watersheds in the Dover area.

There are areas associated with Silver Lake and its major tributaries that have slopes approaching 30%, which would make them unsuitable for development. Yet these same areas are also generally associated with other natural constraints (wetlands, woodlands, soils unsuitable for development) and are unlikely candidates for development in the first place. Other than these areas, the majority of the metro area exhibits slopes of between 1% and 3%, which present few topographic constraints on development.

Soil Classifications

The United States Department of Agriculture (USDA) Soil Service produced a soil survey of Kent County in 1971. The Department of Agriculture, through the Natural Resources Conservation Service is currently working to update this survey. This update will modernize

the process and information available when completed. The current soil survey indicates that there are three basic types of soil found in and around the City. The first soil classification is the Tidal Marsh Association of Soils. There are a limited amount of these soils, located mostly to the east of Dover, which are generally associated with the tidal, saltwater tributaries of the Little River. Due to frequent flooding and salt marsh characteristics, these soils are quite poor to build upon and exhibit extreme constraints for development.

The second type of soils in the Dover area is the Othello-Matapeake-Mattepex Association of Soils. These soils are generally located in the eastern portion of the metro area, and comprise about one quarter of its soils. This association is characterized by nearly level to sloping, variably drained soils on uplands.

The third soil classification is the Sassafras/Fallsington Association of Soils. These soils are deep, well-drained soils on upland areas. Both of these associations are generally suitable for urban development in most cases, unless they are encumbered by other environmental limitations such as steep slopes or floodplains.

Woodlands

Trees are an integral part of the image and heritage of Dover and significant efforts have been taken to preserve them by the City Council and the Planning Department. In 1992, the Council enacted the Tree Planting and Preservation Ordinance. This ordinance requires developers to plant trees as a component of development projects. There are also requirements for preserving woodlands and limits are set on the amount of woodland that can be cleared for development.

Most woodland within the City exists along the streams and tributaries, or in wetlands. These areas are generally unsuitable for development because of multiple environmental constraints. However, on wooded sites the design of development projects must first consider the preservation of existing trees and other natural features. Options exist in the *Zoning Ordinance*, such as the Planned Neighborhood Design Option (PND), which provide design flexibility and alternatives to developers to encourage design that is in harmony with natural features.

Wetlands

There are two general types of wetland areas in Dover, tidal and nontidal wetlands. Tidally-influenced wetlands can be either salt or freshwater wetlands. Nontidal wetlands are strictly freshwater wetlands. These tidally-influenced wetlands are associated with the Little Creek watershed. The second type of wetlands consist of freshwater wetlands, which are associated with forested, upland areas which have high water tables and little or no topographic relief.

Wetlands generally constrain development. Wetland soils are poor for building, and usually require excessive fill to stabilize. Wetlands soils are generally found in low-lying areas, therefore structures built on them are susceptible to flooding. Wetlands provide many crucial ecological functions, including wildlife habitat, water cleansing, and flood storage capacity. For these reasons, wetlands should not be disturbed, and adequate buffers of natural vegetation should be provided around them.

Both the federal and state governments regulate the alteration and filling of wetlands. State regulations only address tidal wetlands and federal regulations have been reduced in recent years. Currently, nontidal isolated wetlands are not protected by state or federal regulations. Except for small intrusions into wetlands systems, disruptions are generally prohibited. Development projects undertaken with wetlands on site must accurately delineate wetlands and respect wetlands through the design of the project. Dover's zoning and subdivision ordinances provide protection for wetlands and buffer standards that must be adhered to when designing land development projects. While these protections are in place, the *Zoning Ordinance* includes two separate definitions of the term "wetlands" which causes some confusion in implementing the provisions. This issue will be addressed with the update of environmental provisions of the *Zoning Ordinance*.

Regulatory protection of wetlands is mandated under Section 404 provisions of the Federal Clean Water Act. Certain other wetlands (mainly in tidal areas) are accorded additional regulatory protection under provisions of Title 7, *Delaware Code*, Chapter 66. Compliance with these statutes may require an Army Corps of Engineers approved field wetlands delineation and/or an official DNREC wetland jurisdictional determination.

Environmental features are shown on two maps in the map appendix. Map 5-1 shows natural features in Dover and Map 5-2 shows regional environmental features in a larger area of surrounding Kent County. The data for these maps is drawn from a variety of state and federal data sources combined and displayed using Geographic Information System (GIS) technology. These maps are intended to provide a general guideline to assist City staff, the public and developers in identifying natural features located in Dover. As always, land development must rely upon detailed site analysis and delineation of wetlands and woodlands to comply with the requirements of Dover's ordinances.

The Natural Environment: Dover's Water Features

Hydrology

The hydrology of the Dover metro area is defined by two main watersheds. The dividing line between these watersheds is a ridgeline, which runs approximately parallel to the US Route 13/113 corridor. To the east of this ridge, the land drains to the Delaware Bay through a series of tributaries and saltwater marshlands associated with the Little River. To the west of this ridge line, the land drains to Silver Lake and/or the St. Jones River, and then to the bay. Silver Lake is approximately 167 acres in size. It is a popular location for boating, fishing, swimming and recreation. The focal point is the Silver Lake Recreation Area located on the east side of the lake. Several private property owners also have docks and piers on the lake. The Silver Lake Commission continues to explore the establishment of procedure for review of permits for docks, piers, and similar structures on the lake.

Areas that are prone to flooding and poor drainage are shown on Map 5-1: Natural Features. Without exception, flood hazard areas are associated with the major tributaries of the St. Jones River (to the west) and the Little River (to the east). The floodways and 100-year flood plain boundaries represent areas where development is discouraged and most frequently prohibited for two reasons. First, any structures placed in these areas would be

vulnerable to damage by flooding. Second, the tributaries' flood capacity and natural functions rely upon these areas being predominantly natural vegetation that cleanses flowing water and can help slow and absorb flood waters during major rainfall events. Dover's zoning and subdivision ordinances contain provisions which limit urban development in the floodplains in order to prevent flooding, environmental disruption, and to reduce the probability of property damage.

Stormwater runoff is an aspect of development that must be properly addressed and maintained over time. As properties develop in the City, the increasing challenge of stormwater management must be addressed. The water runoff characteristics of land are changed as a consequence of development. The zoning and subdivision ordinances as well as the State's Sediment and Stormwater Regulations include requirements to mitigate this impact. The Kent Conservation District and/or DNREC review erosion and sediment control plans and stormwater management plans for development projects within the City of Dover. However, even with the current levels of professional review that have been applied to stormwater management within the City, several challenges to both the City and its residents remain present.

The City of Dover has attempted several key efforts to address these issues including the Puncheon Run Action Team, participation in the St. Jones Tributary Action Team, and implementation of a Source Water Protection Overlay Zone. These efforts are further discussed later in this chapter. Two other courses of action have been proposed to further address issues of stormwater within the City. These include participation in the St. Jones Riparian Buffer Project, which was presented to the City of Dover Parks, Recreation, and Community Enhancement Committee in October of 2007. Also proposed has been the establishment of a Stormwater Utility that would give the City both the scope of authority to regulate more effectively the management and maintenance of stormwater retention areas and the funding of such management. This utility would operate in a manner similar to the other City utilities and is further discussed in Chapter 7: Public Utilities and Infrastructure.

The City of Dover has been addressing water quality in Silver Lake for many years through the efforts of the Silver Lake Commission, an appointed advisory body of citizens. This group has worked closely with DNREC (particularly, the Division of Soil and Water Conservation) on water quality and lake management issues. As a result, a number of reports and studies about Silver Lake have been published. One document prepared by DNREC entitled, "Options for the Protection and Improvement of Silver Lake," is a study of lake conditions and an action plan to improve water quality in the lake. The Silver Lake Commission and DNREC have been actively implementing this plan since its adoption. Recent accomplishments have included the introduction of bio-filtration and stormwater management structures that treat urban runoff in areas that once flowed unimpeded into the Lake. The Silver Lake Commission is currently working with the City of Dover and DNREC (particularly, the Division of Water Resources) to develop a riparian buffer within Silver Lake Park to help improve water quality of the St Jones.

Dover is located within the St. Jones and Little Creek watersheds which are impaired according to Section 303(d) of the Clean Water Act. Under Section 303(d) of the 1972 Federal Clean Water Act (CWA), states are required to identify all impaired waters and establish total maximum daily loads to restore their beneficial uses (e.g., swimming, fishing, and drinking water). A TMDL defines the amount of a given pollutant that may be discharged to a water body from point, nonpoint, and natural background sources and still allows for attainment or maintenance of the applicable narrative and numerical water quality standards. A TMDL is the sum of the individual Waste Load Applications (WLAs) for point sources and Load Allocations (LAs) for nonpoint sources and natural background sources of pollution. A TMDL may include a reasonable margin of safety (MOS) to account for uncertainties regarding the relationship between mass loading and resulting water quality. In short, a TMDL matches the strength, location and timing of pollution sources within a watershed with the inherent ability of the receiving water to assimilate the pollutant without adverse impact. A Pollution Control Strategy (PCS) identifies the actions necessary to systematically achieve the pollutant load reductions specified by the Total Maximum Daily Load(s). Reducing the pollutants to the level specified by the TMDL(s) will ensure that a water body meets the water quality criteria and goals required for compliance with the State Water Quality Standards.

The City of Dover is located within the St. Jones and Little Creek watersheds of the greater Delaware River and Bay drainage. This watershed is assigned a range of nutrient (nitrogen and phosphorus) and bacterial TMDL load reduction requirements that, as mentioned previously, must be met in order to meet the State Water Quality Standards (See Table 5-1).

Table 5-1: TMDLs

Delaware River and Bay Drainage	N- reduction requirements	P-reduction requirements	Bacteria- reduction requirements
St. Jones	40%	40%	90%
Little Creek	40%	40%	75%

Source: Table 1: TMDL Nutrient (Nitrogen and Phosphorus) and Bacteria reduction requirements for the St. Jones and Little Creek watersheds.

Planning for the Environment

Scenic Resources

Scenic resources in Dover involve the interaction of both the natural and the built environment. Much of Dover's character is derived from scenes that we associate with the City and its history. The historic Green, the trees and grand old houses along State Street, and Silver Lake all convey images that we think of as uniquely Dover, a distinct, historic, and vibrant place. Scenic resources (as defined in the *Zoning Ordinance*) include the following: mature woodlands and areas of natural vegetation; the Historic District and the Victorian District; freestanding historic buildings and sites; other buildings or districts exhibiting visual merit; buildings or places of public or cultural significance; and significant

views and view corridors to buildings or places of architectural, visual, or cultural value and to attractive natural areas.

Dover is also home to the Anne McClements Woodland of the Fork Branch Nature Preserve. Purchased in 2003 from Dr. James McClements by the State of Delaware Division of Parks & Recreation, this 236 acre tract of preserved land is host to a variety of old growth trees and numerous species of plants and animals. This parcel of land constitutes one of the largest and most significant pieces of protected land in the City of Dover and in the State of Delaware. The preserve contains a stand of old growth American beech, a wooded stream corridor and several rare and threatened species. Located in the northwest section of the City on Maidstone Branch, a St. Jones River tributary, its protection will preserve a portion of the St. Jones River headwaters.

The Fork Branch Nature Preserve was deemed an important site for conservation by the Delaware Natural Heritage Program. According to a survey completed in 1991, the tract has "many ecological attributes that certainly justify its preservation." Much of the site is forested and supports a high diversity of plant and animal life. Portions of the forest support old-growth trees that have been determined through growth-ring counts to be over 100 years of age. Several state-rare species have also been recorded on this site.

The survey also determined the preserve to be "one of the finest streams in the state in regards to water quality." A relatively pristine natural area such as this within the city limits of Dover is indeed rare. This is an important opportunity to preserve valuable open space for the protection of biodiversity and provide an area for passive recreation for the citizens of Dover and Kent County

Numerous elements of the *Zoning Ordinance* are intended to protect features defined as scenic resources. For example, some historic resources are protected by the City's Historic District Zone. This local Historic District Zone encompasses many of the oldest areas in the City, which date back to the 1700s. The Tree Planting and Preservation Ordinance protects existing woodlands and require developers to plant trees. This type of ordinance preserves the natural features of the City. Other City ordinances work towards ensuring that development activities are compatible with Dover, its character, and the surrounding environment.

Puncheon Run Flood Study

Concerns regarding the flooding within Puncheon Run watershed have existed for years. Dover City Council in December 2005 authorized the creation of the Puncheon Run Action Team. This team included City staff, Dover residents, DNREC, Kent Conservation District, development professionals, and engineers whose sole goal was to study the watershed and make recommendations that would improve the watershed and quality of life for those living in it. In order to provide accurate and current information to the Puncheon Run Action Team; a Flood Study Report was commissioned to provide data and to develop recommendations to establish best practices for stormwater management and to alleviate flooding.

From 1982 to 2006, several efforts were made to examine the difficulties presented by the Puncheon Run watershed. DelDOT in 1982 led the effort with a report on channel capacity. The legacy of this report was two-fold; channel capacity was established and improvements to both the channel and culverts were implemented. 1988 saw further action by DelDOT as the culverts at Route 13 and Route 113A (State Street) were improved. DelDOT also expressed one of the key aspects of all the research into the Puncheon Run watershed: no single action would remedy the extent of the problems in the watershed. Landmark Engineering in 1992 produced a study recommending the implementation of a regional stormwater retention basin that would alleviate, yet still not solve the downstream flooding issues of the watershed. While each study and report completed during this time period assessed the situation, they did not provide detailed descriptions of the end result of the implemented recommendations.

A 2006 study by the URS Corporation evaluated the peak flow rates for the areas upstream of the railroad. The study found that while peak flows could be reduced with the implementation of the aforementioned practices, impervious cover increases in local developments would still result in a 'net' flooding effect. Both DelDOT and URS reports indicate that the maximum capacity of Puncheon Run without flooding is the 25-year storm event, however flooding could occur in some locations in as little as the 10-year storm event.

The most recent study is significantly more comprehensive and provides detailed recommendations based on current scope of work. The work completed in 2007-2008 by the URS Corporation employed field surveys for the first identifiable time in the history of the Puncheon Run studies. Computer modeling was also used for the first time in the evaluation of field data. Based on field surveying, inspections, and hydraulic model study, six (6) primary mitigation measures were recommended:

- Flood proofing
- Property acquisition
- Floodwall
- Over-Detention
- Flood Insurance Rate Map (FIRM) Revisions/Letter of Map Revision (LOMR)
- Letters of Map Amendment (LOMA)

Several key findings were reported to the Puncheon Run Action Team. According to the results of the study, "Only the acquisition and demolition of flood-prone properties will permanently eliminate future flooding damage and loss." The study recommends a cost/benefit analysis prior to any implementation of this option.

The Puncheon Run Flood Study attempts to provide answers to homeowners who have been continuously seeking relief from the problems in the watershed. Flood proofing and creation of floodwalls were recommended as cost-effective solutions for individual properties, though the study recognizes this to be a mitigation effort and not a solution. The City of Dover has requested that the URS Corporation pursue a Letter of Map Revision with FEMA. This process takes up to a year to complete and will result in eventual changes to the Flood Plain

Maps. A Letter of Map Amendment can be requested from FEMA once the LOMR (Letter of Map Revision) process is completed. This can provide relief to individual property owners in financial terms when they can demonstrate that their particular structure is not within the flood plain. The Letters of Map Amendment were recommended as a means for property owners to solve one of their key grievances by reducing the homeowner's flood insurance rates.

Two large-scale development projects, the proposed Kesselring PND Subdivision and the Eden Hill Farm Traditional Neighborhood Design (TND), have been designed to over-manage stormwater on the site. The study notes that the use of over-management in developments upstream is already being implemented and recognizes this as an important component of overall improvement to the watershed. Additionally, with the improvements to the South Governors Avenue corridor that are currently underway, the bridge over Puncheon Run is being replaced. The new bridge is being constructed at an elevation where it will no longer be an obstruction during the 100-year storm. This will improve the conditions in the watershed during the 100-year storm event.

An additional nine secondary measures were also recommended but were identified as having no major effect on major flooding. Some of these measures include minor drainage improvements, routine maintenance and debris removal, and retrofitting existing stormwater management facilities or construction of new structures.

Source Water Protection Overlay Zone

In 2001, the Delaware General Assembly passed the Source Water Protection Act, which requires all municipalities of a certain population size, including Dover, to adopt ordinances and maps meant to protect excellent recharge areas and wellhead protection areas. The law instructed the Department of Natural Resources and Environmental Control to provide guidance to municipalities on developing these ordinances.

The City of Dover, in the *2003 Comprehensive Plan Update*, identified the development of Source Water Protection Ordinances as an implementation strategy. City Planning Staff developed an ordinance that was heard before the Planning Commission in October 2007. The proposed ordinance was forwarded to City Council with recommended changes.

City Council referred the ordinance to the Utility Committee, who held three meetings dedicated to working through the ordinance with members of the real estate, development, engineering, and other affected segments of the community. Staff held several technical level meetings with these groups as well to develop ordinance language to appropriately protect ground water resources while also preserving the ability to develop in a way that is consistent with the urban nature of Dover. City Council adopted the wellhead protection area measures in November 2007. The excellent recharge area protections were developed into a separate ordinance which was presented to the Planning Commission in March 2008 and subsequently adopted by City Council on March 24, 2008.

The ordinance establishes an overlay zone known as the Source Water Protection Overlay Zone (SWPOZ) affects over 500 parcels within the City. Within the overlay zone, there are

three distinct kinds of protection areas, each of which is identified by a tier number. The section of the *Zoning Ordinance* (Article 3 Section 29) which sets forth the regulation of these areas creates distinct regulations for each tier as well as overall regulation of permitted uses on any parcel affected by the overlay zone.

Tier 3 lands have been identified as Excellent Recharge areas and are necessary for the adequate recharge and health of the subsurface aquifer. In these lands, restrictions upon development will limit impervious surface coverage percentages to 30% or, where proper implementation of green technology is present, 60% impervious cover.

Tier 2 lands are those lands which are within 500 feet of an unconfined well. These lands require that areas around these highly sensitive source water points remain open space. They also require uses within the 500-foot buffer to demonstrate that their intended use will not damage the well or water supply.

Tier 1 lands are those lands which are within 300 feet of a confined well. These lands require similar restrictions to the Tier 2 lands with smaller buffers and directions on where stormwater can flow on site.

Following adoption of the Source Water Protection Overlay Zone by the City, DNREC determined that the data provided for the ordinance included only municipal wells and not the wellhead protection areas around other public wells. The ordinance will need to be updated to reflect the other public wells.

The City of Dover has been a leader by example regarding the implementation of this ordinance not only in the strength of the legislation passed by City Council, but by the collaborative effort between the City, the citizens, and the development community which lead to the ordinance. The Source Water Protection Overlay Zone will be implemented as applications are reviewed. Properties within the overlay zone will be identified during the Pre-Application process and during the Development Advisory Committee review process.

Part II – Plan Goals: Natural Resources and Environmental Protection

Goal 1: Protect the Natural Environment

Protect the natural environment through the conservation of significant ecological systems that naturally work to enhance the quality of life for residents.

Recommendation 1: Develop New Code Amendments to Address New and Existing Environmental Challenges

Re-write portions of the *Zoning Ordinance* which no longer adequately address the current environmental concerns within the City.

Recommendation 2: Protect Environmental Resources through the Development Review Process

- Develop an Open Space Zone within the *Zoning Ordinance* to be applied to public and private open space area.
- Identify for conservation as private or public open space, environmentally sensitive areas within development projects early in the approval process, so accurate base data can be collected and the project redesigned as necessary.
- Ensure that the high environmental standards encompassed in the *Zoning Ordinance* and *Land Subdivision Regulations* are upheld.
- Support the Fork Branch Nature Preserve and Delaware's Natural Areas Inventory Lands in their preservation efforts and ensure that DNREC is included in the Development Advisory Committee process when potential nearby development may impact these lands.

Recommendation 3: Coordinate with other Environmental Agencies and Groups

- Continue to work with federal, state, and regional environmental regulatory agencies to help us all meet our conservation goals.
- Act on the necessary actions to achieve implementation of the St. Jones Buffer Project.
- Continue to work with groups such as the Silver Lake Commission and support activities which responsibly address the needs of environmental awareness in the City.

Goal 2: Improve Watershed Quality

Continue the City's partnership with DNREC, Silver Lake Commission, and other environmental groups to improve the water quality in Silver Lake and the St. Jones River watershed and Little Creek Watershed.

Recommendation 4: Participate in or Implement Measures Related to Impervious Cover and Water Quality

- Revise the definition of Wetlands as currently defined in the *City of Dover Code of Ordinances* to better reflect current standards.
- Address impervious cover as it relates to residential lots, commercial development, floodplains, and potential annexation areas through both the planning process as well as the permitting processes within the City.
- Explore options relating to the restoration of piped streams into natural channels and take action to implement restoration activities.
- Update the Source Water Protection Overlay Zone to include the non-municipal public wells omitted in the initial adoption of the ordinance.

Recommendation 5: Support/Utilize the Silver Lake Commission

The City should continue to utilize the talents of the Silver Lake Commission as advocates for the lake, advisors to the City Council on matters regarding the lake, and

as liaisons between the City, the public, and DNREC regarding lake management issues.

Goal 3: Encourage Green Development and Sustainable Energy Practices

Begin the process of creating both Code amendments and/or policy amendments and revisions which encourage environmentally sensitive development and allow for emerging “green” trends to flourish in the City.

Recommendation 6: Research and Implement a Green Energy Program.

- Revise the City Code to eliminate/minimize barriers to “green” and environmentally friendly development.
- The City should support the use of “green” development practices wherever possible.

CHAPTER 6

HISTORIC PRESERVATION PLAN

Part I – Background Information

Historic Development in the City of Dover

A description of the founding and development of the City of Dover has been included in Chapter 1 of this plan; however, it is essential to identify some additional facts about the origins of Dover's historic resources in this chapter. Although the City traces its roots as far back as the late seventeenth century, Dover's first modern development "boom" began immediately after the end of the Civil War. Commercial growth in Dover during this time was spurred primarily by the extension of railroad services to the City, connecting the Dover area's agricultural products to large urban markets to the north and west. Subdivision of land in the latter half of the nineteenth century allowed for the construction of vast commercial and residential developments.

The City of Dover is known for its exemplification of a late-nineteenth century townscape. Development of the City continued in the twentieth century with residential, commercial, and major industrial areas. Residential development expanded the downtown street grid to the north and south. Post-World War II residential subdivisions developed surrounding the City's core and continued into the mid-to-late twentieth century to provide housing for the workforce of the new industries like Playtex and Dover Air Force Base. The downtown core area of Loockerman Street was a significant commercial and cultural district mid-century then began to wane as auto-oriented commercial development grew along Route 13 (DuPont Highway) and Route 113 (Bay Road) corridors.

A majority of the historic resources in Dover are centered around and to the north of The Green. The development of this historic area has been categorized into three distinct phases of growth. These three phases are identified by the historical incorporation of developed areas into the City during the period immediately following the Civil War until the late 1920s. The dates assigned to these growth periods are 1868, 1885, and 1929. The 1868 City limits were bounded by Water Street on the south, Division Street on the north, West Street and the railroad on the west, and King's Highway on the east. In 1885, the City stretched northward as far as Clara Street and the 1929 limits reached Ross Street to the north and South Street to the south. Neither the 1885 expansion nor the 1929 expansion significantly added developed areas to the east or west of the original boundaries. The combined area covers the historic core of the City of Dover.

Identification of Historic Resources

The formal identification of historic resources begins with Cultural Resource Surveys according to the criteria and standards set by the Delaware State Historic Preservation Office (SHPO), Division of Historical and Cultural Affairs. This is a systematic inventory of Delaware's buildings, structures, sites, and objects over fifty (50) years old. Each property is assigned a Cultural Resource Survey (CRS) number. Government agencies, consultants, and

SHPO staff supply this survey information by conducting projects, reviews, and grant-funded surveys. Within the City of Dover, the core Downtown area and some of the adjacent residential areas were subject to Cultural Resource Surveys completed in the 1980s. More recently, additional historic resources have been surveyed as part of road development projects in other areas of the City. It is important to note that not all areas of the City have been subject to this survey.

Information from the Delaware CRS can be used for local planning initiatives and the determination of local priorities for identification, evaluation, registration, and treatment of historic resources. The CRS information allows for continual updating of changes to or demolition of the identified historic resources. The CRS also needs to focus on the completion of surveys of early to mid-twentieth century resources within the City.

The evaluation and registration of historic resources may lead to specific types of designation including recognition of individual properties and historic districts. The two types of historic districts established in the City of Dover: the federally designated historic districts listed in the National Register of Historic Places and a local Historic District Zone. There are three Historic Districts listed in the National Register of Historic Places and one local Historic District Zone. The boundaries of the local Historic District Zone overlap portions of two of the National Register listed historic districts. The locations of each of the districts are shown on Map 6-1.

There are several differences between the National Register listed historic districts and the local Historic District Zone. The properties listed in the National Register of Historic Places are governed by the National Historic Preservation Act of 1966, as amended. These properties are given protection when potentially impacted by federal actions. Further, the listed properties may be eligible to apply for the Federal Historic Preservation Tax Incentives program for certified rehabilitations. State, regional grants and incentives are also available for these properties. However, the designation as a National Register Historic District does not impose land use or structure design restrictions on the property owners within the district boundaries. Most of the benefit to those properties within the National Register of Historic Places comes in the form of pride, recognition, and local awareness. In addition, property values in these districts are typically higher and more stable.

In contrast to the National Register Historic Districts, the Dover local Historic District Zone was established by a set of local ordinances under state enabling legislation. The local Historic District Zone functions as an overlay zone. The provisions for the Historic District Zone (H) are outlined in Article 3 §21 of the *Zoning Ordinance* and its area is depicted on the City's official Zoning Map. The Historic District Zone was created in order to preserve the historic character of an individual historic resource or a district as a whole. The local Historic District Zone includes regulations regarding structural design and landscapes, as well as a design review process for any proposed changes to properties within the district. These regulations are titled the *Design Standards and Guidelines for the City of Dover Historic District Zone*. The permitting process for projects within the district is subject to the Architectural Review Certification Process, which ensures the consistency of projects or changes with the standards of the local Historic District Zone. A description of these designated historic resources follows.

National Register of Historic Places: Dover Green Historic District

The Dover Green Historic District (K-394) encompasses the area of earliest development in Dover. It is bordered on the north by North Street, on the south by South Street, on the east by Federal Street, and on the west by South Governors Avenue. The Dover Green Historic District was established to recognize the historic importance of the area during the City's development in the eighteenth century. The district includes a range of building types from residences and offices to governmental and church buildings. The key feature of this district is The Green.

National Register of Historic Places: Victorian Dover Historic District

The Victorian Dover Historic District (K-396) includes the historic areas north of the Dover Green Historic District surrounding both Governors Avenue and State Street. The district stretches as far north as Mary Street and Walker Road, and is bounded on the south by North Street, on the east by the St. Jones River, and on the west by North West Street and the areas of New Street and North Governors Avenue. The Victorian Dover Historic District was established to recognize a portion of the historic development of Dover during the nineteenth century and post-Civil War period. It includes residential and commercial areas.

National Register of Historic Places: Little Creek Hundred Rural Historic District

The Little Creek Hundred Rural Historic District (K-5686) includes an agricultural landscape located east of Dover and northwest of the town of Little Creek. A portion of this historic district on the west side of Long Point Road lies within the City of Dover boundaries.

National Register of Historic Places: Individual Properties

A number of individual properties within the City of Dover are listed in the National Register of Historic Places. The table below identifies these properties.

Table 6-1: Properties Listed in the National Register of Historic Places

<i>CRS#</i>	<i>Property Name</i>
DE-104	First Broiler House (relocated to DE Agricultural Museum & Village)
K-104	Bradford-Loockerman House
K-106	Christ Church
K-107	Delaware State Museum Buildings
K-110	Governor's House (Woodburn)
K-112	Loockerman Hall
K-115	Old State House
K-125	Eden Hill
K-126	Greenwold
K-347	John Bullen House
K-486	Hughes-Willis Site
K-6396	Palmer House

Source: Delaware State Historic Preservation Office

Dover Local Historic District Zone

Established in 1961, the local Historic District Zone encompasses those historic areas of Dover whose design and environment are essential parts of the historic character of the City. The Historic District Commission was formally established in 1993 and the *Design Standards and Guidelines for the City of Dover Historic District Zone* were adopted. In 1997, the local Historic District Zone was expanded to encompass the properties fronting on Loockerman Street from State Street to Forest Street. The local Historic District Zone (H) is approximately bounded on the north by Reed and Fulton Streets, on the south by North and South Streets, on the east by the St. Jones River, and on the west by North West Street. See Map 6-1. The local Historic District Zone (H) functions as an overlay zone. It includes residential, commercial and institutional land uses. The local Historic District Zone is considered the most prominent positive force in the active preservation activities regarding Dover's historic resources.

Location within the Dover Historic District Zone requires proposals for specific types of construction activities such as new construction, additions to existing buildings, exterior renovations, and demolition of buildings to undergo a review process known as Architectural Review Certification. As stated in the *Design Standards and Guidelines for the City of Dover Historic District Zone*, an Architectural Review Certificate will be granted for the project "if it is found that the architectural style, general design, height, bulk and setbacks, arrangement location and materials affecting the exterior appearance are generally in harmony with neighboring structures and complementary to the traditional architectural standards of the historic district." Thus proposals are reviewed for conformity with the design criteria and development guidelines found in the *Design Standards and Guidelines of the City of Dover Historic District Zone*. For Architectural Review Certification, the Staff reviews of certain types of the projects such as signage, fences, and minor exterior improvements through the Building Permit process. Historic District Commission reviews new construction projects and demolition requests taking action on the Architectural Review Certificate. In instances such as Site Development Plans where the proposed project also requires Planning Commission review, the Historic District Commission makes a recommendation on the Architectural Review Certificate which is forwarded to the Planning Commission.

Historic Preservation: Development Activity and Historic Resources

Since the inception of Dover dating to the early 1700's, the growth and development of the City has continued. Today, development activity is faced with the challenge of balancing preservation as related to building, history, and culture with the development activity of a modern society. As described above certain types of development activity on properties within the designated local Historic District Zone (H) are subject to a design review process known as the Architectural Review Certification. This design review process is part of the regulatory authority established in the *Zoning Ordinance*. The earliest land use codes of the City dating to the 1960's recognized the special character of the oldest sections of the City and sought to protect it.

Most of the regulations associated with the preservation and/or protection of historic resources focus on consideration of an area's character. The character of an area looks at elements like architectural style, building form, siting and placement, presentation of the streetscape, and landscaping. The concept of land use focuses more on the location of the development and the type of uses that occur together or in close proximity. Also the elements of density, lot coverage (paved versus open land), infrastructure, a mix of uses, a diversity of uses, open space, and public space are related to land use. The choices made related to these character elements and land use have an economic impact ranging from jobs created/retained to construction costs, income, wealth, taxation, housing affordability, and tourism opportunities. There are also incentives for which development projects may qualify to assist in addressing the economic impacts (See descriptions.).

Development activity within the area of the Historic District and even other areas of the City has the potential to impact historic resources. Within the current City boundaries, development activity may range from the adaptive re-use of an existing building to infill of a vacant property to the development of a large tract of land. Also as the City continues to annex land, the consideration of the historical importance of these lands may need to focus on historic resources such as agricultural landscapes (and buildings), archaeology, and even early twentieth-century buildings.

With the existing regulations and current design review process in the City of Dover's Historic District Zone, a number of concerns have been expressed including how to clarify the process, how to encourage reuse of existing buildings, how to encourage appropriate architecture for new buildings on infill sites, and Downtown revitalization efforts. Some of the contemporary concepts of planning which may assist with preservation efforts include new standards for construction and rehabilitation, a focus on smarter growth by mixing uses, sustainability, utilization of existing infrastructure, various approaches to affordable housing, and form-based codes. Overall, an emphasis on neighborhood/area planning to address character, the importance of building form, and urban design principles are key concepts.

Another issue that has arisen in recent years relating to revitalization and redevelopment of Loockerman Street is the role of the Historic District Zone (H) on Loockerman Street. The Historic District Commission and the Planning Commission have reviewed proposals along Loockerman Street that do not strictly adhere to the *Design Standards and Guidelines of the City of Dover Historic District Zone*. The public has supported these projects and the Historic District Commission and/or Planning Commission have issued Architectural Review Certificates for some designs.

In meetings with the Planning Commission, the Historic District Commission, and the public in development of the 2008 Comprehensive Plan, all expressed a need to revisit the *Design Standards and Guidelines of the City of Dover Historic District Zone*, and specifically to address how the guidelines apply to Loockerman Street. All expressed a concern that Historic Preservation plays a more prominent role in the area encompassing and immediately surrounding The Green than along the Loockerman Street commercial corridor, and that the standards and guidelines should appropriately differentiate between the two areas. Some feedback indicated that the Loockerman Street corridor should be removed from the Historic

District Zone (H) entirely; however, in order to preserve the overall character of the area, differing treatment within the guidelines is a more appropriate approach to this issue.

Historic Preservation: Programs and Groups

Several entities are involved in the preservation of historic and cultural resources in the City of Dover. These include local, state and federal governmental agencies as well as private and not-for-profit organizations. Some of the major agencies and organizations are identified and described below.

Dover Historic District Commission

The Historic District Commission was established in 1993 by the *Zoning Ordinance* (Article 10 §3) to create and maintain district zone guidelines and review proposed developments and projects within the local Historic District Zone. The types of projects reviewed for Architectural Review Certification range from exterior renovations to new development projects for multi-story buildings. In the period from 1996-2002, the Historic District Commission reviewed thirty (30) applications. From 2003 to the present (October 2008), the Historic District Commission has reviewed forty-two (42) applications. Some of the large projects include the Haslet Armory conversion to State offices, the Robbins Hose Company (Dover Fire) Station 1 Building Addition, the Kent County Courthouse Building Addition, an office building development known as State Street Commons, and Collegian Plaza (apartments). On The Green, projects have included the renovation of the Old State House and the proposed renovation/restoration of the John Bell House. Other projects reviewed include a variety of parking lots, smaller building additions, signage, and banner programs. In addition, the Commission advises City officials on all matters regarding historic preservation in the City and acts as a local government liaison when meeting with outside officials about historic preservation matters. The Commission also reviews applications for the City's Tax Credit Program for Historic Properties. At least six tax credit applications have been considered since the establishment of the program in 1997. The Commission is also a member of the National Alliance of Preservation Commissions which offers training and research information.

Downtown Dover Partnership

In July 2008, the Downtown Dover Partnership was formed. This new organization combines the Downtown Dover Development Corporation, the Dover Parking Authority, and Main Street Dover. From its Bylaws, the purpose of the Downtown Dover Partnership is "to promote the public welfare of the residents of the City of Dover, Delaware by promoting and furthering in any way, the development of the economic, cultural, and historic resources of the downtown area of the City of Dover and to provide for the residents to the extent that the common good and general welfare of the community is served." This purpose statement also lists the following goals: to improve the opportunities for job creation, to broaden the tax base through the development of the commercial and residential potential of the Central Dover area, and to maintain and restore the historic and architectural and community qualities of the downtown area consistent with the goals of the National Main Street Program.

One of the Partnership's forerunners, Main Street Dover, Inc. was a not-for-profit organization whose primary goal was the economic development and revitalization of the central Dover commercial areas. The activities of the organization were undertaken in the context of historic and cultural resource preservation. Beginning in 1996, Main Street Dover provided grants for historic properties through the Facade Improvement Grant Program assisting over seventy projects.

Friends of Old Dover

The Friends of Old Dover (previously also known as the Dover Historical Society) is a local non-profit group that promotes preservation of properties with historical significance in Dover and Kent County, Delaware. The group encourages the preservation and restoration of documents and other memorabilia of historical, biographical, or genealogical significance. The Friends of Old Dover encourages Dover's beautification by garden sponsorship and tours. The Friends of Old Dover educates citizens on Dover's historical heritage by conducting Old Dover Days activities, celebrations, memorial observations, educational programs and tours. May 2-4, 2008 was the 75th Anniversary of Old Dover Days.

First State Heritage Park at Dover

The First State Heritage Park at Dover (FSHP) is a new initiative established in 2004 that places the historic resources of Dover in the forefront. In this non-traditional approach to a park, the concept creates Delaware's first urban "park without boundaries" linking together a series of historic and cultural sites. It is a partnership of state agencies under the leadership of Delaware State Parks in addition to the City and a variety of private entities (non-profits and churches). A series of anchor sites make up the urban historical park. The First State Heritage Park at Dover instituted "First Saturdays" to coordinate programming and interpretation at local museums and participated in the development and installation of signage, wayfinding and information features such as maps, banners, and waysides. The FSHP also focuses on the promotion of heritage tourism with innovative opportunities to learn about Dover's history through costumed interpreters, hands-on children's activities, and a variety of walking tours including the popular "cemetery lantern tours." The FSHP took the lead in preparing Dover's application for designation as a "Preserve America Community." The City of Dover was designated a "Preserve America Community" on November 5, 2008. The FSHP program is actively involved in the preservation, restoration, and research of the one story frame building located at 43 The Green, known as the John Bell House.

State Agencies

The Delaware Division of Historical and Cultural Affairs focuses on historic resources through historical research, stewardship, management of historic properties, interpretation, and public education. State Historic Preservation Office (SHPO) is a part of this state agency which conducts statewide and local historic preservation activities. SHPO provides informational assistance to property owners and local governments pursuing preservation activities. In addition, SHPO facilitates nominations of properties to the National Register of Historic Places and maintains information about surveyed cultural resources statewide. As part of their goals to provide information on historic resources, they are developing CHRIS (Cultural and Historic Resource Information System), a web-based interactive map. The

agency also just completed Delaware's Historic Preservation Plan 2008-2012 entitled *Planning for the Past: Preserving Delaware's Heritage*.

The Office of State Planning Coordination recognizes preservation as a component of the planning process associated with land use planning, conservation, economic growth, and redevelopment activities. The Office was a partner in the 2004 publication entitled *Better Models for Development in Delaware*. From this report, one of the six Principles for Better Development is "Preserve Historic Resources" in addition to preservation related concepts within the other principles." The principle is given as:

Principle 4. Preserve Historic Resources

Delaware's rich history is still evident in the wealth of historic building and neighborhoods found in cities, small towns and rural areas throughout the state. Historic assets should be identified and protected, and developers should be encouraged to rehabilitate and reuse historic structures. Protecting historic resources such as small-town main streets is also important because historic preservation is a powerful tool for economic revitalization that generates jobs and attracts tourists, residents and investors. – *Better Models for Development in Delaware*, page 54 and 69.

A number of other state agencies contribute to preservation efforts by supporting local community redevelopment initiatives. The Delaware Office of Management and Budget provides monetary and informational assistance. The Division of Facilities Management, within the department, manages a number of state owned historic buildings within Dover. The Delaware Department of Transportation (DelDOT) administers recognition programs and grant funding opportunities, such as the Delaware Scenic and Historic Highways program and Transportation Enhancement program. The Delaware Department of Natural Resources and Environmental Control (DNREC), in addition to having offices within adaptively used historic buildings, plays a role in park programming, in conservation programs associated with the St. Jones River adjacent to Downtown, and other cultural resource management and planning. Other divisions and agencies contribute to land protection activities as part of the Open Space Program and federal and state wildlife areas.

The Delaware Economic Development Office (DEDO) also plays a role in historic preservation activities in the state. DEDO supports the preservation activities undertaken by public, private and not-for-profit organizations by providing information and technical assistance. The Delaware Main Street Office and the Delaware Tourism Office are part of this agency.

The Delaware Department of Agriculture (DDA) assists in administering the Delaware Agricultural Lands Preservation program. The program includes land enrolled in ten-year Agricultural Preservation Districts and land permanently-protected through the Purchase of Development Rights. Many of these properties include historic dwellings and agricultural outbuildings, as well as archaeological sites. There two farms within the City limits protected through the Purchase of Development Rights program of the Agricultural Lands Preservation program: one on the north side of Route 8 at the City's western boundary and the second along Long Point Road on the east side of the City.

Preservation Delaware, Inc.

Preservation Delaware, Inc. (PDI) is a statewide not-for-profit organization dedicated to preserving historically and architecturally significant resources in the state. PDI provides information to Delaware local governments and individual property owners seeking to preserve or rehabilitate historic structures. Its counterpart at the national level, the National Trust for Historic Preservation provides leadership, education and advocacy to save America's diverse historic places and revitalize communities.

Federal Agencies

The U.S. Department of the Interior administers most federal government programs and assistance. The National Park Service, part of the Department of the Interior, maintains the National Register of Historic Places and the Heritage Preservation Services program. These programs provide recognition, monetary assistance and tax incentives for rehabilitation projects of certified historic properties. The Advisory Council on Historic Preservation administers the federal regulations for implementing Section 106 of the National Historic Preservation Act of 1966 and well as other programs such as the Preserve America program.

Historic Preservation: Available Programs, Incentives, and Resources

Several assistance and certification programs are available to local governments and private property owners pursuing historic and cultural resource preservation activities. There are other approaches such as easements, covenants, and Transfer of Development Rights which may be ways to assist in preservation activities as well. Four of the main programs and incentives are described below.

Certified Local Government Program

In 1980, an amendment to the National Historic Preservation Act of 1966 established the Certified Local Government (CLG) program to involve local governments in national preservation efforts. Most states, including Delaware, created programs extending CLG status to local communities with a local historic preservation district and a historic preservation commission. The CLG program provides intensive protection to designated areas and eligibility for federal Historic Preservation Funds. In addition, localities participating in the CLG program may participate in the National Register nomination process for historic properties and are strongly considered for training and technical assistance from SHPO. The Dover Historic District Commission is working to complete an application for Certified Local Government status.

Tax Credit Programs

Tax credit and incentive programs for historic preservation are available at the City, county, state, and federal level for certified historic properties in Dover. The City of Dover Tax Credit Program is administered by the Dover Historic District Commission and applies to exterior rehabilitations to properties within the local historic district or properties listed on the National Register of Historic Places. The City program provides a tax credit amounting to 50% of the cost for approved preservation, restoration, or rehabilitation project to the exterior architectural facades. The project must cost a minimum of \$1,200. The credit is provided in equal amounts over the period of ten years with a maximum credit of \$600 per year.

The Tax Credit Program for Historic Properties in Kent County offers a county tax credit for historic properties listed in the National Register of Historic Places based on preservation, rehabilitation, and/or restoration projects involving exterior rehabilitations to the architectural facades of buildings. The credit is applied to county property taxes and is similar in requirements to the City program.

The Delaware State Tax Credit Program applies to rehabilitations to those properties individually listed on the National Register of Historic Places, those located within a National Register Historic District and certified as contributing to the historical significance of that district, or those located within a local historic district and deemed eligible for National Register listing. The rehabilitation project must be certified by SHPO and have “qualified” expenditures exceeding \$5,000. The tax credit ranges from 20-40% of the qualified expenditures and may be claimed after SHPO issues a certificate of completion for the project.

The U.S. Department of the Interior, in partnership with the U.S. Department of the Treasury and the Internal Revenue Service, administers two federal tax credit programs (20% program and 10% program) for rehabilitation projects on historic and non-historic properties. The 20% program applies to improvements to those properties either listed on the National Register of Historic Places or properties within a National Register Historic District that have obtained “Certified Historic Structure” status through the SHPO. The rehabilitation project must be deemed a “certified rehabilitation” by a representative of the National Park Service in order to qualify for either tax credit program. The program provides a tax credit of 20% of the total project cost and is applicable to all properties except owner-occupied residences. The 20% credit may only be claimed after the National Park Service issues a certification of the completed work and requires that the owner retain the property for a minimum of five years from the completion of the project. The second program provides a credit of 10% of the total project cost and is applicable to non-historic, non-residential buildings built before 1936.

The City of Dover Code of Ordinances also establishes other development activity incentives for the Downtown Redevelopment Target Area. Incentives range from tax abatement to reduction in permit fees and impact fees depending on project criteria. Other federal level incentives are the Low Income Housing Tax Credit program, Community Development Block grant funds, and other programs administered by HUD.

Preservation Revolving Fund

The Delaware Preservation Fund, Inc. (DPF) administers a rehabilitation grant program, a low interest loan program, and an easement program. DPF receives funding from a variety of sources including the State of Delaware, the Longwood Foundation, and the Welfare Foundation. Through the program, short-term, low interest loans are provided to the owners of historically significant structures who wish to rehabilitate or stabilize their historic property, but have trouble meeting the requirements for traditional loans. The historic property must meet eligibility requirements and the potential loan recipient must meet approval criteria. The loans are available to corporations, partnerships, individuals and not-for-profit organizations.

Scenic and Historic Highways Program

Established and administered by the Delaware Department of Transportation (DelDOT), the Scenic and Historic Highways program protects and promotes historically significant corridors in Delaware through awareness and recognition. The program involves a two-step process of nomination and the creation of a corridor plan. DelDOT reviews nomination applications through an evaluation committee and an advisory board, and then forwards the approved nominations to the State Secretary of Transportation for official designation as a Scenic and Historic Highway. After receiving an official designation, the sponsor must create and implement a corridor plan that includes a vision, goal statements, an inventory of resources, a promotion and support plan, and a short-term action plan. Designated corridors are eligible for grants through the Federal Highway Administration for the creation and implementation of the plan. An area designated a Scenic and Historic Highway is promoted through the Delaware Tourism Office, is identified on state highway maps and may receive additional funding consideration from the Delaware Economic Development Office. The Route 9 Coastal Heritage Highway, located east of Dover, has received this designation. Other groups are working on an application for designation of an Underground Railroad Scenic and Historic Highway which may also include resources in Dover.

Cultural and Other Resources

The City of Dover not only possesses a number of historically significant structures, but also is home to several unique cultural resources. As the capital of the state, Dover hosts many institutions that illustrate and exemplify the cultural and historic character of both the City itself and the State of Delaware as a whole. A few of these cultural and other resources are identified and described below.

Museums and Cultural Institutions

Due to its own unique and rich history and its role as a state capital, the City of Dover hosts several historical and cultural museums and institutions. An agency of the Division of Historic and Cultural Affairs, Department of State, Delaware State Museums administers the following state owned museums located within the City of Dover:

- Delaware Archaeology Museum (Meeting House Gallery I)
- Delaware State House
- Delaware State Visitor Center
- Johnson Victrola Museum
- Museum of Small Town Life (Meeting House Gallery II)

Other museums and cultural institutions located in the City include:

- Air Mobility Command Museum (on the grounds of the Dover Air Force Base)
- Delaware Agricultural Museum and Village
- Delaware Public Archives (Hall of Records)
- Delaware State Police Museum and Education Center
- Delaware State University: Art Gallery
- Delaware State University Education and Humanities Theatre
- Dover Art League
- Dover International Speedway

- Legislative Hall
- Schwartz Center for the Arts
- Sewell C. Biggs Museum of American Art
- Various sculptures and memorials

Festivals, Celebrations, and Special Events

In addition to typical holiday celebrations and parades that are common to cities across the region and the country, Dover hosts several festivals and celebrations that are distinctly unique to the City. These include:

- **African American Heritage Festival** – A Citywide event recognizing the important role of African American heritage in Dover.
- **Amish County Bike Tour** - Each September over 1,500 cyclists start this tour at Legislative Mall area in Downtown Dover. The tour consisting of varying mile loops winds through the Amish countryside southwest of Dover.
- **Arts on The Green** – A Spring and Summer music series that brings family-style entertainment to Dover each week. The event is held on The Green.
- **Collage of Cultures** – An annual arts exhibit sponsored by the Dover Art League, a key player in cultural and community revitalization in Dover.
- **Dover Air Force Base Community Appreciation Days and Air Show Events** – The Dover Air Force Base hosts open houses and air show events.
- **Dover Mile** – One of many races and walk-a-thons that travel through the historic district. This one mile run and walk event sponsored by the Colonial Rotary Club of Dover is held in June celebrating Flag Day.
- **First Night Dover** – A community New Year's Eve celebration with a 'ball' drop countdown, fireworks and other activities and entertainment.
- **Governor's Festivals at Woodburn** – The Governor's mansion hosts seasonal events each year including a Fall Festival, Easter Egg Hunt and holiday events each December
- **July 4th Celebration** – Legislative Hall provides a scenic backdrop for this annual celebration and fireworks display.
- **NASCAR Races** – Dover International Speedway currently hosts two major stock car racing event weekends each year, each drawing well over 100,000 fans.
- **Old Dover Days** – A celebration of the historical heritage of Dover, held the first weekend of May in the City's historic district each year.
- **Old Dover Days Garden Tour** – This tour founded in 1933 features various public and private gardens in the City and nearby area.
- **St. Patrick's Day Parade** – One of many parades that travel the streets of Downtown Dover, this parade is sponsored by Main Street Dover Inc./Downtown Dover Partnership.

Part II – Plan Goals: Historic Preservation

Goal 1: Preserve and Protect Historic Resources

Preserve and provide better protection for historic resources including individual properties and historic districts in order to maintain community character and the plan for integration of these places into everyday use.

Recommendation 1: Identification and Designation of the Dover Historic District Zone

Identify areas and study properties/areas for potential future local Historic District designation as individual structures in a Historic District or the creation of new Historic Districts. The local Historic District designation criterion is established in the *Zoning Ordinance*.

- Evaluate properties of interest and concentrated areas of historic resources for local Historic District designation
- Evaluate for local Historic District designation those areas currently listed in and/or eligible for the National Register of Historic Places
- Evaluate proposed annexation areas for historic resources to address needs for preservation and protection

Recommendation 2: Stewardship of Historic Resources

Encourage stewardship activities by public and private owners of historic resources to ensure the long-term care, protection, preservation, and continued existence of historic resources.

- Encourage appropriate stewardship of historic resources in City building projects and infrastructure improvements located within designated historic districts or projects impacting historic properties.
- Develop strategies within disaster response plans for the consideration of historic resources.

Recommendation 3: Evaluation of Design Standards and Guidelines

- Evaluate and update the “*Design Standards and Guidelines for the City of Dover Historic District Zone*.” This document was originally developed and adopted in 1992.
- Evaluate and consider the standards and guidelines in regards to the levels of protection for The Green and the Loockerman Street historic contexts.

Recommendation 4: Architectural Review Certification Process

Evaluate the existing regulatory process and procedure for Architectural Review Certification for properties located within the designated local Historic District Zone (H) including the process for review and approval of waivers and requests for demolition.

Recommendation 5: Impact of Development Activity on Historic Resources

Explore other strategies, activities, and incentive programs to assist in the preservation and protection of historic resources in order to balance the needs of preservation and revitalization. These activities may involve regulatory measures such as ordinance or

code amendments, flexible building codes for rehabilitation, form based zoning codes, etc.

- Develop and/or improve incentives and ordinances that encourage the use of historic structures
- Focus planning initiatives on Downtown Dover to strengthen Loockerman Street and the adjoining areas while maintaining the balance of preservation and development activity

Recommendation 6: Support of Historic Resources

There are a variety of approaches that can support and recognize historic resources.

- Support consideration of historic resources in development activities from infill projects to land annexation.
- Continue to identify, assist, and review the nominations of eligible properties to the National Register of Historic Places.
- Explore opportunities to conduct and/or update the Delaware Cultural Resource Survey for properties located within City limits.
- Ensure the diversity of the community as reflected in the City's history, architecture, and demographics are reflected in the preservation efforts
- Recommend completion of a Self-Assessment for the Historic District Commission to identify other strategic planning needs.

Goal 2: Provide and Promote Incentives for Preservation Activities

Provide and promote incentives for public and private preservation activities and the protection of residential and non-residential historic properties including incentives to encourage continual use, on-going maintenance of such properties, and appropriate in-fill project design.

Recommendation 7: Tax Credit Program for Historic Properties

Evaluate and improve the process for the City's Tax Credit Program for Historic Properties.

Recommendation 8: Increase Participation in Resource-Bearing Programs

Increase participation in resource-bearing programs (Certified Local Government Program and the Scenic & Historic Highways Program).

- Continue process to complete application to achieve Certified Local Government (CLG) status in the National Park Service's Certified Local Government program.
- Identify corridors for evaluation and consideration for designation in Delaware's Scenic & Historic Highways Program and support initiatives by other groups working to achieve such designation.

Goal 3: Increase Public Information on Historic Resources

Increase and promote dissemination of information on preservation activities, the value and significance of historic resources, and historic and cultural heritage tourism opportunities to the general public and elected/appointed officials.

Recommendation 9: Public Outreach Education

Initiate educational programs on historic and cultural resources for the general public and elected/appointed officials.

- Develop and/or update written and digital materials (brochures, process guides, web-based postings, GIS mapping, etc.) on such topics as the local Historic District Zone, historic resources, the Historic District Commission, the Architectural Review Certification process, and the City's Tax Credit Program for Historic Properties.
- Conduct workshop training with for the Historic District Commission and Planning Commission on preservation topics and the Architectural Review Certification process.
- Identify and implement methods of on-going communication with historic property owners and interested groups.

Goal 4: Collaborate with Diverse Groups and Governments

Partner and collaborate with special interest groups, within municipal government, and state and federal government agencies regarding preservation activities, cultural activities and heritage tourism.

Recommendation 10: Assistance and Support of Interest Groups

- Continue to coordinate with and assist government agencies/ officials and preservation interest groups. Examples of these groups and agencies include the City Council, Planning Commission, Downtown Dover Partnership, Preservation Delaware, the Division of Historical & Cultural Affairs (State Historic Preservation Office), and the First State Heritage Park at Dover.
- Build relationships with the historic preservation programs at Delaware State University, Wesley College, and the University of Delaware

CHAPTER 7

PUBLIC UTILITIES AND INFRASTRUCTURE PLAN

Part I – Background Information

The City of Dover is a full service utility provider offering electric, water and wastewater services within and beyond the City limits. Additionally, the City owns and manages a storm sewer system that collects and conveys stormwater runoff from City streets to surface waters or stormwater management facilities.

Water Utility

The City of Dover's water system began operations in 1882 with an initial system of 13,000 linear feet of pipe and one well. Since its inception, the water utility has grown to include more than 200 miles of pipe and 22 wells. Like other areas of Delaware south of the Chesapeake and Delaware Canal, the City of Dover relies entirely on ground water for its water supply. The City is a regional water supplier, supplying water to customers within and beyond the City limits. The City's system includes interconnection with neighboring systems as well. Currently, the City's water utility includes over 13,349 metered connections. In addition to the metered connections, the City's water system provides fire protection city-wide through a system of fire hydrants. The water system operates as an enterprise fund, with operation, maintenance and capital costs supported through user fees.

The City of Dover's water system is supplied by 15 deep wells and 7 shallow wells drawing potable water from three aquifers. The deep wells draw from the Cheswold and the Piney Point aquifers, while the shallow wells draw from the Columbia aquifer. These wells draw an average of 5.5 million gallons of water each day. During summer months, water usage has peaked as high as 9 million gallons per day. The Department of Natural Resources and Environmental Control (DNREC) has permitted the City to draw as many as 10 million gallons of water per day from these aquifers. If it can be demonstrated that the City needs in excess of this amount, the permitted volume may be increased in the future. Currently, the system has the capacity to draw as much as 12.1 million gallons a day if the City's permit through DNREC were modified to permit this allocation.

Water systems in Delaware are subject to franchises or CPCN areas (Certificate of Public Convenience and Necessity) granted by the Public Service Commission. The City's service area includes the City of Dover boundaries as well as unincorporated areas south of Dover including Rodney Village, Kent Acres, Capitol Park, and areas to the east of Dover along White Oak Road and Fox Road. To the north we have an interconnection with Tidewater Utilities that in turn serves Reichhold Chemical, Carlisle Village, Winding Ridge and Planters Woods. An additional interconnection with Tidewater Utilities to the north (Scarborough Road interchange area) is in the construction phase and will eventually provide a secondary supply source to Tidewater Utilities or the City

of Dover should the need arise. An interconnection with Tidewater Utilities to the south provides fire suppression service to the area south of Highview Avenue.

The area north of Dover is within a Tidewater Utilities franchise territory. Areas to the east and west of Dover are principally unfranchised. Areas to the south of Dover are either un-franchised areas or served by the Camden-Wyoming Sewer & Water Authority and Tidewater Utilities.

The City developed a Water System Master Plan in 2005 to update the hydraulic model, review demand and production data, and identify future capital projects for distribution and production facilities to meet projected needs. According to the Master Plan, the current water system is adequate to serve the current population and projected growth through 2008 to meet fire flow requirements during peak demand periods. For this reason, capital improvements such as a new well and elevated storage tank are under design with construction planned for 2010.

In 2001, the City began to continuously chlorinate its water supply because there were multi-year violations of the Total Coliform Rule, and the State issued an administrative order requiring the City to continuously chlorinate the water system. The addition of chlorine to the water system, while beneficial to the overall supply and public health, has caused rust inside the cast iron pipe system to discolor the water, therefore causing “brown water” in various areas of the City. The problem of brown water is not constant and varies depending on water flows and other factors. The City has developed a strategy for addressing the brown water issues, which includes systematic flushing of water mains, installation of contact chambers at well locations, and replacement and/or lining of old cast iron piping. Replacement and lining of water lines and installation of contact chambers are reflected in the City’s Capital Improvement Plan (CIP), and flushing of water lines has been incorporated into the regular maintenance operations of the Department of Public Utilities.

In an effort to protect the quality and quantity of the water supply in Dover and the surrounding region, the City adopted a Source Water Protection Overlay Zone in 2008 as an overlay zone within the *Zoning Ordinance*. The ordinance restricts incompatible land uses and impervious cover in areas of excellent recharge and areas surrounding the municipal wells. The City will implement the ordinance through the development review process for applications that require Planning Commission approval.

Water Systems Expansions and Improvements

There are a number of ongoing programs and projects needed to maintain and expand the water system. These include general distribution upgrades, wellhead redevelopment, meter reading technology upgrades, and water tank painting. The Capital Investment Plan for the water system is summarized in Table 7-1.

Table 7-1: Water System Improvements

Proposed Improvement	Proposed Year
Production & Storage Facility Improvements	
Cheswold Well #8 Replacement	2008
Wellhead Redevelopment Program	2008/2009
Wellhead VFD Upgrades	2008/2009
1.0 MG Elevated Water Storage Tank	2008/2010
Piney Point Well	2008/2010
Water Quality Improvements	2008/2013
Future Well Installation	2013
Water Treatment Plant Improvements	2013
Transmission & Distribution System Upgrades	
Scarborough Road Interconnection	2008/2009
Water Quality Improvements	2008/2013

Source: City of Dover Utilities Department

As the City annexes land, its water service territory will expand to encompass annexed lands. In some cases, this will require negotiation with other water providers if this area is within their franchises. As land is developed within the City, the developer is responsible for expanding the water system, including any necessary capacity upgrades, at their expense. All system expansions and upgrades are reviewed and approved by City engineering staff. Most of these improvements are dedicated to the City for ownership and maintenance upon completion of the construction. In addition, the City implemented a water impact fee in 2008, to help support the capital improvements necessary for the system to support future development and expansion.

Wastewater System

The City of Dover owns and operates a wastewater collection and transmission (sanitary sewer) system. The City collects wastewater and transmits it to facilities owned and operated by Kent County. Once transmitted to the Kent County system, wastewater is ultimately treated at the Kent County Wastewater Treatment Plant in Frederica and discharged to the Murderkill River. The water system operates as an enterprise fund, with operation and maintenance supported through user fees. Users pay a fee to both the City of Dover and Kent County for transmission and treatment of wastewater.

The City's 195 mile sanitary sewer system collects 1.7 billion gallons of liquid waste from residential, commercial and institutional land uses annually. Forty-two (42) pumping stations transport the waste to the Kent County's main line transmission system. While the sanitary sewer serves the majority of the City, there are a few isolated properties that still have on-site septic systems. The current service territory includes most of the area within the incorporated boundaries and un-incorporated areas including Hunter's Pointe, Rodney Village and areas along White Oak Road. Kent County operates sewer districts to the south, east and north of Dover. There is no service to the west.

Due to the topography of the area, a relatively large portion of the City's sewer mains are force mains, which require pumping stations. These stations are both publicly and privately owned. The primary County main running through Dover (mostly beneath US 13) is a large trunk line with evenly spaced pumping stations. Kent County has also installed a Central Bypass line on the eastern side of the City to help reduce the load on primary main.

Currently, the City of Dover Public Utilities Department is engaged in the development of a Pump Station and Sewer Basin Study (an update based upon the 1999 *Wastewater Master Plan Technical Documents*) to evaluate pump station and sewer basin capacities. The City anticipates that in FY 2009 the Wastewater Master Plan will be updated and include the following: (1) a modeling update to include GIS mapping of the entire wastewater collection and transmission system; (2) evaluation of available capacities of the critical junctions in the system; and (3) development of future CIP projects to address the needs of the system including future growth.

Sanitary Sewer System Expansions

There are a number of ongoing programs needed to maintain the sewer system. These include pumping station upgrades that include pump and motor replacements, electrical upgrades, water seal systems and wet well rehabilitation, and pump house rehabilitations. Upgrades are planned for the Lafferty Lane, Fox Hall, Weaver Street, Acorn Lane, Heatherfield Subdivision, Brandywine Subdivision, Lepore Road, Rolling Acres Subdivision, Dover Brook Gardens, Baltray Road, DelTech, Delaware State University and Westover pumping stations. The Capital Investment Plan for the wastewater system is summarized in Table 7-2.

Table 7-2: Sanitary Sewer System Improvements

Proposed Improvement	Proposed Year
Pump Station & Force Main Improvements	
White Oak Farms Pumping Station VFD Installation	2008
Lafferty Lane Pump Station Replacement	2008/2009
Weaver Street Pump Station Replacement	2009
Acorn Lane Package Pump Station Replacement	2009/2010
Delaware State University Pumping Station Replacement	2009/2010
Fox Hall/Retreat Force Main Rerouting	2009/2010
SCADA System Technology Upgrades	2009/2013
Dover East Pump Station Abandonment & Sewer Line	2010/2011
Fox Hall Pump Station Rehabilitation	2010/2011
Delaware State University Force Main Rerouting	2010/2011
Heatherfield Pumping Station Replacement/Redirect	2010/2012
Brandywine Pumping Station Replacement	2010/2012
Lepore Road Pump Station Relocation	2010/2012
Baltray Pumping Station Replacement	2012/2013

Dover Brook Gardens Pump Station Upgrade	2012/2013
McKee Road Pumping Station Communator Replacement	2012/2013
Rolling Acres Pumping Station Replacement	2012/2013
Turnberry Force Main Redirect	2013/2014
Westover Pumping Station and Force Main Upgrade	2013/2014
Delaware Tech Pumping Station Replacement/Redirect	2013/2014
Collection System Upgrades	
South Governors Avenue Sewer Main Upgrade	2008/2009
Rt. 13 & West Rustic Lane Interceptor Sewer Extension	2008/2010
Inflow/Infiltration Removal	2009/2013

Source: City of Dover Utilities Department

As the City annexes land, its wastewater service territory will expand to encompass annexed lands. As land is developed within the City, the developer is responsible for expanding the City's sewer system, including any necessary capacity upgrades, at their expense. All system expansion and upgrades are reviewed and approved by City engineering staff, and many of these improvements are ultimately dedicated to the City. In addition, the City and County charge a wastewater impact fee to help support the improvements necessary to the system to support development and expansion.

Electric Utility

The City of Dover is a major electric provider in the region, providing electric service to more than 22,717 customers. The City's electric service territory extends significantly beyond the City boundary into unincorporated areas of Kent County, encompassing 92 square miles. The Electric System owned by the City primarily consists of production plant, transmission plant, distribution plant, and general plant facilities.

The City owns two power plants, the McKee Run Generating Station (McKee Run) and the VanSant Generating Station (VanSant). McKee Run consists of three steam turbine generating units with total combined capacity of 136 megawatts (MW). VanSant is a 39 MW simple-cycle combustion turbine unit.

From March 1996 through June 2006, the City purchased power under a contract with Duke Energy Trading and Marketing. In May 2006, the City entered into a five year Energy Management Agreement with PACE Global Asset Management (Pace), LLC of Fairfax, Virginia to assist the City with its energy procurement, energy sale, purchase of fuels, establishment and management of risk policies, to develop and manage hedging protocols and related energy procurement challenges. Currently, all power is purchased through a combination of long term hedges and the Day-Ahead market. Energy produced by the City of Dover power plants are sold into the Day-Ahead market at market prices and are settled at real time prices, which cover the cost of production plus reasonable profit. In 2007, the City of Dover generated less than 3% of its annual kWh consumption.

Duke/Fluor Daniel (D/FD) assumed responsibility for operating and maintaining the City's two power plants under a separate agreement also dated March 11, 1996. These agreements provided for the City to retain complete ownership of the two generating stations. The partnership between D/FD was officially dissolved as of September 13, 2004. The two power plants were then operated by DE Operating Services, LLC (DEOS) during FY 2006. As of July 1, 2006, North American Energy Services (NAES) began operating the plants.

The City's electric system supplies electricity to a service area of 92 square miles, serves approximately 22,717 customers, approximately 19,217 of which were residential customers, as of the middle of FY 2009. The transmission system interconnects with the Delmarva Utility's regional transmission system at the 230 kV Cartanza Substation which has a redundant capacity of 300 MW; in 2007 the system peak was 171 MW. The distribution facilities include 221.11 miles of overhead lines and 230.35 miles of underground lines connected through fifteen (15) substations.

Four of the Electric Division customers take service off of the 69 kV transmission system. These customers include the Dover Air Force Base, Kraft, Proctor & Gamble, and NRG Energy Center (NRG). NRG is an exempt wholesale generator that sells power that must be transmitted through the City's transmission system to third party purchasers. When the NRG plant is not operational, the Electric Division provides power for the plant site.

The Electric Division has one contract for providing transmission service through the Electric System. As mentioned above, the Electric Division provides transmission service to NRG for the output of its 16 MW electric generator.

As with other utilities, the City regularly maintains and improves its electric distribution and generation system. Table 7-3 shows a list of improvements that are planned or underway.

Table 7-3: Electric System Capital Improvements

Proposed Improvement	Proposed Year
Generation / Production Facility Improvements	
McKee Run Pollution Reduction Project	2008/2009
McKee Run CEMS Software Upgrade	2008/2009
VanSant CEMS Software Upgrade	2008/2009
McKee Run Unit 3 COMS Replacement	2008/2009
McKee Run Unit 1 COMS Replacement	2009/2010
McKee Run Smoke Detection System	2009/2010
McKee Run Unit 2 COMS Replacement	2010/2011
McKee Run Unit 1 & 2 Stack Repair	2011/2012
McKee Run Unit 1 Turbine Inspection	2011/2012

McKee Run Unit 3 Turbine Inspection	2012/2013
Substation Improvements	
St. Jones Substation	2008/2009
Horsepond 600 Transformer	2008/2009
69kV Breakers Replacement	2008/2012
Danner Farm Transformer	2008/2009
Mid City Substation	2009/2011
Substation PT & CT Replacement Program	2009/2012
Frazier Substation Reliability Upgrade	2011/2013
Horsepond Sub Reliability Upgrade	2011/2013
Transmission System Upgrades	
69 kV Feeders 3 & 4	2008/2009
Distribution System Upgrades	
Distribution Upgrades	2008/2013
Lighting Projects and Rehabilitation	2008/2013
Walker Road OVH Conversion	2009/2011
Distribution Feeder Replacement Program	2009/2013
Distribution Capacitors	2009/2012
College Road to McKee Substation Feeders	2011/2012

Source: City of Dover Public Works Department

Storm Sewer System

The City of Dover is served by a storm sewer system that primarily includes catch basins, storm sewer drain pipe, gutters and ditches. This system aids in controlling and transporting excess stormwater runoff that is unable to infiltrate into the ground or evaporate. The collected stormwater is discharged to local water courses. Excess stormwater is a direct effect of urbanization, development and increased impervious surface coverage. Development can dramatically alter the existing local hydrologic cycles. Existing trees, meadow grasses and the like, that intercept and absorb rainfall, are replaced with severely compacted grades and impervious surfaces that are much less receptive to absorption and convert precipitation into stormwater runoff. As the natural drainage system cannot handle the excessive load, stormwater facilities (curb and gutter, enclosed storm sewers) are provided to collect the runoff and quickly convey it to downstream water bodies. In developments built since the early 1990's (when the State began regulating stormwater management) stormwater management facilities treat the quality of stormwater runoff and manage the timing of discharge of treated water to waterways. This not only improves the quality of stormwater discharges, but it also prevents flooding in areas downstream of discharge points.

The State stormwater regulations attempt to alleviate the impacts of runoff associated with the effects of urbanization. However, a number of older developments were built prior to modern stormwater management controls. Much of the stormwater runoff from

older areas of the City is discharged from the City's storm sewer system, untreated, into surface waters.

While the City owns and manages the much of the storm sewer system that conveys stormwater to stormwater management facilities and ultimately to water ways, private property owners, including homeowner associations and commercial property owners, own and maintain many of the stormwater ponds located throughout the City.

Studies have shown that stormwater runoff from urban and industrial areas typically contains the same general types of pollutants that are often found in industrial wastewater discharges (heavy metals, pesticides, herbicides, and synthetic organic compounds such as fuels, waste oils, solvents, lubricant and grease). Runoff can also contain high levels of contaminants such as sediment, bacteria and nutrients. Polluted stormwater is a major contributor to surface water quality degradation and can have damaging effects on human health and the environment, particularly aquatic ecosystems. In response to these issues, the Environmental Protection Agency (EPA) developed the National Pollutant Discharge Elimination System (NPDES). Phase II of the NPDES program requires operators of small municipal separate storm sewer systems (MS4s) to develop and implement a Stormwater Management Program (SWMP) and obtain a permit for discharge of stormwater from/through their portion of the MS4. (Small MS4s typically consist of cities with a population of less than 100,000 within an urbanized area. The City of Dover has been classified as a small MS4 due to this population criterion only.)

The SWMP is to focus on six minimum control measures: Public Education and Outreach on Stormwater Impacts, Public Participation/Involvement, Illicit Discharge Detection and Elimination, Construction Site Stormwater Runoff Control, Post-Construction Stormwater Management in New Development/Redevelopment, and Pollution Prevention/Good Housekeeping for Municipal Operations. For each measure, Best Management Practices (BMPs), measurable goals, and timeframes for implementation are to be provided. Other elements of the plan include developing a storm sewer map, implementing ordinances/regulatory mechanisms, enforcement and employee training. The SWMP is to be designed to reduce the discharge of pollutants to the "maximum extent practicable", protect water quality and satisfy the water quality requirements of the Clean Water Act.

The City obtains a permit through the Delaware Department of Natural Resources and Environmental Control (DNREC). The City's first permit term began in 2003 and extended until 2008. The permit requires that the City submit a report to DNREC each year to assess the effectiveness of the program. New permits must be applied for prior to the expiration of the current permit to continue the activity regulated by the permit past its expiration date. The initial permit expired in August 2008, and the City is working with DNREC to renew the permit.

The City's Stormwater Management Program is managed through the Public Services Group but compliance with the conditions of the permit requires inter-departmental, City Council, Planning Commission and community cooperation and support to be successful.

The current system of stormwater management calls for managing stormwater in a piece meal fashion, where each development is responsible for designing, building, and ultimately maintaining stormwater management structures on a project basis. Regional planning and management for managing stormwater is thought to be more cost-effective and efficient. Additionally, individual homeowner associations are rarely equipped to properly manage and maintain the stormwater infrastructure in their respective developments.

In response to these concerns, the State has begun to encourage creation of regional stormwater utilities that would function on a regional level to plan, construct, manage and maintain stormwater infrastructure. A stormwater utility would function similar to other utilities, where property owners would be assessed a fee, likely based on area of impervious cover, to properly plan, construct, manage and maintain stormwater infrastructure. Such a system might allow for smaller, redevelopment projects to pay into a fund for retrofits elsewhere in the region rather than implementing costly stormwater practices that may not have the benefits of improvements elsewhere in the system. The stormwater utility concept is new to Delaware, but could prove to be beneficial to the City of Dover. The City should conduct a feasibility and implementation study to determine how a stormwater utility would function, necessary staffing requirements, and fee structures that would be needed to properly implement such a concept. This would give City Council the information they need to determine if this approach is appropriate for Dover.

Part II – Planning for Utilities

The City of Dover as a service provider to both residents of the City and County, has a responsibility to prepare for future issues and challenges to the utility infrastructure. Providing adequate services requires that maintenance of the physical infrastructure be regularly addressed and that the City must be responsive to changes and pressures upon its system.

The most recent version of the City of Dover's Water System Master Plan identifies some key issues which the City must address due to their relevance to growth management within the service areas of the City.

Perhaps the most vital issue regarding both the direction of growth in the City and utility service is the identification of future service areas. Both municipal development and annexation are reliant upon the availability of service for water and sewer. While the physical extension of piping around and to the extent of the City boundary is an easily identifiable issue, development both on the edge of the City boundary and in the Downtown core requires careful consideration of water flow and availability.

Planning for downtown re-development must ensure that the new challenges encountered by the City, such as the push towards taller buildings in the downtown (five stories and/or higher), are met with utility services which are capable of addressing those needs. In a similar manner, the Water System Master Plan identifies industrial use of water resources as stagnant due towards trending away from traditional manufacturing. However, in the

event that a large industrial operation was proposed to locate within the City, careful attention must be paid to the new potential demands on the water system.

Improvements to the distribution system for water within the City's water utility were also specifically identified in the Water System Master Plan. These improvements include expansion of piping to adequately address demand over time and a scheduled replacement of the older portions of the City's infrastructure, especially where cast-iron pipes are still in use. These actions were identified as important due to the fact that they increase the availability of service over time and would address some of the current concerns over 'brown' water.

Managing Inflow and Infiltration

Inflow of stormwater and infiltration of groundwater into the City's wastewater collection and transmission system has become an issue as the City's sewer infrastructure ages. Cracks in the sanitary sewer pipes allow for both stormwater and ground water to infiltrate. Additionally, in older areas of the City, many sump pump systems and rain gutters discharge directly to the sanitary sewer system. This additional flow places significant stress on Kent County's wastewater treatment system by increasing the City's flow to the wastewater treatment plant. It also costs the rate payers within the City of Dover, in that the City must pay for all wastewater that is transmitted to the County for treatment, regardless of its source.

In response to the issues of inflow and infiltration of stormwater and ground water into the City's sanitary sewer system, the City has developed a plan to identify sources of inflow and infiltration and to remove these sources from the system.

Electricity and Energy Consumption

The City of Dover has adopted the Cool Cities Initiatives and is seeking to recognize a number of Green Energy Goals to reduce overall consumption where possible so as to better utilize existing capacity. Currently, there are several solar energy projects that have been authorized in the City's service area. A number of geothermal units have also been authorized by staff.

The City of Dover has established the 2030 Committee to develop conceptual alternatives for future energy supply. The Committee is in the process of evaluating a number of alternative proposals for long-term power generation. Several of the proposals under consideration would involve development of an energy generation plant at Garrison Oak.

Part III – Plan Goals: Utilities

Goal 1: Proactively Maintain Existing Infrastructure and Expand Infrastructure When Beneficial

Continue to place highest priority on maintaining existing utilities and community infrastructure so that reliable service can continue to be provided to existing community.

Recommendation 1: Update Utility Plans Regularly

Dover water, sewer and electric will have their long-range plans updated every five years and integrated into the Consolidated Utility Plan for the City of Dover.

Recommendation 2: Continue to Seek Interconnections with Other Water Systems

Work with Tidewater Utilities, the Camden-Wyoming Sewer and Water Authority, other neighboring water providers to interconnect with other water systems.

Recommendation 3: Implement plan to identify and remove sources of inflow and infiltration

- Contact private property owners based on the results of smoke testing that has been completed in an effort to remove roof and area drains on private property from the sewer system.
- Prepare projects to reline old sewer mains to reduce and/or eliminate inflow & infiltration
- Work with commercial property owners to remove catch basin connections to the sanitary sewer system that have been identified by field investigations or smoke testing.

Goal 2: Enhance Infrastructure to Meet Community Needs

Enhance public utilities and infrastructure where studies indicate that community services standards are not being met.

Recommendation 4: Continue to Implement Plans to Improve Water Quality

The City has developed a plan for resolving the “brown water” issues that have occurred since the City began to chlorinate the water system. The City should continue its commitment to implementing the water system improvements that will improve the water quality concerns.

Recommendation 5: Identify and pursue options for long-term reliable, cost competitive, and environmentally prudent electricity for the citizens of Dover***Goal 3: Meet or exceed the State and Federal requirements of the NPDES permit and Stormwater Management Plan***

Recommendation 6: Determine the Feasibility of Implementing a Stormwater Utility within the City of Dover

Develop a feasibility study for initiating a stormwater utility within the City. This will include an analysis of the staffing needs and fees necessary to support a stormwater utility. Implement recommendations of the study as approved by City Council.

Recommendation 7: Encourage and Possibly Require Green Technology for Stormwater Management in New Development Projects

Work with City engineering staff, Kent Conservation District, and the Department of Natural Resources and Environmental Control to determine the appropriate changes to City codes and processes to require stormwater management practices that mimic natural conditions for new development. Implement necessary changes to codes and processes.

CHAPTER 8

COMMUNITY SERVICES AND FACILITIES PLAN

Part I – Background Information

The City of Dover is a full service municipality providing a wide array of services to its residents including but not limited to:

- Public Safety: Police, Fire (volunteer fire fighters, fulltime dispatchers), Ambulance (contracted), Fire Marshal, Construction Inspections and Code Enforcement
- Recreation: Parks, Recreation and Sports Programming, Library, and Arts Council
- Community Services: Grounds Maintenance & Beautification, Solid Waste Collection, Street and Drainage Maintenance

The City of Dover maintains a work force of approximately 350 fulltime employees. The City-Operating budget in Fiscal Year 2008-2009 for its General, Electric, and Water\Wastewater Funds is approximately \$158 million.

The following sections give a more detail description of the services and facilities that the City of Dover provides to its residents. A discussion of the City's utility system is detailed in Chapter 7.

City of Dover Planning, Inspections, and Code Enforcement

The City employs a four person professional planning staff with a range of expertise and backgrounds. All development activity is reviewed by the Planning Department. Planning Staff is responsible for site plan review, zoning interpretation, long range planning, and zoning enforcement among other responsibilities.

The Planning Department also provides support to the Board of Adjustment, Planning Commission, Historic District Commission, and City Council on issues related to planning and development. As staff to these Boards and Commissions, the Planning Staff fields zoning and code compliance inquiries, conducts meetings with developers and design professionals, manages the application filing and review process, completes plan review, writes reports on each application, and presents information in public forums. The City's Planning Staff is available to assist citizens in a variety of ways including zoning verification, guidance through the development process, and explanations of the restrictions and requirements of the City's *Zoning Ordinance*.

Oversight of all development, including the review of large-scale construction projects and municipal growth fall under the auspice of the Planning Department. Notable projects such as the Eden Hill Farm TND, Dover Downs & Dover International Speedway expansions, and

the implementation of the City's Source Water Protection Overlay Zone were all guided through the development review process by City Staff. The total number of development applications has steadily increased almost every year since 2003. Currently, the rate of application filing in 2008 indicates a return to a more stable number and not continuing the significant increases seen in the past two years. This decrease is likely due to the changing economic conditions especially due to limited credit availability for construction activity and real estate purchases.

Table 8-1: Application Summary for 2003-2008

	2003	2004	2005	2006	2007	2008
Total Number of Applications	99	114	107	138	163	120

Source: City of Dover Department of Planning

The City also employs a staff of professional engineers in the Public Utilities Department and Public Services Department who serve a variety of planning and engineering responsibilities. City engineers are responsible for reviewing and approving key aspects of development such as utilities, roadway construction and implementation, and life-safety concerns.

The City of Dover Department of Inspections provides several services to residents and property within the City including issuance of construction permits, performance of inspections, and issuance of certificates of occupancies. The City maintains responsibility for all permits and inspections related to construction including signs, plumbing, mechanical and fire protection. All new construction within the City of Dover is inspected by the City's Building Inspectors. During the timeframe of 2003-2007, City Inspectors were involved in over 12,000 separate inspections. The Department of Inspections ensures that building and construction safety within the City maintains a high degree of accountability and professionalism through maintaining certifications through the International Code Council and by maintaining a strong relationship with the development community. The City has adopted the 2003 versions of the International Code Council Codes for building, plumbing, and mechanical.

The City of Dover also provides a code enforcement and property inspections service to its residents. Code Enforcement Inspectors are available to the citizens to address complaints and issues regarding code violations and property maintenance issues. These Code Enforcement Inspectors also pro-actively work to ensure that the land and buildings across Dover are adequately and properly maintained in accordance with City Codes. In addition to inspecting property exterior, code enforcement staff inspects rental dwelling units to ensure that they meet current code standards as part of the Rental Dwelling Licensing Program.

City of Dover Fire Marshal's Office

The City of Dover maintains its own jurisdictional Fire Marshal's Office. This office is responsible for property inspections, fire protection inspections, life safety inspections, and fire investigations across the City. The City of Dover Fire Marshal is also a member of the City's Development Advisory Committee and provides comments on development

applications regarding the adequacy of their fire protection elements. The City of Dover Fire Marshal's Office follows both the NFPA (National Fire Prevention Association) regulations for minimum fire safety standards as well as the Delaware State Fire Prevention Regulations. The Office performs several public outreach activities as well as education programs throughout the year.

The City Fire Marshal's Office takes a lead role in special events management in the City. The Office is also responsible for the operation of NASCAR event Command Center for all City operations. They perform this task in conjunction with Kent County 911 and other State and Federal agencies. The Fire Marshal's Office collects data on race day incidents, ensures the general safety of the campgrounds, and manages the coordination of resources in the event of an emergency.

Emergency Management Planning

In 2008, the City of Dover added an Emergency Management Coordinator to its staff, within the Public Services Department. Prior to the addition of this position, the emergency management function resided within the Police Department. The role of the Emergency Management Coordinator is to serve as the City's liaison on emergency management/preparedness issues. He will coordinate and conduct training programs and emergency operations drills, assist departments with emergency and mitigation plans, manage grants, and administer the submittal process for Federal and State reimbursement claims for the City's costs during emergency operations. The Coordinator's first priority will be to update and modernize the City's Emergency Operations Plan.

The Dover Emergency Operations Plan (DEOP) is a working document in its current state that the newly hired Emergency Management Coordinator is revising and preparing for full implementation. The City is working to maintain compliance with the National Incident Management System (NIMS) to ensure that all staff who would participate in a disaster response or recovery efforts are properly trained under this national standard. The Emergency Management Coordinator works to coordinate with other governmental and private agencies that would play a part in an emergency response, including the Delaware Emergency Management Agency, Department of Natural Resources and Environmental Control, Dover Fire Department, and Kent County Public Safety Department.

The City of Dover Emergency Operations Plan (DEOP) provides a basis for preparing for and executing emergency operations to prevent, minimize, prepare for, respond to, and recover from injury or damage that may be caused by natural or technological disasters or enemy attack. The City government must also ensure the continuity of government operations during such disaster situations. This plan pre-determines, to the extent possible, actions and interactions to be taken by the City government and cooperating agencies to prevent and minimize disasters. These actions include reduction of the vulnerability of its citizens to disasters, protection of life and property of citizens residing in Dover as well as visitors to the City, quick and effective response to disaster occurrences and the implementation of timely recovery actions.

City of Dover Parks and Recreation

The Parks and Recreation Department provides a comprehensive recreational program to meet the needs of all citizens, along with a citywide park system. Programming includes special events such as the Spring/Summer Performing Arts Series, Old Dover Days, Youth in Government Day, and athletic programs/leagues. The City's athletic programs and leagues encompass softball, basketball, tennis, wrestling, field hockey, track and field, cross-country, football and cheerleading. In addition, the department provides bus trips, after school programs, and special interest courses to meet the needs of all citizens.

Over the past 10 years, the City has made major upgrades to its park facilities. They have replaced playground equipment in the following locations; Silver Lake, Dover Park, Mayfair, Hamlet, Williams Park, Mary Street and New/Dover Street. New playground equipment was installed in the Millcreek Subdivision and at Kirkwood Street Park. Through a land donation, Kirkwood Street Park was expanded to provide additional recreational opportunities. A fifteen-acre land donation received by the City will go towards the expansion of Schutte Park, along with the Wyoming Mill Road realignment project.

The City operates twenty-six (26) City parks, ranging from passive planted areas to community playgrounds to larger regional parks. A full listing of City Parks and their amenities can be found in Table 8-2.

Schutte Park functions as a regional athletic center, as home to soccer fields utilized by the Central Delaware Soccer Association, lighted softball fields, and the Dover Little League Park. The City is currently working with the Boys and Girls Club to build a state-of-the-art Boys and Girls Club in Dover. The Boys and Girls Club is developing a concept for a building to be built in the Schutte Park Complex.

Silver Lake Recreation Area is a major recreation area for Dover and Central Delaware. The lake provides both passive and active recreational activities for all ages. Activities include fishing, waterskiing, boating and swimming. The City has in coordination with the St. Jones River Commission, developed plans for a "Silver Lake Revitalization" project. The project is designed to improve water quality of the lake and the St. Jones River by providing buffers to the stream with natural vegetation and to create a management plan for the lake and St. Jones River.

Table 8-2: City of Dover Parks and Facilities

Park Name	Baseball Fields	Basketball Courts	Boat Ramp	Cultural	Exercise Court	Fishing	Flower Beds	Future Development	Horseshoe Courts	Multipurpose Fields	Parking	Benches	Pavilion	Picnic Tables	Playground Area	Playground Equip.	Recreation Center	Shuffleboard	Swimming Area	Tennis Courts	Volleyball Courts	Walking rails
Constitution Park				X																		
Continental Park															X							
Crossgates												X			X							
Dover & New Sts	1	1													X	X						
Dover Park	1	2							X	1	X	X	2	X	X	X	X	X		3		
Division & Kirkwood		1														X						
(a) Hamlet												X			X	X						
Heatherfield East												X										
Kirkwood & Mary Sts																X						
Mallard Pond															X							
Mayfair Park	1	1								1					X	X					1	
Memorial Park						X						X										
Millcreek															X							
Orville Myers							X															
Paul's Property								X														
Richardson Park						X						X										
Saulsbury Park												X			X							
Schutte Park	4					X		X		10	X		1	X			X					X
Silver Lake		X		X		X					X	X	2	X	X	X			X		1	X
The Green			X									X										
Turner Drive Park															X							
Westfield															X							
Westwind Meadows															X							
Williams Park											X	X		X	X	X						
Woodbrook												X										

Source: City of Dover, Community Development Block Grant Program

In 2008, the long-awaited John W. Pitts Center opened at Schutte Park, providing a much-needed indoor recreation center and gymnasium to residents in the Dover area. The John W. Pitts Recreation Center offer fitness activities and leisure time program for all ages. The facility includes a gym area with two (2) basketball courts, three (3) volleyball courts, and walking track; multipurpose room for fitness; and a classroom for small workshops.

Dover Public Library

The City's public library provides an essential service to City residents and residents of Central Delaware. For FY08, circulation at the Dover Public Library consisted of more than 460,000 items to all users. At the same time, there were more than 400,000 visits to the library. Dover residents accounted for approximately 45% of library usage; Kent County residents accounted for approximately 49% and non-county residents accounted for the remaining 6% of the overall facility usage. In addition to lending materials such as books and movies, Dover's library offers computers for public use and a variety of programming for children, teens and adults.

The library is centrally located on South State Street and is an important component of the Downtown area. With the increased usage and visitor traffic at the library in recent years, it has become apparent that the facility is much too small. In order to provide improved services to residents, the City has chosen to build the new library on land adjacent to and just east of City Hall, currently housing a surface parking lot and the Post Office. The Post Office has outgrown their facility due to security and inclement weather concerns and requires a different facility. As such, the Post Office plans to move to an alternative location. The City is working with the Postal Service to find an appropriate location where the USPS can purchase sufficient land to house their distribution operations. In the summer of 2008, the City of Dover hired architectural firm Holzman-Moss to develop a concept design and building program for the proposed new library.

The new, larger multi-story library will provide much-needed space for expanded services. Among them will be increased space for a more extensive collection of all materials, a business resource area, a consumer health consultation area, quiet study areas, conference rooms, a café, a teen resource area, and an expanded children's services area that will have larger spaces for story times and other activities. It is anticipated that there will be space for many more public access computers, along with a computer training center. The new library will also function as a community center, with larger meeting room spaces and assembly areas capable of hosting a variety of events.

All of these features, and more, will make the City's anchor library a popular destination for area residents and for visitors to Central Delaware and especially to the historic government complex. The location will enable the library to play a major role in the variety of annual events that occur in Dover, e.g., Old Dover Days, the African American Festival, First Night Dover, etc. It is anticipated that the new library will be a catalyst in the revitalization of Downtown Dover.

Solid Waste Management

The Sanitation Division of the Public Services Department has responsibility for the collection and transport of municipal solid waste. It is responsible for the collection and transport of approximately 16,000 tons per year of refuse from more than 8,000 residential and 600 commercial customers to the Sandtown Landfill.

Aside from standard collection, the City's Sanitation Division also provides services for the collection of bulk trash and, in conjunction with the Delaware Solid Waste Authority, provides a curbside recycling program. The curbside recycling program is free of charge to Dover residents and currently has an approximate participation rate of 15-20% of City of Dover trash service customers. The City would like to see this participation rate continue to rise.

The City is considering the implementation of a Pay-As-You-Throw Trash Utility. This utility would view trash as an enterprise fund similar to the Electric Utility and the Water Utility. The fund would create various rates based on the customer's needs for trash service. For example, some customers may need a 95-gallon container vs. a 60-gallon container, as such, the customers would pay differing rates for their trash services. The Pay-As-You-Throw approach focuses on recycling to reduce the overall amount of trash being delivered to the landfill. The goal of the PAYT system is to create an incentive based environment where customers will change their behavior and reduce waste by ensuring that more discarded materials are recycled rather than refused. Another benefit of implementing a Pay-As-You-Throw program is that it helps identify and control specific costs related to solid waste collection and disposal. One strategic objective for FY2009 is to evaluate the feasibility of a Pay-As-You-Throw trash utility.

Grounds Maintenance and Beautification

The City of Dover employs dedicated grounds maintenance staff. This staff is responsible for the care of lawn and turf in the City maintained parks, for the protection and maintenance of street trees, and for the maintenance of all City right-of-way. Grounds maintenance staff oversees the care of all City owned land and works in conjunction with other departments to ensure that the various trees and plantings do not conflict with other City construction or projects.

The Grounds Division is also responsible for the City's beautification program which includes the seasonal planting of flower beds throughout the City. These flower beds are consistently identified as one of the aspects of the City which citizens and visitors find most appealing.

The Grounds Division is responsible for the following tasks:

- Mowing over 285 acres of turf in parks and around City buildings
- Providing maintenance for 2,265 street trees
- Maintaining 35 miles of City rights-of-ways including streets and ditches
- Maintaining 65 flower beds throughout the City
- Removing snow from 3.75 miles of sidewalks on City property

- Providing set up for special events such as Caroling on the Green, Spring/Summer Performing Arts Series, Festival of Lights, Old Dover Days, etc.
- Decorating trees on Loockerman Street and The Plaza, and other City properties for the holiday season
- Providing herbicide spraying for weed control on 137 miles of City streets
- Maintaining safety surfaces under City playground equipment
- Edging sidewalks and curbs on City properties.
- Controlling vegetation in 20 miles of alleys
- Advises the Development Advisory Committee (DAC) with technical expertise on Landscape Plans
- Assisting Electric Department in bioremediation projects
- Assisting both the Electric and Public Works Departments with yard repairs

Education

The City of Dover has two school districts within its boundaries, the Capital School District and Caesar Rodney School District. Seven elementary schools, two middle schools, one high school and the Kent County Community School are all located in Dover within the Capital School District. Caesar Rodney School District has one elementary school within the boundaries of Dover. Currently, the South Dover Elementary School site is undergoing construction of a new school building and Central Middle School is undergoing a project to replace the existing gym facilities. The Carey Farm on Route 8 has been identified as an eventual site for a new Dover High School.

Overall enrollment numbers for the Capital School District in 2008 show approximately 6,179 students. Capital School District employs over four-hundred teachers and a total of 737 employees (inclusive of those teachers). Of the seven elementary schools in the Capital School District, four of the schools were rated as “Superior” in the Delaware Accountability rating scale (a hybrid of the Delaware School Rating standards at the State level and the Federal ‘No Child Left Behind’ Act, which satisfies both requirements). Two of the elementary schools were rated as “Commendable” and one was noted at the “Academic Review” level. Both middle schools were rated at the “Academic Progress” level and noted as “below target” requirements. Dover High School was also rated as “below target” in this area.

Student enrollment of W. Reily Brown Elementary, the one school from the Caesar Rodney School District within Dover is approximately 426 students. It employs a total of thirty-six teachers and six teaching support positions. W. Reily Brown Elementary School was rated as “Superior” in the Delaware Accountability rating scale and was cited as being “above target” requirements. School information and rating information is generated by the State of Delaware Department of Education and is available from the Department of Education website at <http://www.doe.k12.de.us/>

Police

The Dover Police Department employs 93 officers and provides a variety of services to citizens. The City operates a Community Policing Unit which includes the Quality of Life Task Force. The Community Policing unit and Quality of Life Task Force work with the community to address crimes that affect the overall quality of life of the community. The City recently added two positions to the Department as a sex offender unit.

Fire

The City of Dover maintains a close relationship with the Dover Fire Department, (Robbins Hose Company). The Fire Department is a volunteer force; however, the fire dispatchers work for the City of Dover. The Fire Department currently has five fire apparatus, two of which are ladder trucks. A rescue vehicle, special operations vehicle and several other department vehicles are serviced and employed by the Department. The Fire Department serves nearly the entire City of Dover as well as some locations beyond the City boundary. The strong relationship between the City and the Fire Department ensures that the quality of fire protection services remains high.

Ambulance

The Basic Life Support (BLS) Ambulance Service for the City is a contracted service. The City of Dover is under contract with PrimeCare for ambulance services within the City. The contracts are for three years per contract period. The service provides for two ambulances on duty for sixteen hours per day and one ambulance on duty for the other eight hour shift. The BLS ambulance service has back-up support from two Paramedic units provided by Kent County.

The Kent County Division of Communications is located at the Kent County Emergency Services Building at Public Safety Headquarters in Dover, Delaware. The center houses the Delaware State Police Communications and Delaware Department of Natural Resources (DNREC) Communications Division.

Health Care

While not a service provided by the City of Dover, the health care services are an integral component of the City and vital to the City's continued growth.

The City is home to the Bayhealth Medical Center where Kent General Hospital is currently involved in the largest expansion project in its history. This expansion, which will redefine the level of healthcare available to residents of central Delaware, is part of Bayhealth's ten-year strategic plan designed to address present and future regional healthcare needs at this central Dover facility.

At the hospital, Phase I was completed in 2006 and consisted of three new floors with all private rooms, including the two-story Center for Women and Infants and a one-story medical-surgical unit. Preparation for a \$168 million Phase II construction is now underway. This expansion will include an integrated cancer center, an emergency department that will

double the size of the existing facility, a welcome center, a new central utility building and 375 car parking garage. In the midst of this undertaking, Bayhealth has been ranked “Best in Delaware for Cardiac Surgery” for 2008 by *Health Grades* and to be recognized by J.D. Power and Associates for providing an “Outstanding Inpatient Experience.”

The investment of Bayhealth contributes to a number of health support services located throughout the City, including doctors’ offices and medical laboratories. In September 2008, the Eden Hill Medical Center opened as the largest non-hospital medical center in the State. It houses offices for a number of medical specialties and surgical centers and a walk-in care facility. Also in 2008, the Veterans Administration opened a clinic in Dover on South Governors Avenue.

Part II – Plan Goals: Community Services & Facilities

Goal 1: Provide a System of Interconnected Open Space Areas and Recreational Opportunities

Provide a walkable open space network which links the community to facilities, schools, libraries, and travel paths.

Recommendation 1: Develop an Open Space and Park Master Plan

- Identify within the Master Plan a variety of park and recreation facilities suitable to different ages, cultures, economic status, and interests.
- The Open Space and Park Master Plan should meet the open space and recreational needs in the Downtown and a plan of action for implementation should be created as part of the process.
- Implement improved water based facilities and other non-traditional recreation activities as part of any Open Space and Park Master Plan.

Recommendation 2: Pursue Recreation, Open Space, and Park Linkages

- Pursue via code amendment or adoption of policy a means by which the linking and development of travel paths through the various parks, open space, and community facilities will be required to interconnect.
- Continue to pursue and implement the Silver Lake Revitalization Project.
- Acquire and develop recreation/open space areas in strategic locations to provide opportunities to connect open spaces.
- Continue to make connections to regional efforts, such as the St. Jones Greenway.
- Support efforts to preserve natural greenways corridors, such as the area along the Fork Branch.

Recommendation 3: Maintain and Improve City Park Facilities and Recreation Programs

- Continue to perform playground safety inspections to ensure that playgrounds meet safety standards.
- Continue to implement playground replacement schedule as a part of the City’s Capital Investment Plan.

- Maintain and expand recreational programs to meet the needs of a diverse population.
- Evaluate the process and responsibilities for maintaining active recreation areas and common open space within residential developments.
- Continue to support efforts to locate an appropriate location and develop a skate park within the City.

Goal 2: Provide a New & Modern Public Library

The City should pursue and support the construction and operation of a newly constructed modern library facility.

Recommendation 4: Develop and Construct a New Public Library

- The development and planning of the new library should be a coordinated effort between the citizens of Dover, City Representatives, City Staff, State & County governments, and the private sector to ensure the most up to date and comprehensive facility possible is made available to the public.

Goal 3: Disaster Preparation

The City must be prepared to face and quickly address potential disasters both natural and man-made.

Recommendation 5: Disaster Preparedness

- Continue to comply with the National Incident Management System (NIMS) through participating in appropriate staff training and holding drills to prepare for potential disasters.
- Continue to evaluate the City's role in large special events management such as the NASCAR events and other large events, festivals, parades, etc.
- Maintain strong intergovernmental relationships with County and State agencies during Race Weekend activities.
- Continue to develop, finalize, and fully implement the City's Emergency Operation Plan.

Goal 4: Provide and Maintain High Quality City Services

The City should provide and maintain high quality services to all residents, properties, and visitors within Dover.

Recommendation 6: Maintenance of City Services

- Evaluate the levels of City Services as they pertain to police, fire, and emergency response times. Service levels should be maintained or excess from their current status as Dover grows in population and land size.
- Evaluate the possibility of a City maintained ambulance service.

Recommendation 7: Develop and expand City Waste Services

- Increase Curbside Recycling participation.
- Evaluate implementation of a "Pay as You Throw" program for solid waste collection.

Goal 5: Protect and Preserve the City Owned Resources

The City should work to ensure the protection and preservation of its own resources ranging from natural, historic, and cultural resources to the physical facilities.

Recommendation 8: City Services and Facilities Maintenance

- Assess the feasibility of all City buildings to determine if they are adequately able to support City staff and day-to-day operations in the City.
- Complete the implementation and construction of the bike path and sidewalk replacement plan.
- Assess the feasibility of expanding e-services such as electronic applications, fee payment, and services where applicable.

Recommendation 9: Protect and Preserve Natural, Historic, and Cultural Resources

- Encourage appropriate stewardship of natural, historic, and cultural resources in City construction projects and activities that may impact these resources.
- Continue to support tree planting and landscaping programs through the Development Advisory Committee and Public Works Department.
- Continue to support historic and cultural events and projects in the City by assisting with technical aid and other support staff activities that ensure the viability and continuation of those projects.

CHAPTER 9

TRANSPORTATION PLAN

Part I - Background

The City of Dover owns and maintains approximately 100.27 miles of streets and alleys throughout the City limits. A majority of these roads and alleys are residential in nature and include enclosed drainage systems as well as curbs and sidewalks. The City has an annual capital maintenance program that rehabilitates various road sections based on pavement rating conditions. The maintenance programs include improvements to deteriorated curbs, sidewalks and pavement sections. The annual investment in these improvements ranges from \$750,000 to \$1.5 million depending upon available funding. In addition, the City provides staff, equipment and materials to provide general maintenance for these road sections such as street sweeping, catch basin cleaning, hot mix patching, signage, leaf collection and other maintenance services. There are an additional 60 miles of roads within the city limits that are maintained by the State of Delaware Department of Transportation (DelDOT).

The Dover/Kent County Metropolitan Planning Organization (MPO) was established in 1992 in response to the United States Inter-modal Surface Transportation Efficiency Act of 1991 (ISTEA). The Act was reauthorized by the US Congress in 1998 as the Transportation Equity Act for the 21st Century (TEA-21). Building on these two landmark bills, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) was created in August 2005. The Dover/Kent County MPO has updated its 2030 Long Range Transportation Plan (LRTP) in May 2005.

As the City formulated the Dover Plan in 2003, the Dover/Kent MPO concurrently developed its 2030 LRTP for Kent County. The Transportation Chapter from the City's 2003 Plan Update was derived largely from that MPO plan. The City of Dover is a leading member of the Dover/Kent County MPO and the City of Dover Planning Department was represented on the LRTP steering committee. This 2008 Comprehensive Plan chapter is based on a combination of the 2030 LRTP and SAFETEA-LU, both published in 2005. Where appropriate, the results of Dover citizen participation workshops are included, in addition to Dover-specific transportation goals and policies.

Patterns of Travel

Auto Travel

Over the past several decades, automobiles have increasingly dominated the way people travel. Many factors have led to this increased dependence on automobiles including development patterns, employment trends, population growth and demographics, and income trends. Specifically, the following are noted:

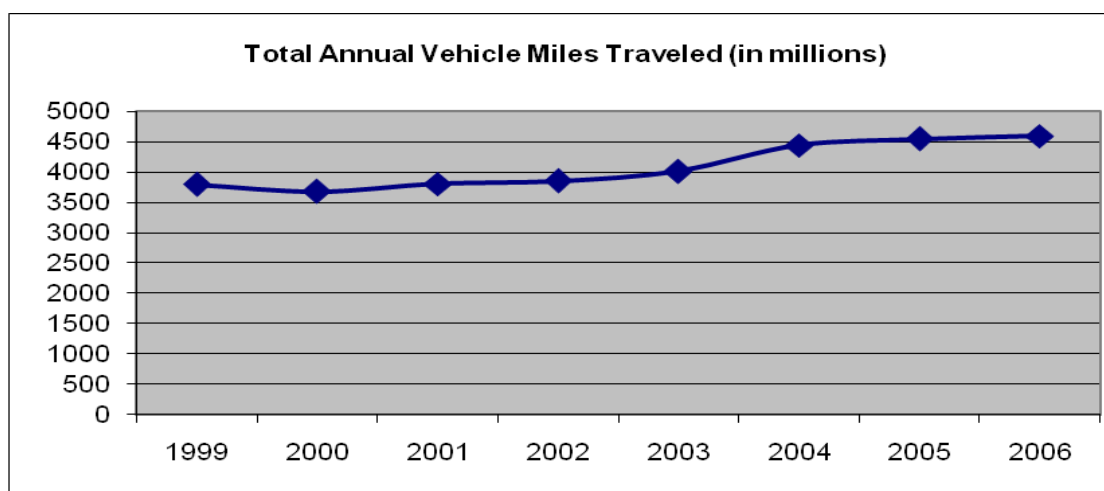
- Most workers continue to drive alone.
- Few workers choose to walk, bicycle or carpool.
- More people are riding transit, but not to work.
- The number of vehicles owned by each household is increasing with most households owning at least two vehicles.
- The annual number of vehicle miles traveled increased at a greater rate than total roadway mileage, vehicles, or drivers.

In short, more vehicles are being driven more miles while carrying fewer people.

Vehicle Miles Traveled (VMT) is a key measure of roadway use. Overall, the statewide VMT increased by 21.2 percent between 1999 and 2006. Chart 9-1 depicts the change in VMT in Kent County.

Chart 9-1:

Total Annual Vehicle Miles Traveled (in millions) in Kent County, 1999-2006



Source: Delaware Department of Transportation

Another indicator of vehicular travel is the Annual Average Daily Traffic (AADT) on roadways. The following table illustrates the AADT at DelDOT counting stations in Kent County.

Table 9-1: AADT and Percent Change, 2002 – 2006

ROAD	LOCATION	2002	2004	2006	CHANGE 2002-2004	CHANGE 2004-2006
US 13	Dover Downs	45,731	49,091	56,662	7.35%	15.42%
Leipsic Road	NE of Dover	1,622	1,531	1,600	-5.61%	4.51%
DE 8	W. Dover City Limit	12,019	12,005	11,697	-0.12%	-2.57%
US 13	Court Street, Dover	25,881	23,596	24,945	-8.83%	5.72%
US 113	Court Street, Dover	25,408	24,876	22,751	-2.09%	-8.54%

Source: Dover/Kent County Metropolitan Planning Organization (MPO), 2006 Traffic Summary

State Route 1 remains the major thoroughfare through Dover and Kent County. AADT on Route 13 near Dover Downs continues to be the highest and has increased between 2002 and 2006.

Increases in traffic on Route 8, Route 113 and Route 13 and the resulting increased AADT on Dover roads were discussed during Comprehensive Plan workshops. When asked if Routes 8, 113, and 13 were adequate to handle daily traffic, the majority of respondents stated that they were not adequate, and that respondents' daily commute did take significantly longer than five years ago. In 2003, when asked if US Routes 13/113 were adequate to handle daily traffic present on the road, the respondents were split with 44% disagreeing with this statement. Traffic and traffic congestion continues to be an issue identified by the citizens in Dover.

The Dover/Kent County MPO's 2030 LRTP expands on these detailed findings throughout the City and Kent County at-large.

Truck Travel

The dominant means of transporting goods in Dover, as in all of Delaware and the United States, is trucking. Trucks move about 80% of manufactured goods to and from Delaware each year.

In Kent County, US Route 13, US Route 113, and SR 1 are major truck routes. In Dover, McKee-Saulsbury Road is a designated truck route to serve the industrial areas on the west side of Dover. Route 15/Scarborough Road connecting SR 1 with McKee/Saulsbury Road has enhanced this truck connection to Dover in recent years. Development of the industrial area in southeast Dover in the areas of Horsepond Road and Lafferty Lane also increased truck traffic in that section of the City as well.

Despite the concentration of industrial uses and warehouse facilities in Dover and surrounding areas of Kent County, there is no full service truck stop facility in the area. This has led to an increasing problem of trucks parking overnight along road shoulders and in shopping center parking lots.

Public Transit

Public transit in Kent County is provided to a service area covering approximately 27.45 square miles, centered around Dover. The public transit service area is defined as any location within one-quarter mile on either side of a bus route. DART First State has improved services in Dover and the surrounding area. DART now provides weekday service from 6 a.m. to 6 p.m. along routes in Dover and Kent County with a new *Go Link Night Service* providing Dover residents with connections to fixed route transit service within the City. Additionally, beginning June 28, 2008, DART provides Saturday service for the 101, 104, 107, 109 and 112 routes.

The Water Street Transfer Center remains the DART hub for this operation, utilizing a timed-transfer system. A fleet of ten medium-sized buses provides weekday service along thirteen local routes (Routes 100-109, 112, 113, 401) in Dover and the surrounding areas. In 2007, this transit fleet logged 459,530 vehicle miles and 35,725 vehicle hours. Two Inter-

County bus routes also connect all three counties to Dover. Route 301 connects Wilmington to Dover on weekdays and Route 303 connects Dover-Milford-Georgetown between Kent and Sussex Counties. During the summer months, DART operates Route 305 on weekends, connecting Wilmington and Dover with Rehoboth Beach. A maintenance and repair facility is located at the Department of Transportation complex in Dover.

Ridership has increased steadily since 2003 with over 300,000 passenger trips annually in Kent County. DART First State estimates that nearly half of these riders were high school or university students. The remaining riders were largely transit dependent; meaning, most public transit riders lack independent means of transportation. Primary trip destinations included school, employment, medical services and shopping. Table 9-2 provides operating statistics for DART First State South District from 2002 through 2007.

Table 9-2: Transit Operating Statistics for DART South District, 2002-2007

Measure	2002	2003	2004	2005	2006	2007
Miles	408,430	408,528	426,806	486,068	471,537	459,530
Hours	30,933	30,820	31,674	35,943	35,924	35,725
Passenger Trips	308,716	303,914	308,759	340,856	364,781	376,223
Trips/Mile	0.76	0.74	0.72	0.70	0.77	0.82
Trips/Hour	9.98	9.86	9.75	9.48	10.15	10.53

Source: Delaware Transit Corporation

DART First State also provides the Paratransit door-to-door bus service in Dover for individuals who are unable to use fixed route bus service due to age or disability. The service is also available to individuals in need of transportation to and from renal care dialysis treatment. Reservations for this service must be made at least one day in advance. Some private and public social service agencies also offer transportation to the elderly and disabled.

In 2007, the DART First State supplemented the “Transitioning to Transit: Delaware’s Long Range Transit Plan for the 21st Century” with the 2008-2013 Business Plan. This 6-year plan recognizes Kent County and Dover’s, increased need for public transit. In this plan, the DART First State realizes that it has to “tailor downstate transit to the needs of distinct markets, such as Kent County.” The plan highlights a number of “better service arrangements” that can be explored to improve public transit in Kent County. Examples of these arrangements include evening and weekend services in the Dover area and shortening the times between buses.

DART has also added the “Get a Job, Get a Ride” program to provide employees throughout the State with discounted/free transit cards during the first month of employment. Employers are required to register with DART in order to qualify their employees.

Even with the increase in transit ridership along DART routes, citizens have continued to raise concerns about the inaccessibility and inconvenience of the Greyhound/Carolina Trailways Lines intercity bus service. Eleven to twelve thousand passengers arrive and

depart from Dover's Greyhound terminal annually. A large number of these riders are going to and coming from the Dover Air Force Base; many others are students traveling to and from colleges and family members visiting relatives. The scheduled arrivals and departures in Dover mainly link to New York City in the north, through Wilmington and Philadelphia, and through Salisbury, Maryland to Norfolk, Virginia, where connections can be made for further travel into the south.

Pedestrian and Bikeways

A number of different types of facilities accommodate the use of bicycling and walking as travel modes within the City. Bicycle facilities on separate rights-of-way include bike paths, bike trails and greenways. Bicycle facilities within the roadway rights-of-way include bike lanes, paved shoulders, wide curb lanes, shared roadways, and bike routes.

When asked during the 2008 Comprehensive Plan workshops, 68% of respondents stated there are an insufficient number of sidewalks with the City. A higher number of respondents stated that more bike and pedestrian walkways/paths need to be built.

Bikeways and pedestrian ways along the collector and arterial streets are fragmented. Some roadways are augmented with a cautionary "share the road" signs to increase motorists' awareness of the presence of bicycles. Today, several types of facilities accommodate the use of bicycling and walking as a travel mode. All of these facility types are represented in Dover, although the City still lacks a completely interconnected bicycle and pedestrian transportation system. Dover requires that sidewalks be constructed as a part of any new development or redevelopment application reviewed by the Planning Commission. This requirement has led to a great increase in sidewalks located throughout the City. The challenge will be connecting those segments into a connected sidewalk system.

Rail Transportation

The Delmarva Secondary Line is the primary north-south rail connection along Delmarva and is operated by Norfolk-Southern as a freight line. It roughly parallels the US Route 13 roadway corridor and bisects Dover. To the north, this line connects to the Northeast Corridor serving many destinations in the northeastern United States.

Inter-modal transfer centers, switching yards, and similar facilities greatly increase the feasibility of rail transport. In Dover, a switching yard services the Kraft Foods and Procter and Gamble Paper plant on the west side of Dover. In this same area along New Burton Road, Norfolk-Southern often stores and switches cars for its general operation.

The location of this switch/storage yard is problematic at best. Its present location not only causes noise problems, but the storage and marshalling of chemical cars poses a potential environmental and safety hazard to area residents. The leak of the chemical styrene in 2006 originated from a rail car carrying styrene monomer caused a partial evacuation of areas near Cheswold and portions of north Dover. The storage area along New Burton Road is adjacent to heavily populated residential neighborhoods. This leak raised the level of awareness of residents and City government. It is a priority for the City to address the marshalling of railcars and the substances that they may or may not contain to protect the health, safety and welfare of its residents.

Freight Rail

The future of rail travel in Delaware is bolstered by the commitment of Norfolk-Southern Railroad to continuing in the region. It is encouraging to note that recently Norfolk-Southern has taken more of an interest in the flexible operating strategies necessary to make small rail corridors, such as the one through Dover, profitable for the carrier and accessible to a variety of industries. The viability of the rail service is hindered by the lack of an operating inter-modal rail facility in Kent County.

Passenger Rail

Passenger rail services has been offered in Kent County during special events. The future of rail travel in Delaware has been discussed in various capacities throughout the past two decades. The City of Dover remains committed to exploring the possibility of passenger rail service to Dover and is committed towards pursuing passenger rail service once it becomes a viable alternative.

Aviation

The primary aviation facility in Kent County is Dover Air Force Base (DAFB), which permits limited public service at an adjacent civil air terminal, the Central Delaware Commuter Air Facility. In addition to the facilities at the DAFB, five of Kent County's other public use aviation facilities provide general aviation services. Another, the DelDOT Helistop is a publicly owned helicopter-landing pad, located at the DelDOT complex in Dover, and available for public use. An ancillary facility, the Kent County Aero Park is a 115-acre county-owned industrial/business park located next to the Air Force Base. Several of the lots in the park are reserved for aircraft related industries.

To meet future needs and provide public aviation facilities in Kent County, the State has acquired the Delaware Airpark in Cheswold. This facility is located less than five miles away from Dover and is important to future economic development efforts. Some improvements are planned to the airpark, including runway enhancements intended to accommodate larger aircraft.

Civil Air Terminal

The Civil Air Terminal (CAT) is located at the end of Horsepond Road adjacent to the Dover Air Force Base. It is operated by the Delaware River and Bay Authority. The Civil Air Terminal's current primary use is for private commuter travel.

A Federal grant has allowed the City of Dover in conjunction with Kent County to pursue a feasibility study on the viability of commercial commuter air service at the Civil Air Terminal. The Civil Air Terminal sees consistent use throughout the year; however, its peak usage is during NASCAR race events. The CAT is a key economic aspect of the NASCAR and race weekend operations and expansion of its existing services would increase its contribution to the City and region.

Roadway Systems

The State of Delaware, through the Delaware Department of Transportation, owns and maintains the vast majority of the roadways in the State. Virtually all arterial and collector roads are managed by the State. The City of Dover owns and maintains only the local street

system in the City. The partnership between the City, the Dover/Kent County MPO, and DelDOT is critical to coordinating land use and transportation planning in Dover.

The roadways in the City range in character from four-lane highways to local streets. The functional classification system classifies roadways based on the degree to which they limit access. The functional classes are listed below and are based on the Federal Highway Administration (FHWA) Functional Classification guidelines. The City's classifications systems differ slightly from those of DelDOT. These classifications need to be aligned with DelDOT in order to alleviate confusion and streamline projects.

Urban Principal Arterial System

In every urban environment, there exists a system of streets and highways that can be identified as unusually significant to the area in which it lies in terms of the nature and composition of travel it serves. This system is not restricted to controlled access routes. In order to preserve the identification of controlled access facilities, the principal arterial system is stratified as follows: (1) Interstate, (2) other freeways and expressways, and (3) other principal arterials (with no control of access). For principal arterials, the concept of service to abutting land should be subordinate to the provision of travel service to major traffic movements.

Dover's principal arterials are State Route 1, US Route 13 and US Route 113.

Urban Minor Arterial Street System

The minor arterial street system includes all arterials not classified as a principal and contains facilities that place more emphasis on land access than the higher system, and offer a lower level of traffic mobility. Such facilities may carry local bus routes and provide intra-community continuity, but ideally should not penetrate identifiable neighborhoods.

The minor arterials in Dover include: State Street, Governors Avenue, McKee/Saulsbury Road, Walker Road, College Road, Route 8 (including all alternate names), Division Street, Kenton Road, Webbs Lane, Loockerman Street, Leipsic Road, New Burton Road, and Scarborough Road.

Urban Collector Street System

The collector street system provides land access service and traffic circulation within residential neighborhoods, commercial and industrial areas. Collector streets may penetrate residential neighborhoods, distributing trips from the arterials through the area to the ultimate destination. The collector street also collects traffic from local streets in residential neighborhoods and channels it into the arterial system.

The urban collectors within the City are Independence Boulevard, Babb Drive, John Hunn Brown Road and Beiser Boulevard.

Urban Local Street System

The local street system comprises all facilities not on one of the higher systems. It serves primarily to provide direct access to abutting land and access to the higher order systems. It offers the lowest level of mobility and usually contains no bus routes. All streets on the urban local streets systems are city streets and maintained by the City of Dover.

The City owns and maintains approximately 100 miles of roads and alleys within the City limits. As developments have moved forward to completion and infrastructure has been dedicated to the City, this mileage has grown over time. Table 9-3 shows the increase in City street mileage between 2005 and 2008. As developments continue to move forward to completion and infrastructure dedication to the City of Dover, the street mileage will continue to increase over time. This represents a 2.84% increase in total mileage over past three years. In addition, the City estimates that approximately twenty miles of streets are under construction within new subdivisions that have not been dedicated to public maintenance as 2007.

Table 9-3: Certified Street Mileage: City of Dover, 2005 – 2008

2005	2006	2007	2008
93.61 miles	94.10 miles	96.27 miles	100.26 miles

Source: City of Dover Public Services Department

Dover has an active program to maintain City streets and to repave streets as they deteriorate over time. The City's Street Program is funded through the City's General Fund budget, as well as through legislator commitments of Community Transportation Fund dollars. The following subdivisions (Table 9-4) are in various phases of construction and will add mileage to City owned and maintained streets inventory when completed.

Table 9-4: 2008 Current Subdivision in Active Construction and Street Miles

Subdivision	Miles to be added
Village of Westover (Phase VI)	0.43
Stoney Creek (Phase II)	0.89
Somerset Park	0.18
Emerald Pointe	1.07
Seskinore	0.07
Clearview Meadows PND	2.88
Patriot Village	0.94
Lexington Glenn PND	0.84
Nottingham Meadows	2.59
Village of Cannon Mill	1.99
Eden Hill Farm TND Residential District	6.93
Eden Hill Farm TND Medical District	0.16
Chestnut Grove Farms	1.03
Stover Professional Campus	0.52
TOTAL	20.52

Source: City of Dover Public Services Department

Revisions to City Street Standards

In 2004, the City of Dover in a joint effort by City Council, Planning Commission, and the Planning Department Staff proposed an amendment to the *Land Subdivision Regulations* in regards to street standards. The origin of this proposed amendment was the result of numerous waiver requests during the 2003-2004 time period and the increasing amount of time required on the part of Staff, Planning Commission, and City Council to process those waiver requests.

City Council passed these revisions with a recommendation from Planning Commission in February 2005. In passing the amendment, Council recognized that the changes would better serve Dover's housing needs, that the changes had no significant objections from the Safety Advisory and Transportation Committee, and that Robbin's Hose Company had recently purchased a smaller make of fire apparatus which was better equipped to navigate subdivision streets. The Code revisions set the minimum paved width at twenty-four feet for residential areas and twenty-six feet for commercial areas with additional paved width required to accommodate on-street parking.

Roadway Capacity and Performance

The need for road improvements was identified in the community workshops in March and June 2008. Just over 50% of respondents stated that Routes 13 and 113 were not adequate to handle daily traffic present on the road while 61% responded that Route 8 is not adequate to handle its daily traffic. In addition, participants were asked if their overall commute was longer in 2008 than in the previous five years. The majority (60%) stated in the affirmative, that their commute today takes more time than five years ago.

Assessing Future Transportation Needs

To determine future transportation needs, the MPO not only scrutinized the trends described, but used those trends to develop travel demand forecasts that would indicate the highways on which congestion could be expected by 2030. Once those highways were identified, strategies and actions could be examined and analyzed for their value to mitigate expected deficiencies.

Travel Demand Analysis

To develop travel demand forecasts that would identify transportation system deficiencies, it was necessary to generate traffic volumes to represent:

- Existing conditions
- Future conditions with no change in the roadway network (2030 no-build)
- Future conditions with changes (2030 build)

These traffic volumes were calculated and assigned to the roadway network by means of DelDOT's transportation plan computer model of Kent and Sussex Counties. The model uses a three-step process to model travel. Demographic data is used to determine how many trips are generated by each Traffic Analysis Zone (TAZ), and the TAZ to which each trip is destined. Trips are assigned to paths along the highway network based on minimal path travel times, forming link volumes.

The analysis identified over 20 roadways with segments that would be deficient if current trends in population, employment and trip making continued and the roadway network was not improved. This was labeled the 2030 “no-build” scenario. The segments projected to be deficient by 2030 are indicated below in Table 9-5.

Table 9-5: 2030 “No Build” Deficient Roadway Segments

Roadway	Segment
US Route 13	Crawford Carroll Avenue to College Road
	College Road to N. State Street
	N. State Street to Townsend Boulevard
	Loockerman Street to Route 13/113 split
	Puncheon Run Connector to Governors Avenue
Scarborough Road	Crawford Carroll Avenue
DE 8	Saulsbury Road to Loockerman Street
	Loockerman Street to West Street
	N. State Street to Kings Highway
	Kings Highway to Park Drive
	Kings Highway to Route 13
	Route 13 to Halsey Road
Saulsbury Road	Walker Road to Clara Street
	Route 8 to Hazletville Road
US 13 Alt Governors Ave.	Walker Road to Mary Street
Loockerman Street	Route 8 to Bradford Street
	Federal Street to Park Drive
Kenton Road	Walker Road to Fieldstone Court
	Foxhall Drive to Route 8
Walker Road	N. State Street to Dover High School
K73 Hazletville Road	Hazletville Road at Eden Hill
Kings Highway	Route 8 to Route 13

Roadway	Segment
N. State Street	Route 13 to Walker Road
	Mary Street to Route 8

Source: Dover / Kent County MPO LRTP 2030

Adequate Public Facilities Ordinance/Concurrency Regulations

Adequate Public Facilities Ordinances (APFOs) are an effort to phase the provision of public facilities consistent with a locally adopted comprehensive plan. An APFO ties development approvals under zoning and subdivision ordinances to specifically defined public facility standards. These ordinances are designed to slow the pace of development or in extreme cases to delay development approvals in an area until adequate service levels are in place or reasonably assured.

Part II – Climate Change and the Future of Transportation

Addressing concerns over the greenhouse gas emissions from vehicles that contribute to climate change is a topic the public and professional planners have identified as a critical issue in transportation. Reducing the environmental damage caused by individuals' use of cars and light trucks should be a top priority for the City of Dover. In 2007, the City began to consider recommendations of the *Cool Cities* initiatives.

Cool Cities is a nationwide campaign through the Sierra Club for local governments (municipalities and counties) to implement energy saving, cost effective and efficient energy solutions for its communities to curb global warming. This initiative encourages municipalities and counties to empower residents, business leaders and developers to develop and apply smart growth and smart energy solutions. Some of the initiatives that Dover has studied include those addressed in this Plan such as adopting a green energy program, expanding the public transportation system within the City and surrounding area, and developing and expanding alternative modes of transportation.

According to the 1990 Clean Air Act Amendments (CAAA of 1990), the Kent County portion of the Dover/Kent County MPO planning area is designated as a moderate non-attainment area for ozone under the 8-hour standard. The air quality analysis conducted for the 2005 Dover/Kent County MPO transportation plan update identified emissions impacts of volatile organic compounds (VOCs) and nitrogen oxides (NOx) - the two compound precursors of ground level ozone formation. Both Volatile Organic Compounds (VOC) - or hydrocarbons - and Nitrogen Oxides (NOx) are the result of imperfect combustion within a vehicle's engine. When combined with sunlight, they form ground-level ozone, the major component of smog that can damage lung tissue, aggravate respiratory disease and make people more susceptible to respiratory infections. Automobile emissions are one of the major contributors to ozone formation.

The previous sections of this chapter on Transportation that detail the increase in vehicle usage and roadway congestion demonstrates that there are some significant challenges that will have to be overcome to improve our air quality in Dover. The cultural and societal

trends that have led to increased use of our roadways will not be easy to counter, at least in the short term. The *2008 Comprehensive Plan* is committed to meeting the “ozone challenge” through a variety of strategies that seek to provide alternative transportation options to residents, and to ensure that Dover’s built environment provides opportunities for those residents to take advantage of those alternatives. The following is a summary of some of the strategies employed by this plan:

- The Land Development Plan encourages mixed-use development in Downtown Dover, and provides for various well integrated residential and employment centers throughout the City. See Chapter 12 for more information.
- Opportunities for increased use of public transportation are supported.
- Numerous bicycle and pedestrian improvements are being suggested by the MPO and the City; and a major strategy of this plan is to encourage interconnections to provide a continuous bicycle and pedestrian transportation system.
- This plan contains an Economic Development Chapter which seeks to attract business and industry to Dover. More employment opportunities may lead to more people living and working in the same community. Employees who live and work in Dover may find commuting by transit, bicycle or as pedestrians to be viable options. See Chapter 10 for more information.
- The City is in full support of the MPO’s efforts to decrease ozone pollution, and to educate the public regarding “the Ozone Challenge.”

Part III – Transportation Accomplishments & Studies Since 2003

Since 2003 there have been a number of significant transportation improvements in Dover that have served to implement the Comprehensive Plan, as well as a number of studies which have been completed that have furthered the goals of the plan. These accomplishments are summarized below.

Recent Road System Improvements

The following improvements have been accomplished since 2003:

- Implementation of Intelligent Transportation Systems, particularly improvements to lights on Route 8 and US Route 13
- Improvements to the North Street corridor from West Street to Mifflin Road
- Improvements to Walker Road
- Intersection improvements on North Street, West Street, Saulsbury Road, and Mifflin Road
- Downtown Signalization Project
- Expansion of Crawford-Carroll Avenue from Scarborough Road to K.W. Boulevard
- Installation of sidewalks and pedestrian crossings along portions of Route 13

In spring 2008, the City of Dover City Council has prioritized (in no particular order) the following projects for inclusion into the State of Delaware's six-year Capital Transportation Program:

Intermodal Transportation Terminal (Dover Transit Hub)

The Dover Transit Hub has outgrown the existing Water Street Transfer Hub in Dover and the State's Division of Facilities Management has stated the site is needed to "support the court system expansion in Downtown Dover." DelDOT has purchased the former George & Lynch property at Water and Queen Streets to support the new transit hub. The site has been cleared and Phase I & II environmental studies have been completed. Conceptual plans were completed in 2008 and the City is currently meeting with DelDOT, MPO members and design engineers to study the funding possibilities and feasibility of the DTH. The Downtown Dover Partnership is currently working on this as a public/private partnership opportunity. The site is designed to include an indoor waiting area, ticket sales, restrooms, and service DART local, Paratransit and inter-county lines as well as commercial bus service and taxis. It has also been identified as an ideal location for future growth for downstate commuter rail due to proximity to existing rail line. Dover City Council has prioritized this project and recommended that it be identified in the State's six-year CTP.

West Dover Connector

With the completion of SR 1 around Dover, the east-west corridors in and out of the City have seen increases in traffic. The City of Dover Comprehensive Plan Update in 2003 and the Dover/Kent County MPO Long Range Transportation Plan recommended studying the extension of Saulsbury Road due to persistent and fast-paced growth that contributes to existing and future traffic congestion in the area. The West Dover Connector project is studying the feasibility of extending Saulsbury Road across the Eden Hill Farm and adjacent agricultural parcels making connections to New Burton Road and possibly to US Route 13. Because much of the land needed for such a roadway is undeveloped, the opportunity still exists to make improvements that best accommodate the area's multi-modal transportation needs. Alternative routes and concepts have been developed with the input and guidance of the West Dover Connector Working Group that began in 2004. This group is working in conjunction with DelDOT and with neighborhood and community officials, schools, local government leaders, concerned citizens, federal and state environmental and cultural resource agencies, and others to develop options that meet the diverse needs of the community.

Through a series of workshops, the group developed five alternative options to improve mobility across the Norfolk Southern Railroad for all modes of travel to and from the west side of Dover, to reduce congestion at key intersections in the study area, and to improve the connecting roadway network for local travel.

City Council, in December 2005, adopted a resolution to endorse Alternative Option 5C as the best possible alternative alignment for the West Dover Connector. The key features of 5C states:

- Extends Saulsbury Road over Puncheon Run and the railroad spur on a bridge
- Parallels New Burton Road on the west side of the railroad corridor
- Provides a new connector road across the Kesseling Farm (west of New Burton Road)

- Connects to New Burton Road with a ramp
- Connects to US Route 13 using Charles Polk Road corridor
- Potential connection to Wyoming Mill Road

The Resolution stated that Alternative Option 5C has little or no impact on the existing homes, churches, and schools nearby adjoining streets, would reduce cut-through traffic and traffic volumes along Camden-Wyoming Avenue as well as provide a direct connector to US Route 13. Alternative Option 5C provides for interconnectivity and offers protection of City utilities without impacting the Mayfair Electric Substation. This option would establish a defined southern boundary for the City. This option was one of two concepts recommended by both the Working Group and the Project Team. Alternative Option 5C has been identified in the Dover City Council's Transportation Projects Prioritization as a key aspect of the West Dover Connector project.

West Street/North Street Intersection

The intersection of West Street and North Street has been identified as a potentially problematic portion of the road network. Difficulties for northbound traffic on West Street attempting to make left turns are compounded by line of sight issues down North Street. There have not been simple solutions to this issue to date as the road network in the surrounding area is compact enough where even small adjustments to one intersection can have dramatic impacts on other intersections. Increased traffic generation from Eden Hill Farm TND has begun to contribute to congestion in the area and is expected to be more significant with the addition of Eden Hill's commercial portions.

Kenton Road Corridor Upgrades

The proposal is to upgrade the Kenton Road corridor from Route 8 to Denneys Road to an urban road standard. Improvements to the corridor focus on new pavement sections, sidewalks, shoulders, curbing, enclosed drainage systems, bicycle lanes, lighting and intersection reconfiguration. DelDOT has entered into a contract with Whitman, Requardt & Associates and this project is in the study phase. Dover City Council has prioritized this project and recommended that it be identified in the State's six-year CTP.

Loockerman Street/Forest Street Improvements

This project includes a series of improvements throughout Dover that will encourage economic development and alternative modes of transportation. These improvements include a roundabout adjacent to the Dover Train Station building, new curbing, and new sidewalks. Additionally, this project will enhance Downtown Dover development. Dover City Council has prioritized this project and recommended that it be identified in the State's 6-year CTP.

College Road Corridor Upgrades

Another road improvement project is to upgrade the College Road corridor from Kenton Road to Saulsbury Road to an urban road standard. Improvements in this project include new pavement sections, sidewalks, shoulders, closed drainage system, bicycle lane, lighting and other improvements. Once completed, this road will be similar to Walker Road. Dover City

Council has prioritized this project and recommended that it be identified in the State's 6-year CTP.

US Route 13 Sidewalk Construction

As part of an ongoing effort along the corridor, this project will complete the sidewalk network on both sides of US Route 13 from White Oak Road to College Road. The scope of the project includes addressing accessibility and ADA compliance. Field surveys and preliminary design have been conducted and this project is in the design phase. Dover City Council has prioritized this project and recommended that it be identified in the State's 6-year CTP.

Garrison Oak Connector Road

Garrison Oak is a 385-acre tract zoned as IPM2 (Industrial Park Manufacturing Zone-Technology Center) and is the only site in the City to be zoned as such. It has been identified by the City as an ideal location for large technological/green industry firms that require large lot sizes of over twenty acres.

Dover City Council has expressed a desire to DelDOT to provide a direct access to SR 1 via a connector road to White Oak Road. While the State discourages growth east of SR 1, this tract is acknowledged by both the City of Dover and the State of Delaware as the only large scale developable land east of SR 1 in the City of Dover. City Council recommends that a study be done to evaluate the feasibility and costs of providing access to Garrison Oak by way of a connection to SR 1 via White Oak Road to encourage economic development and accessibility. Dover City Council has prioritized this project and recommended that it be identified in the State's six-year CTP.

Crawford Carroll Avenue Extension

This project will continue the improved right-of-way of Crawford Carroll Avenue from West Rustic Lane in a southerly direction to the site with Circuit City and PetSmart and connect to US Route 13 via a signalized intersection. Crawford Carroll Avenue is a limited access service roadway designed to alleviate traffic congestion on Route 13 and provide local motorists with alternate routes to access the commercial areas of Route 13 in north Dover. This project is currently in Phase III of implementation.

US Route 13 Service Road Corridor

In adherence to the State's Corridor Capacity Preservation Program, the addition of service roads from Scarborough Road, east and west of Route 13, from the toll plaza through to Dover Downs, behind the Dover Mall and Wilmington University, would decrease traffic on US 13 in an attempt to get local traffic off Route 13. Dover City Council has prioritized this project and recommended that it be identified in the State's 6-year CTP.

The purpose of the US Route 13/113 corridor through the City has changed. This roadway once served the dual purposes of a high speed through travel route and as a local access road to service the many commercial businesses that were constructed along it. With SR 1 serving the needs of through travelers, US Route 13/113 corridor is becoming a destination for

commerce and community activities, as well as a significant employment center for the growing service sector. In order to address the changing character of this roadway a workshop was conducted by the Dover/Kent County MPO. The purpose of the workshop was to generate new ideas for improving the appearance and operation of the corridor. The organization prepared a report entitled “Concept Plan for US Routes 13 and 113 in Dover – Phase I, Technical Memorandum II: Final Recommendations.” This was adopted by the MPO in November 1, 2000.

The final recommendations of the study were:

- Create a corridor overlay zone;
- Service roads for local traffic;
- Assist voluntary development of rear access to business;
- Construction of sidewalks and bike paths;
- Median landscaping;
- Add bus pullovers where needed;
- Installation of attractive lights that serve both motorists and pedestrians;
- Bury utilities;
- Install pedestrian buttons at signals and strip crosswalks heavily;
- And develop a system of appropriate signage.

East West Route Corridor Study

East/west traffic has been identified as an issue of concern, as growth has put additional pressure on the various east/west corridors in Kent County that serve as the connection between Dover and other Kent County communities and the Bay Bridge and areas west of the Bay Bridge, particularly Washington, DC, Annapolis, and Baltimore. In the Dover area, Route 8 and Hazlettsville Road have experienced increase in traffic as growth has continued in Dover and areas west of Dover. It is important that a study of east/west routes be conducted and that strategies be developed and implemented to preserve capacity on these vital corridors as growth continues.

Delaware Route 8 Study

The Dover/Kent County Metropolitan Planning Organization conducted a study in 2007 of the State Route 8 corridor from the railroad tracks, west to Artis Drive. The study identifies a number of service roads and alternative roadways to help disperse the traffic pattern and reduce congestion on Route 8. The study addressed the construction of the new Dover High School and other development that has occurred and/or is planned on the west side of Dover.

The following projects are also on the City of Dover City Council's Policy/Prioritization list and have been either completed or are ongoing within the City:

Signalization

As noted previously, citizens have been concerned about the functioning of the traffic lights in the Dover area. Their concerns are about the traffic flow and the congestion at certain

intersections. They generally express their concerns by questioning the sequencing and timing of the lights.

The State Department of Transportation developed an “Integrated Transportation Management System,” commonly referred to as “DelTRAC.” This system uses a multi-modal approach to improving the movement of people and goods by using modern technology and a Transportation Management Center (TMC) to monitor travel and adjust signals, signage and public transit to lessen congestion.

In 2008, DelDOT completed Phase II of the Signalization Project incorporating eighteen signalized intersections in Dover into the DelTRAC system. As a result, DelDOT is now responsible for the monitoring and adjusting of current conditions and signals automatically adjusting these traffic signals, freeway access, lane use and traffic schedules in response to real-time demand in the Dover area. Along with the assumption of ownership and maintenance responsibilities these previously City owned lights, the project included the replacement of each signal with ornamental mast arms and pedestrian poles. In addition, pedestrian facilities (curb ramps, crosswalks and pedestrian signals) were upgraded to meet current Americans with Disabilities Act (ADA) requirements.

Weekend Bus Service

Understanding the increased need for public transportation within Kent County and the City of Dover at large, DART has begun Saturday bus service for the 101, 104, 107, 109 and 112 routes.

Air Passenger Travel

The City is currently collaborating to conduct an Aviation Study to explore the feasibility of launching commuter commercial airline service(s) at the Civil Air Terminal (CAT) at Dover Air Force Base. The purpose of the study is to see if there is enough demand to attract commercial airlines to the CAT and explore funding options and opportunities in the future.

Red Light Photo Enforcement Program

Working with DelDOT, the Dover Police Department implemented test sites at Webbs Lane and Route 13 for red light photo enforcement in 2004. DelDOT installed the first digital statewide camera system in the country in an effort to minimize fatal accidents by changing driver behavior. This project has expanded to include US Route 13 at Kings Highway/White Oak Road, US Route 13 at Webbs Lane, US Route 13 at Roosevelt Avenue, US Route 13 and Loockerman Street, South Governor's Avenue and North Street, and US Route 13 at Division Street.

Red light photo enforcement has been identified as a means of reducing the risk of crashes and other traffic incidents where they are implemented. Possible expansion of the program is currently being evaluated by the Dover City Council and the program has been identified for further study by DelDOT.

Dover Bikeways & Pedestrian Transportation Plan

The City of Dover contracted with consulting firm RBA Group to prepare the “Bicycle & Pedestrian Transportation Plan,” completed in June 1997. This was the result of a year-long

planning process that responded to the growing need for the integration of transportation alternatives in Dover. While this report is eleven years old, it is still relevant in regards to the need for multi-modal streets and sidewalks. Many participants in the 2008 Comprehensive Plan workshops voiced the need for updating this report to make it more relevant to Dover's growing communities.

Recommendations in the 1997 Plan consisted of system-wide solutions for the entire City, on-road bicycle and pedestrian improvements for the roadways within the study network, and independent project recommendations. Comprehensive engineering design treatments were not part of this plan, however, an assessment of some preliminary, route specific improvement recommendations were made to identify target facility types for selected routes. The study lists the top ten individual projects identified by the citizens of Dover. This list includes the following: Schutte Park off-road connection; enhanced pedestrian crossing – New Burton Road; a multi-purpose path between Delaware State University and Delaware Technical & Community College; and Walker Road bicycle and pedestrian facility improvements.

Relocation of Chemical Cars at Norfolk Southern Yard

The City recommends the continued exploration of options for relocating the storage and marshalling of chemical cars at the Norfolk Southern railroad yard on New Burton Road.

Commuter Passenger Rail

The City recommends additional studies to implement commuter passenger rail service between Wilmington and Dover.

Part IV – Plan Goals: Transportation

Goal 1: Preserve and Maintain the Existing Transportation System

Encroaching development and unlimited access onto the region's major roadways reduces system capacity. By guiding development, controlling access, and taking active steps to preserve transportation system investments that have already been made, the existing system can be maintained.

Recommendation 1: Increase the Capacity of the Transportation System:

- Improving corridor intersections
- Upgrading facilities
- Increasing transit service efficiency
- Supporting opportunities to expand aviation facilities
- Facilitating and expanding access to public/private airports in the region's transportation system
- Improving provisions for non-motorized travel
- Supporting the return of passenger rail service

Goal 2: Increase Coordination with Agencies

Work with citizens, DelDOT, and the MPO to ensure that Dover's long and short-range transportation needs are addressed.

Recommendation 2: Leadership in the Dover/Kent MPO

- Continue to play an active role in the Dover/Kent County MPO
- Continue to use the Dover/Kent County MPO as a forum for long-range transportation planning and interacting with DelDOT.
- Continue to coordinate development activities within the City of Dover with DelDOT through the Development Advisory Committee.

Goal 3: Develop and Expand Alternate Modes of Transportation

Expanding facilities and services for alternate modes of transportation such as walking, bicycling, taxi, and transit services enhances mobility for residents, reduces the number of single-occupant vehicles, and reduces the need to own an automobile.

Recommendation 3: Update and Implement the Bicycle & Pedestrian Transportation Plan

- Review the bicycle and pedestrian transportation network to identify gaps and important segments needed to provide a continuous network.
- Develop an implementation plan to complete this network. The construction of the missing sidewalk/bikepath segments can be accomplished utilizing a combination of private development activities, City funding through the CIP, and funding available through DelDOT and SAFETEA-LU.
- Amend the *Zoning Ordinance* to require bicycle parking for new non-residential development and multi-family development.

Goal 4: Create Recommendations and Policies for Roadways and Development

The City should cooperate with DelDOT through the Development Advisory Committee (DAC) and the Dover/Kent County MPO on the following:

- Support for access management along minor arterials and collector roads to protect traffic capacity and preserve the character of existing neighborhoods.
- Support for pedestrian, bikeways, and public transit facilities in subdivisions and site plan applications.

Recommendation 4: Implement the US Route 13/113 Corridor Improvements

- Consider the implementation of the recommendations of the US Route 13/113 Corridor Study, which may involve developing an overlay zone to implement the study's many design recommendations.
- Explore the possibility of developing a truck stop, where possible and appropriate, along the Route 13 corridor, through the office of the Economic Development Director.

Recommendation 5: West Dover Connector

- Work with DelDOT, the MPO, private property owners, neighborhood and school organizations on the plans for the West Dover Connector.
- Continue to participate in the West Dover Study Working Group and continue to support Alignment Option 5C as endorsed by City Council
- Support a study to evaluate North Street and the intersection with West Street particularly in regards to resolving issues of traffic flow from West Street to North Street.
- Support activities to integrate the Eden Hill Farm TND circulation network with the adjacent areas such as West Water Street extension (with rail crossing) intersection improvements along North Street, community walking trail network, and the Saulsbury Road Extension.

Recommendation 6: Develop and Implement Strategies for Addressing East/West Traffic West of Dover

- Add the East/West Route Corridor Study to the State's six-year CTP
- Work with DelDOT, property owners, and the Dover/Kent County MPO to implement the Delaware Route 8 Study.

Recommendation 7: Establish a means of access from the Garrison Oak Tract to SR 1

- Evaluate potential access means which would allow access to the Garrison Oak Tract from SR 1
- Determine Costs necessary to Build Access Road via SR 1 to the Garrison Oak Tract.

Recommendation 8: Miscellaneous Transportation Improvements

- Advocate the following projects and studies to be placed in the Dover/Kent County MPO Transportation Improvement Program and the DelDOT Capital Transportation Program (CTP). Each year the Dover City Council develops listing of prioritized projects (See Table 9-6 and 9-7 for the current year's prioritization).

Table 9-6: Prioritization of City Transportation Projects

Intermodal Transportation Terminal (Bus Station)
West Dover Connector
West Street Traffic Flow
Kenton Road Corridor Upgrades
Loockerman Street / Forrest Avenue Improvements
College Road Corridor Upgrades
U.S. Route 13 Sidewalk Construction
Garrison Tract Connector Road
Crawford Carroll Avenue Extension
U.S. Route 13 Service Road Corridor Study
Route 8 Corridor Study

Source: Dover City Council April 2008

Table 9-7: Policy/Program Prioritization List

Weekend Bus Service
Airport Studies and Improvements to Accommodate Passenger and Aircraft Related Industries
Red Light Photo Enforcement Program
Bike Path Connectivity
Continued Exploration of Options for Relocating the Storage and Marshalling of Chemical Cars at the Norfolk Southern Yard on New Burton Road
Additional Studies of Next Phase to Implement Commuter Passenger Rail Service between Wilmington and Dover

Source: Dover City Council April 2008

Goal 5: Air Quality: The Ozone Challenge

The City of Dover is committed to working with the Dover/Kent County MPO to reduce the air quality impact of auto emissions through sound land use planning, enhancing the bicycle and pedestrian transportation network in Dover, and encouraging increased use of public transit.

Recommendation 9: Continue to adhere to the Clean Air Act of 1990

- Update and implement the Bicycle and Pedestrian Transportation Plan of 1997 to reduce vehicle emissions.
- Encourage and support the instillation of multi-modal paths alongside street frontages where appropriate.
- Improve and widen sidewalks for bicycle and pedestrian use.
- Encourage DelDOT to increase bicycle paths along major routes within the City
- Amend the *Zoning Ordinance* to require bicycle parking in new non-residential and multi-family developments.

CHAPTER 10

ECONOMIC DEVELOPMENT PLAN

Part I – Background Information

Introduction

Economic development is one of the most important issues facing the City of Dover over the next 20 years. The City of Dover effectively serves as the core of central Delaware and is the leader in the area's economic growth. Today, more than half of the population of Kent County lives in and around Dover. Dover is a city that hosts a diverse mixture of major commercial and manufacturing firms, in addition to a large retail, hospitality and public sector. Regional development patterns and recent improvements in the area's transportation infrastructure have increased the accessibility of Dover to and from larger urban markets north and west of the City. Consequently, the City is in a position to attract and benefit from new and developing economic sectors.

Because of its unique history and its equally unique urban region, the City of Dover plays host to multiple economic environments that feed its economic growth and diversity. Observing changes in these environments and economic sectors that are thriving in the Dover area has created new challenges in the creation of an action plan that reflects both economic realities and the needs of city residents and employees. Over the past two decades, the City has faced an employment trend away from manufacturing and towards the retail and service sectors. While this phenomenon is consistent with recent trends in economic development in the Dover metropolitan area, it presents several important issues. First, retail employment tends to pay far less and offer less benefits and little long-term stability as compared to manufacturing or office employment. Consequently, issues of transportation, adequate housing opportunities and sufficient public services become more significant in this rapidly changing economic environment. In addition, the increased accessibility of larger employment markets to the north (due to the construction of State Route 1) combined with reduction in high-paying industrial or manufacturing jobs in the area, provides an incentive for the work-force to seek employment elsewhere. This outflow of skilled and professional labor has threatened the viability of Dover's economy and diverse employment structure.

However, economic development is not strictly a Dover issue; it is a regional issue. Like Dover, Kent County is transitioning from a manufacturing to a service-based economy. Except for manufacturing, between 1993 and 2004 positive job growth was posted in all industries, with the fastest growth in leisure and hospitality, educational and health services, and financial activities. According to the Comprehensive Economic Development Strategy for the State of Delaware (CEDS), many factors still hinder the region in terms of professional workforce development and retention.

The Process

Recognizing these recent and ongoing changes as well as the accompanying challenges, the City Planning Director and City Manager met with economic development professionals in

the region to develop a viable economic development strategy for Dover's future. Through a series of working groups, public workshops, strategy meetings, and surveys throughout Spring 2008, the following categories were recognized as areas of economic importance and viability:

- Downtown Dover
- Garrison Oak
- Industrial/Commercial Zones
- Green Technology
- Improve infrastructure, attractions, and events to increase tourism.
- Diversification of Dover's economy by recruiting new industries that use a skilled work force in addition to adding to the current workforce
- Employ strategic marketing to position Dover as a meetings and leisure travel destination
- Retention of current employment base and assist existing businesses and industry in becoming more successful.
- Strengthen our economic development partnerships.
- General economic conditions (jobs, income, access, etc.)

In order to better understand the intricacies of each of these economic development areas and issues, it is important to define "economic development" and understand its characteristics and needs.

Economic Development Defined

The term "economic development" often means different things to different people. In order to quantify the results of any economic development effort, it is important to define what is meant by the term.

For the purposes of the Comprehensive Plan, economic development is defined as "*The planning, design and implementation of community efforts which influence where wealth is created in order to strengthen an area's economy by creating and retaining jobs and expanding the tax base.*" Generally, these are considered to be the "core" economic development activities, including business attraction and economic diversification, business assistance and development, business retention and expansion, and various forms of collaboration and public-private partnerships.

Dover's Economic Structure

Of the twenty-eight (28) businesses and industries in Kent County that employ more than one hundred workers, Dover is home to half of them. Five key sectors make up the City's economy, including:

- **Manufacturing** – Dover is home to several manufacturing operations, operating several large facilities and contributing heavily to the City's economic vitality. These industries include Kraft Foods, Proctor & Gamble, and Playtex Corporation.
- **Government (Federal and State)** – As the state's capitol, Dover hosts the majority of state government offices which serve as a major employer. The Dover Air Force

Base plays an important role in both national defense and citywide economic diversity and growth. In addition, other federal agencies such as Department of Homeland Security, have offices in Dover.

- **Tourism** – Dover is home to over 15 hotels including Dover Downs Hotel & Casino, which hosts a hotel, a casino, horse racing events, and NASCAR racing entertainment. This contributes considerably to Dover's economic stability and identity. In addition, historic, cultural and natural resources such as the City's historic district, parks, waterways and open space, and the many museums draw thousands of visitors yearly.
- **Business and Personal Services** – Composed of banking, healthcare, attorneys and other personal and business services, this sector plays a prominent role in Dover. Bayhealth has continued to improve its position as a regional healthcare provider.
- **Retail** – As a result of Dover's diverse makeup, the retail sector provides goods and services to different populations in and around the City, taking advantage of Dover's widely varied economic environments. Dover has a unique opportunity to further promote its retailers and restaurants as a "tax free shopping and dining" destinations, as visitor surveys note that shopping and dining are among the top reasons they visit the area frequently.

Dover plays host to multiple economic environments that feed its economic growth and diversity. These unique economic locales include the central downtown area, outlying industrial/office parks, the City's commercial corridors, cultural tourism institutions and the public and nonprofit sector. In order to better understand the intricacies of each of these economic development areas, it is important to understand the characteristics and needs that make each unique.

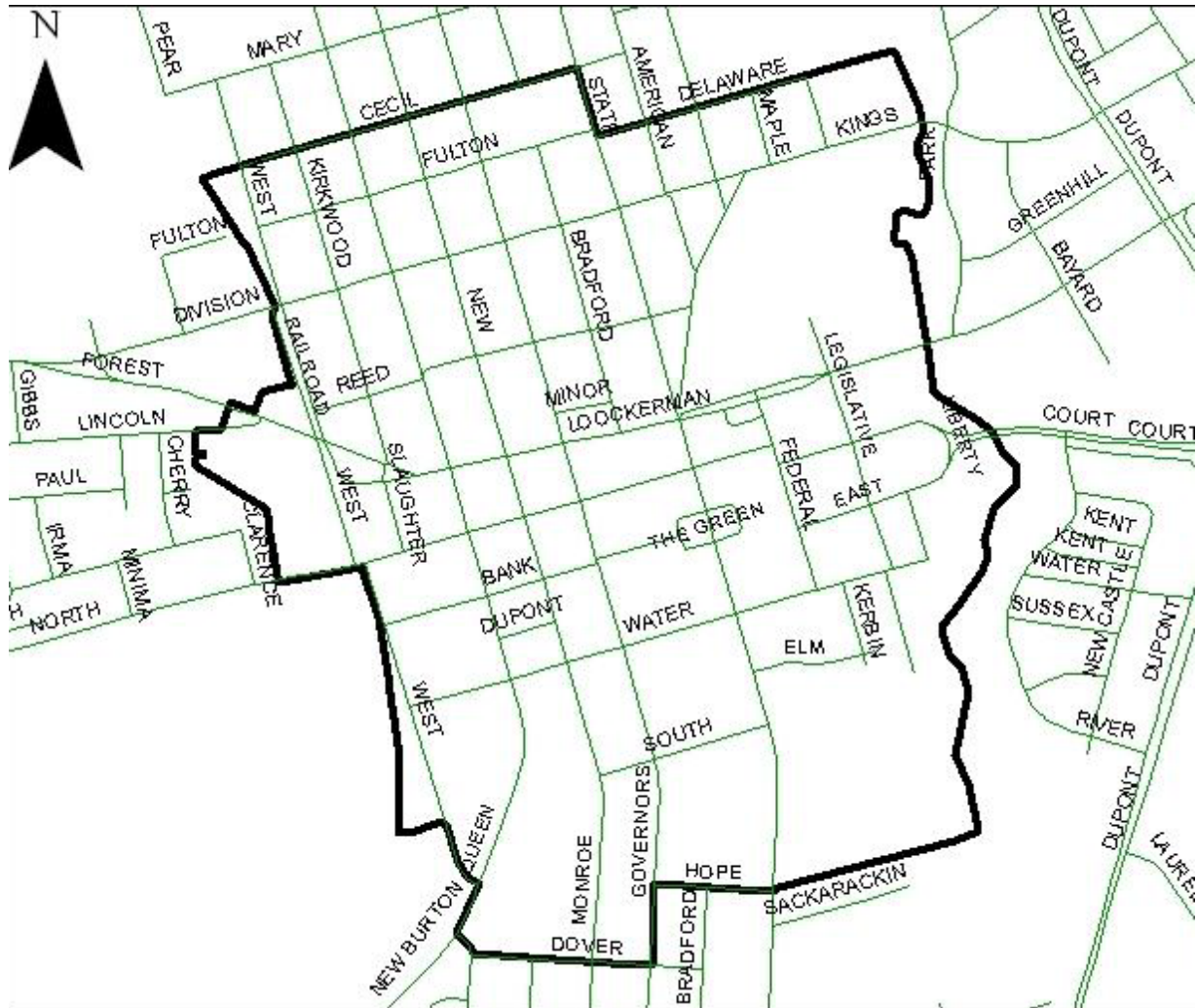
Downtown Dover Target Area

The Downtown area of the City makes up a unique economic environment that is well suited to host a wide variety of neighborhood and community based firms. The area involved in this description includes the area of central Dover bounded by the St. Jones River on the east, Mary Street to the north, the area surrounding the railroad tracks to the west, and the Bayhealth Medical Center to the south (See Map 10-1). Dover's Downtown area primarily consists of small-scale retail and service firms that tend to provide products to the residents of the downtown area as well as cultural and recreation centers. In this area, five retail components have been identified including:

1. *Office Support* – This includes eating and dining establishments and salons. In general the firms in this category thrive through providing services to government employees, lawyers, and other downtown office workers
2. *Neighborhood Convenience* – This category includes stores selling food and other items meant to serve the residents of neighborhoods in and around the area.
3. *Entertainment* – Dover's Downtown area includes several restaurants, taverns, museums, live theatre, symphony, and the arts.
4. *Specialty Products and Services* – This category includes stores that offer a broad selection and high level of service including bridal shops, antiques, auto parts stores, photographers, arts and crafts shops and custom framing.

5. *Fashion and Boutique* – Contained in this category are jewelry stores, clothing shops and hair and spa salons.

Map 10-1 Downtown Dover Target Area



The unique character of businesses found in this Downtown area stems from the fact that most of the firms offer specialty products and services that are significantly different from those found in other areas of the City. In fact, the existence and success of other economic environments has been a precluding element in the development of larger merchandising firms in the downtown area. Other challenges such as the perception of inadequate parking, personal safety, and street lighting has been cited as impediments to further economic vitality in the retail sector throughout Downtown Dover. In addition, many merchants have voiced concern over the basic need for increased coordination between merchants in the downtown community.

In 2006, the Greater Dover Committee hired HyettPalma, a consulting firm specializing in downtown revitalization, to put together an economic enhancement strategy for the

Downtown. In formulating this study, the consultant met with various interest groups to develop a set of strategies to revitalize Downtown.

One of the chief recommendations brought forward by the HyettPalma study was to consolidate the three key organizations aimed at revitalization of downtown: Main Street Dover, Downtown Dover Development Corporation, and Dover Parking Authority.

The implementation of this consolidation is currently underway and was effective July 2008. Under the consolidated organization, called the Downtown Dover Partnership, the City staffs the Partnership through the newly created Economic Development Office within the Department of Planning and Inspections. A board oversees the work of five committees aimed at different aspects of downtown revitalization. The consolidated partnership is expected to provide stronger leadership and better coordination of activities related to downtown revitalization.

Office space in the Downtown area hosts both government workers as well as private users composed mainly of law firms, professional offices (accounting, architecture, engineering, and medical services), and banks. The private office firms in the Downtown area have enjoyed a long history of success; however, the growth in this sector of the downtown economy has been limited by the enormous growth potential and benefits of office uses in outlying areas of the City. Targeted firms for development here include medical and legal offices, with a focus on matching or exceeding the amenities found at other office locations in order to draw new firms. Because of Dover's unique situation as the capital, this is an opportunity for public agency leases to be used to leverage new development.

Although not previously considered a part of the Downtown Dover, the area known as the West Side is an area where economic development opportunities and challenges are numerous. The West Side is located immediately to the west of the central downtown area and comprises the land around the intersections of Loockerman Street, Kirkwood Street, West Street, Forrest Street and Clarence Street. To the south, the railroad corridor runs through the center of the west side. Like the Downtown area, the West Side consists primarily of small-scale retail establishments as well as some light manufacturing firms. However, there has been an identified issue of vacant storefronts, vacant lands, and a lack of economic vitality in this area.

In 2000, the City contracted consultant firms Gannett Fleming, Inc. and Urban Planners to conduct a study to determine the vision for how the West Side of Dover's downtown will be shaped and developed for the future. This strategic plan focused on the revitalization of the West Side area and reintegration of this area into the overall urban fabric of downtown Dover in two phases. Phase I called for actively pursuing public and private partnerships and civic interest groups to occupy the vacant areas in the West Side. These include privately owned office space redevelopment, educational institutions such as Wesley College, and relocation of the Post Office from Loockerman Street. The plan also raised the issue of the former Capital Scrap yard site and developing this facility with a mix of office and flex space. The plan incorporated the cooperative efforts of the City, the Downtown Dover Development Committee and Main Street Dover (now joined under the Downtown Dover Partnership) and the Kent County Economic Development Partnership (KCEDP) to reintegrate events and activities throughout this area.

Phase II of the plan called for infrastructure development in order to create a “neighborhood” appeal to this area by providing public parking areas, pedestrian and bicycle facilities and a unified streetscape plan to harmonize Downtown Dover.

The cleanup of the Capital Scrap yard property was completed in 2008 and Delaware Department of Natural Resources & Environment Control (DNREC) will continue to monitor the area for a period of two years to evaluate the land to ensure that any remaining pollutants do not taint groundwater.

The City has also been working on a strategic plan for the development of the area surrounding Clarence Street. The plan calls for the extension of Clarence Street from North Street through to Forest Street. The area between the extension of Clarence Street and the railroad tracks would be developed as a mixed-use office area. A new day care center recently opened on North Street just west of the railroad tracks, and a 20,000 square-foot office building is planned just west of the daycare center. These projects may provide the catalyst for further redevelopment of this area.

Industrial, Commercial, Technology and Institutional Areas; Office Parks

As a separate economic component, firms located in Dover’s office parks, industrial parks, and manufacturing facilities account for the many of the City’s employees and production. Together, the firms located in these areas employ well over 5,000 workers from Dover and the surrounding area. Some of the largest manufacturing firms in Dover include:

- Playtex Products and Apparel, the City’s largest private employer, operates two manufacturing facilities in the City and employs more than 1,100 workers.
- The community’s other large manufacturers are Kraft Foods and Proctor & Gamble. These firms make a considerable economic contribution to the City’s economy.

In addition to current economic contributions, business parks in the City are the areas of greatest growth potential and are anticipated to contribute more significantly than any other sector to Dover’s future economic development and sustained viability as an urban center. This development potential is due mainly to the high amount of unutilized land currently available in Dover for this use. The following table (Table 10-1), adapted from the Central Delaware Economic Development Council, displays some information about the established office and industrial sites located in Dover.

In addition to these sites, a considerable amount of unused land has the potential to be devoted to industrial and manufacturing uses, exists outside of the designated office and industrial parks and within potential annexation areas.

Table 10-1: Business and Industrial Parks and Sites – Dover, DE

Name	Location	Size	Available Space	Key Tenants
Kent County AeroPark	Horsepond Road	163 acres	19 acres	Discover Card, Monster Racing, Independent Newspapers, Mid-Atlantic Packaging
Enterprise Business Park	Commerce Way & Beiser Boulevard	100 acres	9 acres	Capitol Cleaners, FedEx, Delaware Federal Credit Union,
Stover Professional Campus	Bay Road	38 acres	38 acres	Mainstay Suites
Tudor Industrial Park	S. Little Creek Road	21 acres	0 acres	Control Tech., S.P. Computers
McKee Business Park	McKee Road	76 acres	6 acres	Hirsh Industries, State of Delaware Lottery Office, WDSD/WDOV
Eden Hill Farm TND: Professional Office, Medical & Financial District	South side of North Street (Banning Street)	25.7 acres	25.7 acres	Medical, Surgical
Garrison Oak Technology Park	White Oak Road	389 acres	389 acres	N/A
Blue Hen Corporate Center	Bay Road	437,000 S.F.	225,000 sq. ft.	Aetna US Healthcare
Lafferty Industrial Park	Lafferty Lane	60 acres	60 acres	Under plan development

Source: City of Dover, Dept. of Planning and Inspections & Central Delaware Economic Development Council, 2008

As shown, the City currently hosts hundreds of acres of developable land ready for industrial, office and manufacturing uses. In fact, the diverse location and size of the available land makes many of these areas suitable for and accommodating to innumerable firms with various specialties. However, economic sector targets have been set by both the City itself as well as Kent County and the State of Delaware regarding the desired use of these developable areas. Currently, the recommended sectors for unutilized or underutilized industrial lands include life sciences research and technology production, microelectronics research and development, specialty metal and plastic manufacturing, specialty paper and fabric manufacturing, specialty food and beverage production, and administrative support services. In addition to these sectors, the City has recognized the medical profession and its

related fields, as well as the hospitality/tourism industry as beneficial to the general economy of the area. The placement of firms with these specialties in the currently unused industrial spaces in Dover would maximize the economic development potential of those spaces and would bring a high number of skilled and professional jobs to the City. This event would not only raise average wage and salary figures for Dover's workers, but it would also help to decrease the outflow of skilled workers to urbanized areas to the north.

Commercial Corridors and Centers

The City of Dover offers a large commercial sector that serves the entire region. These retail firms are located in long strands of commercial parcels situated adjacent to the two major transportation arteries. The most prominent is the US Route 13 commercial corridor, located in the eastern portion of Dover and running north-south through almost the City's entire length. Along this corridor are two major commercial centers: Dover Downs/Dover International Speedway and the Dover Mall. Dover Downs/Dover International Speedway, which hosts an auto racetrack for NASCAR events, a horse track, a casino, and a hotel, brings a significant number of visitors and tourism dollars into Dover and the State of Delaware. The Dover Mall, a commercial center comprising dozens of individual commercial activities, also brings many regional consumers into Dover from around the region. In addition to these two major commercial firms, several "big box" retail establishments make their home along the US Route 13 commercial corridor including Target, Sam's Club, Wal-Mart, K-Mart, Kohl's, and Best Buy. In addition, large-scale hardware and home improvement warehouse stores are represented, including Lowe's and Home Depot. The corridor also hosts dozens of chain restaurants as well as two large-scale supermarkets and a diverse mix of specialty firms.

Since the *2003 Comprehensive Plan Update*, the City has seen significant growth in the hotel sector with an addition of 10 new hotels. This growth is due in part to the expansion of Dover Downs Hotel and Casino/Dover International Speedway, Dover Air Force Base (DAFB), and increased tourism in the Dover metropolitan area.

During the last twenty years, a second commercial corridor has developed and become increasingly defined in Dover along Route 8 in the western section of the City. For the most part, this commercial area hosts a mixture of supermarkets and neighborhood commercial firms that provide specialty services and products that draw consumers from the City and immediate area. However, this corridor continues to develop commercially and may be a well-defined, uniform commercial area in the near future. Implementation of the Corridor Overlay Zone, a zoning overlay adopted in the early 1990s, has altered the appearance of the Route 8 commercial corridor by keeping the buildings closer to the road to maintain the small town, pedestrian atmosphere, rather than the conventional commercial strip.

In 2005, Eden Hill Farm was initiated as a Traditional Neighborhood Design (TND), consisting of a residential district, a professional office district, and a commercial district for emerging medical and retail sectors. Eden Hill Farm, recognized by the US Department of Agriculture as a "National Bicentennial Farm," is on the National Register of Historic Places. The Eden Hill Farm TND is being developed in accordance with a General Overall Master Plan and Comprehensive Design Standards Manual (Pattern Book) to create a unique mixed neighborhood. The construction of Eden Hill Farm is underway. The Eden Hill Medical

Center opened to the public in fall 2008. Construction of the first housing units in the residential portion of Eden Hill also began in fall 2008, after more than a year of infrastructure improvements.

Garrison Oak

The Garrison Oak Tract was purchased by the City, with funding from the State, in 1999 and zoned as IPM-2 (Industrial Park Manufacturing Zone-Technology Center). The funding for site was allocated through the State's FY 2000 Bond Bill, and the epilogue language specified that the site be used as a "high technology industrial park." The epilogue language also required the City to enter into a Memorandum of Understanding with the State regarding the use of the site. The City of Dover, Kent County and the State of Delaware developed and signed the specified Memorandum of Understanding in 1999. Its location on White Oak Road with potential access to State Route 1 has been identified by the Dover and the State as a "potential location to promote economic activity."

The Garrison Tract Commission was established by a resolution of the Dover City Council to study the feasibility of mixed development within the IPM-2 zone for the nearly 400 acres of land. Garrison Oak is an ideal location for large technological/green industry firms that require lot sizes of over 20 acres. The Commission concluded that while the area was not ready for development, certain measures and actions could be taken to make the site "shovel-ready" including the creation of a Master Plan, road improvements along White Oak Road, installation of a sewer pump station and infrastructure placements/improvements to bring basic utilities to the site. It is estimated that, once developed, the site would generate approximately 1,900 permanent jobs in the production occupations field. The project was ranked as the second highest-priority proposal by the Kent CEDS Committee and is consistent with the Delaware CEDS goals related to diversity of businesses, collaborative networks, and infrastructure.

Tourism Industry

The City continues to serve as a central location for cultural and historic resources that draw tourist and tourism dollars from both the region and the nation. Locations and institutions that contribute to this sector include:

- *Historic District* – The City of Dover has two historic districts listed on the National Register of Historic Places and one local historic district. Dover's defined and well-maintained historic district with The Green as its focal point, serves as a beautiful and rich example of nineteenth century residential and institutional architecture and community design. Both tourists and architectural experts visit this area for both its informational value and its aesthetically pleasing environment.
- *First State Heritage Park* – Established as a state park in 2004, this "park without boundaries" links historical and cultural sites in the City of Dover, houses Legislative Hall, the Delaware Public Archives, the State House Museum, the Johnson Victrola Museum, the Delaware Archaeology Museum, the Museum of Small Town Life, the Delaware Visitor Center, the Biggs Museum of American Art, and Woodburn House. The First State Heritage Park represents a partnership between the Delaware Department of State, the Delaware Department of Natural Resources and

Environmental Control, and the Delaware Economic Development Office. Legislative Hall and Delaware Public Archives draw many hundreds of educational visitors to Dover each year. In addition to serving as important historic resources for the state, the State House and Archives are also home to countless informational resources for policymakers and legal experts across the nation.

- *Museums* – Quite a few museums make their home in Dover, including the Delaware Agricultural Museum, the Delaware State Police Museum, the Air Mobility Command Museum at the Dover Air Force Base, the Victrola Museum, and others. These cultural centers draw tourists and students to Dover and bring attention to the City's importance as a cultural center in the region.
- *Dover Downs/Dover International Speedway* – The Dover Downs Hotel & Casino/Dover International Speedway has a racing facility that holds harness horse racing and NASCAR events. The Sprint Cup track is now known as Dover International Speedway, and the Dover Downs name is used for horse racing events. The Hotel & Casino opened in fall 2007 with an expanded hotel facility for a total of over 500 rooms, making it the largest hotel in the state. The video lottery at Dover Downs, along with live entertainment and a variety of dining and retail opportunities, attract visitors to the area year round. In spring 2008, Dover Downs opened a 6,000 square foot spa & salon. Dover International Speedway hosts two major auto-racing events each year, one in the spring and another in the fall. These National Association of Stock Car Auto Racing (NASCAR) events draw many thousands of tourists and consumer dollars to Dover twice each year.
- The Schwartz Center for the Arts was originally constructed in 1904 and known as the Dover Opera House. It was later expanded it into a movie theater in 1923 and closed in 1982. After extensive renovations, the Center opened again in 2001. In 2004, a partnership between Wesley College and Delaware State University formed to maximize usage and position the historic treasure as the premiere performing arts center south of Wilmington. The Center holds numerous performances throughout the year and is the home of the Dover Symphony Orchestra.

Events

Every year numerous events are held around the City, ranging from fireworks on 4th of July, Art Festivals, and Christmas Caroling on The Green to ethnic parades and events such as St. Patrick's Day, First Night Dover, and the African American Festival.

One of the more popular events in the city is Old Dover Days. This festival has existed in one form or another in Delaware's Capital City, Dover, since 1933. It is traditionally held on The Green and Legislative Mall, two beautiful outdoor parks in our historic downtown district. Traditional elements and new components bring in thousands of visitors each year with attendance reaching over 15,000. Old Dover Days is a celebration of the First State's Capital City and features a parade, maypole dancing, food court, re-enactors, walking tours, free entertainment and more.

The African American Festival began in 1989 as a craft show and is established as a tradition in central Delaware. Steeped in the culture of Africa and America, this entertaining and historical event is viewed by many as the most dynamic event of the summer season in Dover. This event has grown tremendously over the years, with an audience of more than 20,000 participants. Local entertainment includes gospel singing, marchers, steppers, jazz musicians, comedians, historians, and the Sankofa African Dancers and Drummers of Dover.

Public and Non-Profit Sectors

The City of Dover hosts major components of public sector employment that serve the state, the region and the nation. The institutions comprising this sector of employment and service include:

- *State Government* – The State of Delaware employs 10,148 people in Dover. Major state executive agencies, legislative support offices, public education and other state institutions and their employees make their home in Dover.
- *Bayhealth Medical Center* – Comprising locations in Dover and Milford, this medical service institution employs over 2,400 skilled employees who live and work in the Dover metro area. Since 2002, Bayhealth has enlarged its medical campus to provide expanded neonatal care and began to provide cardiac surgery services.

Higher Education

The City of Dover is home to four (4) higher education facilities, including Delaware State University, Wesley College, Delaware Technical & Community College, and Wilmington University (formerly Wilmington College).

- *Delaware State University (DSU)* – The University was founded in 1890 as the State College for Colored Students and began as a land grant college for agriculture and mechanical arts. Over the last 115 years, it has evolved into a fully accredited, comprehensive university with a main campus located on US Route 13 in Dover and two satellite sites that encompass six colleges and a diverse population of undergraduate, graduate and doctoral degree students. The current student population of DSU is 3,756 and encompasses 38 states and 31 countries.
- *Wesley College* – The oldest private college in the State, Wesley College was established in 1873 as a preparatory school. The College has a covenant relationship with the United Methodist Church and offers 30 bachelors, four associates, and master's degrees in nursing, education, business administration and environmental science in a multi-denominational, multi-cultural campus setting. Wesley is recognized as a premier nursing program in the state and its close relationship with Bayhealth provides valuable education and experience to its students. The College is located within historic Downtown Dover and is the only higher education institution within walking distance of the Downtown business district. The current student population of Wesley College is 3,200 from 30 states and 18 countries.
- *Delaware Technical & Community College, Terry Campus (DTCC)* – DTCC was created through House Bill 529 in 1966 to create the first community college in the

state. The first campus opened in 1967 near Georgetown, Delaware. In 1968, the northern campus in New Castle opened and expanded to two campuses in 1974. The Terry Campus in Dover opened in 1972 and was named after former Governor Charles L. Terry who signed House Bill 529 into law. DTCC is a statewide multi-campus community college that provides open admission, post-secondary education at the associate degree level. The College offers comprehensive educational opportunities including career, general, developmental and transfer education, lifelong learning, workforce education and training, and community services. The current student enrollment of DTCC, Terry Campus is 3,891.

- *Wilmington University* – Wilmington University began as Wilmington College in 1968. In 2007, the institution was granted university status by the Middle States Association of Colleges and Schools. The first campus of Wilmington University in Dover opened at the Dover Air Force Base (DAFB) in 1974 followed by the Dover Campus in 1983 and then moved to its current location at US Route 13 and Scarborough Road. The current student enrollment at the Dover Campus is 1,768 and DAFB Campus is 221.

With a combined student population of 12,836 and employment of over 1,400 Dover-area residents, the colleges and universities in the City offer a vast pool of an educated labor force for the metropolitan area.

Dover Air Force Base

The Dover Air Force Base (DAFB) is one of the largest employers in the City, second only to the State of Delaware. Located on approximately 3,900 acres in southeastern Dover, it plays a major role in national military service, and provides a strong consumer base for the City of Dover. The Base's workforce consists of 6,100 military personnel (4,300 active duty, 1,900 reservists and 1,800 civilians). It also supports approximately 5,100 family members. With an economic impact of over \$400 million a year in a 50-mile radius, DAFB provides employment and economic benefit to the surrounding community.

The City also protects the Base's mission by restricting development in areas around the facility with the Airport Environs Overlay Zone (AEOZ). This zone restricts development that would be subject to aircraft noise and conflict with the crash hazard zones. When questioned about the City's policy of protecting the Base's mission, 100% of all respondents to the questionnaire agreed that the City should protect the viability of the Base.

Public Sector Expansions

As the City grows, public and private services expand to meet its citizens' needs. Dover is strengthening its Downtown area with an expansion of the Dover Public Library. The Library, currently located on South State Street, provides full library services to all residents of Kent County. In 2004, the Library Facilities Plan was completed and recently added to the Capital Improvements Plan 2008-2012. The project is also currently in the design phase. In order to provide improved services to residents, the City has chosen to build the new library on land adjacent to and just east of City Hall, currently housing a surface parking lot and the Post Office. (The Post Office will be moving to an alternative location.) The new, larger multi-story facility will provide much-needed space for expanded services. Among

them will be increased space for a more extensive collection of all materials, a business resource area, a consumer health consultation area, quiet study areas, conference rooms, a café, a teen resource area, and an expanded children's services area that will have larger spaces for story times and other activities. It is anticipated that there will be space for many more public access computers, along with a computer-training center. The new library will also function as a community center, with larger meeting room spaces and an assembly areas that is capable of hosting a variety of events.

All of these features, and more, will make the City's library a popular destination for visitors to Central Delaware and especially to the historic government complex. The location will enable the library to play a major role in the variety of annual events that occur in Dover, e.g., Old Dover Days, the African American Festival, etc. It is anticipated that the new library will be a catalyst in the revitalization of Downtown Dover.

The State of Delaware has recently begun construction of the new Kent County Courthouse on the site of the former O'Brien County Office Building. In 2004, Kent County opened its new administrative office building at 555 Bay Road, adjacent to Blue Hen Corporate Center. The State of Delaware also renovated the former Haslet Armory on William Penn Street, and it now houses the Office of Management and Budget.

Dover's Economic Strengths and Areas for Improvement

In the process of creating an economic development strategy plan for the City, previous and current studies were examined. State of Delaware's Comprehensive Economic Development Strategy and the Kent County's Economic Development Strategy Initiative, Downtown Dover Economic Enhancement Strategy, and Garrison Tract Commission Report are some of the studies encapsulated in this plan.

Table 10-2: Dover Strengths and Areas of Improvement

Dover's Strengths	Dover's Areas for Improvement
Central location with easy access to metropolitan and resort areas	Lack of high-paying jobs
Favorable tax structure (no sales tax, low property taxes)	Severe shortage of affordable housing
Rural character with access to cultural attractions and open space	Inability to attract diverse industries
State and local government support of business	Insufficient transportation system, including roads, public transit, and access to interstate
Strong education base with 4 colleges and universities	Inability to retain graduates/educated workforce
Delaware State University as an emerging high-tech research incubator	Aging population
Diverse population with low crime rate and a safe environment	Lack of social/recreational activities for young professionals, singles, and mid-career couples
Family friendly	

Source: CEDS Summary

Funding Economic Development

In order to fundamentally change the economic horizon of the City, adequate funding opportunities must be made available. There are many funding sources, both state and federal, available that the City can utilize to encourage recruitment, retention and expansion of businesses within Dover.

Tax Increment Financing (TIF) – TIF is a method of targeting tax revenue to a specified area of the municipality (development district) to finance improvements. The district is usually an area the municipality wishes to develop for economic development reasons such as a downtown in need of revitalization, a parking garage or a commercial or industrial park. After the district is established, depending on the plan, tax revenue for assessed value gained above the base year of the district is allocated to the district. The improvements in the district may be made over time as the tax revenues come in or can be financed with bonds with the tax revenue paying the bond's debt service (principal and interest). Development districts are dissolved per the initial plan, usually upon completion of an improvement, a set time-period or, in the case of bond financed improvements, final payment of the debt.

Technology Based SEED Fund (TBSF) – Delaware's TBSF which fosters the creation of technology-based start-ups in fields such as biotechnology, advanced materials, clean energy, information technology, and new chemical applications. The goal of the fund is to invest in "gazelle-like" entrepreneurial projects positioned for fast growth and wealth creation. It provides equity financing up to \$50,000 (TBSF I) or \$100,000 (TBSF II). TBSF I funding can be used for start-up related expenses such as lab equipment, working capital, office space, and patents, etc. TBSF II funding can be used for a later stage in the life of a start-up company for expenses related to prototype development, prototype testing costs, etc.

Tax Exempt Bond Financing – Tax exempt bond financing provides statewide financial assistance to new or expanding businesses, governmental units and certain organizations that are exempt from federal income taxation (collectively, "assisted persons") by issuing tax exempt bonds and lending the proceeds of such bonds to these assisted persons. Tax-exempt bonds bear lower interest rates than comparable taxable bonds, because the interest paid to bondholders is exempt from federal and Delaware income taxes. The Delaware Economic Development Authority (DEDA) is able to pass on this lower interest rate to the assisted persons. The tax-exempt bonds that DEDA issues are "revenue bonds"; thus, DEDA pays the principal and interest on such bonds solely out of loan repayments that it receives from assisted persons. Tax-exempt financing may be cost effective for projects involving the issuance of more than \$750,000.

The availability of tax-exempt status for bonds issued to finance a given project is governed by various provisions of the Internal Revenue Code of 1986 (the "Code") and the regulations and administrative rulings (the "Regulations") of the Internal Revenue Service. The Code and Regulations impose numerous, detailed restrictions on the amount of tax-exempt bonds a state may issue. These regulations may be issued for a specific project and on the permissible uses of the bond proceeds. These rules are considerably more detailed than the brief descriptions that follow. In general, eligible projects include the following major categories:

1. Qualified 501(c)(3) Bonds – Tax exempt bonds can be issued for the benefit of organizations that are tax exempt under Section 501(c)(3) of the Code, if 95 percent of the net proceeds of the bonds are used by the organization in furtherance of its exempt purpose. Depending on the project being financed, certain other limitations may apply.
2. Exempt Facility Bonds – Tax-exempt bonds can be issued to finance certain types of utility projects, including sewage facilities, solid waste disposal facilities, facilities for the local furnishing of electricity and gas and other types of facilities.

Delaware Strategic Fund – The Delaware Strategic Fund represents the primary funding source used by DEDO to provide customized financial assistance to businesses. For businesses considering locating in the State of Delaware, financial assistance may be provided in the form of low interest loans, grants, or other creative instruments to support the attraction of businesses that pay sustainable wages. Assistance terms are negotiated specific to each firm's individual needs and situation. The Delaware Strategic Fund also represents the primary funding source used by for SBIR Bridge Grants and Brownfield Grants.

Economic Development Administration, US Department of Commerce – The Economic Development Administration (EDA) was established under the Public Works and Economic Development Act of 1965 (42 U.S.C. § 3121), as amended, to generate jobs, help retain existing jobs, and stimulate industrial and commercial growth in economically distressed areas of the United States. EDA assistance is available to rural and urban areas of the Nation experiencing high unemployment, low income, or other severe economic distress.

In fulfilling its mission, EDA is guided by the basic principle that distressed communities must be empowered to develop and implement their own economic development and revitalization strategies. Based on these locally- and regionally-developed priorities, EDA works in partnership with state and local governments, regional economic development districts, public and private nonprofit organizations, and Indian tribes. EDA helps distressed communities address problems associated with long-term economic distress, as well as sudden and severe economic dislocations including recovering from the economic impacts of natural disasters, the closure of military installations and other Federal facilities, changing trade patterns, and the depletion of natural resources. Direct project grants and loans are available and range in maximum granted or borrowed.

Part II – Plan Goals: Economic Development

Goal 1: Attract and Retain High-Paying Quality Jobs by Targeting Large Firms and Businesses to Major Growth Areas in the City

Recommendation 1: Adopt Economic Development Strategies

- Recognize and adopt the Dover portion of the Kent County Economic Development Strategy of 2007:
 - Define an Economic Development Vision for the City including a long-term economic portfolio, land/facility requirements and workforce preparation

- Work closely with Economic Development Agencies including Kent County, KCEDP and the State of Delaware
- Recognize and adopt the Dover portion of the Comprehensive Economic Development Strategy (CEDS) of 2006:
 - Create a diversity of businesses
 - Maintain and foster workforce development
 - Build private-public partnerships (P3) to encourage coordination between private, state, county and City stakeholders
 - Utilize public private partnerships to fund infrastructure development and improvements

Recommendation 2: Hire an Economic Development Professional to Attract and Retain Businesses within the City of Dover

Hire an economic development professional, under the Director of Planning and Inspections, who would serve as executive director to the Downtown Dover Partnership as well as perform the following citywide economic development functions:

- Ongoing interface with existing companies (needs assessment)
- Small business development (target entrepreneurial companies)
- External marketing and lead management (networking relationships)
- Secure bonds/grants (industrial revenue bonds, other sources)
- Management of facilities (industrial park development)

Goal 2: Revitalize Downtown Dover as a Vibrant Town Center Integrating the Hospital, the Colleges & Universities, the State and City Governments with Business (Retail and Professional), Housing and Tourism

Recommendation 3: Continue to Develop and Promote Incentives for Downtown Redevelopment

Understanding the interest of the public for preserving and enhancing the look and feel of Downtown Dover, evaluate the slate of incentives for redevelopment within the downtown target area, and continue to add incentives that will encourage a balanced mix of uses within the City's core.

Recommendation 4: Adopt 2006 Downtown Dover Economic Enhancement Strategy (DDEES) (Hyett-Palma Strategy)

The following are some selected recommendations of the strategy which may be assigned to the City's Economic Development Office or Downtown Dover Partnership

- Staff the Downtown Dover Partnership.
- Convene Downtown Dover Forum quarterly.
- Hire economic development specialist to assist downtown partnership.
- Explore tax increment financing district for Downtown.
- Form an arm of the Downtown Dover Partnership to pursue State funding
- Evaluate the feasibility of and develop a funding plan for three Cameo Infrastructure Initiatives:
 - St. Jones River Park
 - Downtown parking garage

- Redevelopment of Museum Square.
- Work with businesses in the Downtown Core District to keep market driven hours, continue to offer specialized products and services, properly maintain building space (inside and out), and enhance window displays.
- Form and operate Business-to-Business Roundtable.
- Operate both internal and external business recruitments, as per recommendations of the DDEES.
- Heavily market all incentives to all Downtown business and property owners, with emphasis in the Downtown Core District.
- Create and operate a one-stop-shop in City Hall.
- Create and publish a “how to” brochure for investors.
- Retain a marketing professional, prepare media relations campaign, and launch campaign, as per recommendation of the DDEES.
- Design and implement Downtown image and cross-advertising campaign, as per recommendation of the DDEES.
- Encourage one-on-one consulting with the business owners. This means assigning a Downtown professional to meet individually with Downtown business owners on a regular basis to discuss the concerns and needs of each business owner and to identify service providers/incentives that can help address those needs.
- The Downtown professional should have a highly visible presence on the street, should drop in and visit with the business owners at least once per month, and should call on new business owners within their first week of business.
- Businesses should first be recruited for the Downtown core using an “internal approach.” Meaning working with current business owners and encourage them to expand or contract current lines and services, expand existing business space, and open new shops.
- After internal recruitment has been established, the “external approach” of business development should be used.
- A media relations campaign should be launched for Downtown.
- A year-long advertising campaign should be created for Downtown.

Recommendation 5: Create a Visual Master Plan and Form-Based Code for Downtown

Develop, through a public process, a master plan for the Loockerman Street area that is visually and design based. Subject the master plan to public hearing before Historic District Commission and Planning Commission. Adopt the Plan as a form-based code and require that any plan consistent with the overall master plan would be subject to only administrative review.

Recommendation 6: Support Mixed-Use Development

Promote zoning districts and regulations that support the traditional mixed-use nature of the Downtown area.

- Ease restrictions on Loockerman Street to encourage personal and service oriented businesses.

- Design a “One-Stop Shop” through the Downtown Dover Partnership to provide technical assistance with the permitting process and other processes necessary for opening a Downtown business.
- Create an Arts Co-op/ Arts & Entertainment District for the Downtown area and recruit artists to live and work in the area.

Goal 3: *Ensure that Zoning Requirements Encourage the Uses Desired and Do Not Create Impediments to Desired Business Growth*

Recommendations 7: Review and Modify Zoning Districts to Ensure that Desired Uses Are Encouraged and Incompatible Uses are Tightly Controlled

- Review and realign existing industrial, office and commercial zones to ensure that industrial uses are separated from incompatible uses and that zoning districts support the economic development strategy.
- Separate light and heavy manufacturing to prohibit non-manufacturing entities within the heavy manufacturing zone.
- Evaluate and update home occupation requirements in the Zoning Ordinance to encourage infill and better align uses.
- Better define permitted and conditional uses in commercial and industrial zones.

Recommendation 8: Protect existing establishments from encroachment:

- Protect existing industrial, office park, and manufacturing establishments from encroachment by incompatible land uses, which could result in nuisance complaints, hazardous situations, and human conflict via regulations reducing/eliminating development surrounding these areas.
- Protect Dover Air Force Base (DAFB) from encroachment by preventing incompatible commercial and/or residential development east of SR 1 and within the Airport Environs Overlay Zone (AEOZ).

Goal 4: *Create an Environment For Long Term Economic Investment in Dover Focusing on Green Technology and Entrepreneurial Businesses*

Recommendations 9: Separate light and heavy manufacturing to prohibit non-manufacturing entities in that respective zone.

Goal 5: *Actively Market Garrison Oak*

Recommendation 10: Develop a Master Plan for Garrison Oak that allows for interested parties to expedite the planning and building phases including the following:

- Change the minimum lot size requirements for the IPM-2 zone.
- Acknowledge the need for infrastructure improvements and compose a cost estimate for such improvements in order to make the site “shovel-ready.”
- Under the direction of the Economic Development Manager, create a committee for marketing Garrison Oak.
- Pursue cooperation with chairs of cluster groups at the State level of economic development with the Dover Economic Development Manager.

- Ensure that the intent of the purchase as expressed in the epilogue language of the Delaware FY2000 Bond Bill is incorporated in the planning of the site as a “high technology industrial park.”

Recommendation 11: Market Garrison Oak as a potential site for green, alternative and low-carbon energy plant(s), and for large technological and manufacturing firms that support these industries.

Recommendation 12: Explore the Creation of a Tax Increment Financing (TIF) District for Garrison Oak

Explore the creation of a TIF overlay district for Garrison Oak allows the City to fund the necessary infrastructure improvements that will enable the City to market the site as a “shovel-ready” technology park.

CHAPTER 11

HOUSING & COMMUNITY DEVELOPMENT PLAN

It is important to consider Dover's development over the past five years in order to establish a comprehensive housing plan for future growth. This chapter will anticipate the effect of City services, incentives and policy on housing needs and strategies as well as goals and recommendations to provide quality safe and affordable housing for all income and age levels.

Part I - Housing Demographics

According to the Delaware Population Consortium, the total population of Dover in 2007 was 35,200. This represents a 9.8% increase from the official 2000 Census figures. Dover had 13,357 dwelling units in 2000, of which 12,340 were occupied. This represents a 26% increase in total units available. Of the occupied units, 52% were owner-occupied and 48% were rental units, which was a 2% increase in occupied rental units from 1990. Average mortgage cost increased by 93% to \$1,481 per month; while average rent increased 27% to \$599 per month. The number of households where rent equaled more than 35% of income increased to 31% of the rental population. There was a 6% decrease in the average size of owner-occupied households with a drop from 2.65 in 1990 to 2.5 in 2000. There was a 4% decrease in the average size of renter-occupied households with a drop from 2.28 in 1990 to 2.19 in 2000. Table 11-1 compares the general housing characteristics of the City of Dover in 1990, 2000, and the period since the last Comprehensive Plan update.

While the data from the US Census is eight years old, current data specific to the City is unavailable until after Census 2010 has been completed. Updates from the Census 2010 will be added once that information is made public. However, the Delaware Population Consortium is able to provide population data and projection from 2006 onwards.

This table, compiled from 2000 Census Data and City of Dover building permit records from 2003-2007, illustrates the housing unit type mixture in the City.

Table 11-1: Housing Unit Mix, City of Dover, 1990 – 2007

	2000		1990-2002		2003-2007	
	Units	Percent	Unit Starts	Percent	Unit Starts	Percent
Single Family Detached	6,684	51%	1,178	43%	596	41%
Single Family Attached	2,558	19%	576	21%	196	13%
Multi-Family	3,942	30%	1,016	37%	678	46%
TOTAL	13,184		2,770		1,470	

Source: US Census; City of Dover Department of Planning and Inspections

As is evidenced in Table 11-1, Dover experienced a considerable amount of new residential development throughout the last five years. The most prevalent housing type in the City is

still the single-family detached dwelling on average per year. The trends, evident in the table, show the fastest growing segment being multiple family units, which constitutes 46% of the total number of permits units permitted from 2003 to 2007. In between the single-family detached (primarily owner occupied) and the multi-family (predominately renter occupied) falls the more affordable single family attached dwellings, made up of townhouse and duplex units. This type constitutes the smallest segment of the housing mix under construction in recent years.

Part II - Existing Land Use and Development Activity

Since the publication of the *2003 Comprehensive Plan Update*, residential development within the City of Dover has been dominated by single-family homes. However, there is an increase in the number of single family attached and multi-family housing being built. The tables below show the residential site plan subdivision approvals and residential housing starts, or permits, issued respectively from 2003 to 2007.

Residential development spiked from 2003 – 2007. This increased included new housing developments as well as the construction of the privatized student housing projects at Wesley College and Delaware State University.

Table 11-2: Residential Approvals by Year 2003 - 2007

Residential Units Approved by Type 2003 – 2007						
Year	2003	2004	2005	2006	2007	Total
Single Family Detached	97	414	18	440	107	1,076
Single Family Attached	281	315	10	404	197	1,207
Multi-Family	368*	216	120	216	362	1282*
Totals	446	945	338**	1,060	666	3,755**

*300 additional units are classified as apartments but are dormitory apartments at Delaware State University

**an additional 190 unclassified units in Maidstone included

Source: City of Dover Department of Planning and Inspections, Annual Reports

Table 11-3: Residential Housing Starts 2003 – 2007

Year	2003	2004	2005	2006	2007	Total
Single Family Detached	126	176	218	78	72	670
Single Family Attached	2	54	22	118	112	308
Multi-Family	380*	0	72	82	144	978
Totals	508*	230	312	278	328	1,956

*300 units are classified as apartments but are dormitory apartments at Delaware State University

Source: City of Dover Department of Planning and Inspections, Annual Reports

Currently, the City has fourteen residential zones. The majority of the residential zones support single-family detached residences while others allow for a mix of housing styles and densities including single family attached homes such as duplexes and townhomes, apartments, and senior housing. The condominium format of ownership has been proposed for several projects.

Even though the residential building activity has focused on new single family detached homes, the City along with many residents and developers have expressed interest in multi-family developments to increase growth in high-density areas as well as mixed-use development. Another example of a mixed-use housing type is the Planned Neighborhood Design (PND). PND offers a mixture of residential housing types in a single development. This provides opportunities for residents to live in a planned neighborhood with reduced setbacks, smaller lots, alleys, porches, public meeting areas, parks for residents, and a variety of housing opportunities located in close proximity to each other. These neighborhoods are designed with pedestrians in mind along with multi-modal streets and sidewalks that also lessen the visual impact of garages and automobiles. Dwelling units within the PND are encouraged to be developed with a variety of architectural styles and layouts. The City is continuing to use the PND as the leading design style with more flexibility in varied housing stock and layouts. Examples of PND developments within the City include Clearview Meadow, Cannon Mill, Stonebrook East, Stonebrook West, DoveView Senior Housing, Luther Village Senior Housing, and Village of Westover.

Another type of development zone within the City is the Traditional Neighborhood Design (TND) adopted in November 2004. TND includes a variety of housing styles with multiple density and land use types in a defined area. The variety of uses permits commercial establishments and civic buildings to be located within walking distance of private residences. A TND is served by a network of multi-modal paths, streets and lanes suitable for pedestrians and bicycles as well as vehicles. This provides residents the option of walking, biking or driving to places within their neighborhood. Eden Hill Farm TND on the south side of North Street is the first TND in the City. The Residential District of Eden Hill Farm TND consists of 665 dwelling units ranging from single family detached homes to duplex units, townhouses, and multi-unit condominium buildings. This residential area is linked with a grid network of streets, open space and park areas while being located in close proximity to the areas proposed for development in the neighborhood commercial district and professional office, medical, and financial district. The construction of the professional office building was completed in September 2008 and the first townhouse units in the residential area of Eden Hill were started the same month.

Part III - Housing Needs

The City of Dover strives to provide opportunities for quality housing variety and adequate housing opportunities for all economic levels, lifestyles and ages for its residents. The City is committed to encouraging homeownership opportunities to all economic and age levels. To reach these objectives, the City's Community Development Office has prepared the 2005-2010 Consolidated Plan to serve as the principal planning document for identifying the housing and community needs of the City's residents. This document also serves as a requirement for the receipt of federal funds allocated annually to each reporting jurisdiction. The Consolidated Plan approach is additionally the means to meet application requirements for the Community Development Block Grant (CDBG), Emergency Shelter Grants and other similar state and federal funding programs as well as unifying the real estate, homeowner and other stakeholders within the community in order to preserve the existing housing stock and provide safe and livable neighborhoods.

From 1996 – 2006 median home prices in Delaware appreciated by 177% and created a lack of homeownership opportunities in many segments of the population. The City has many programs in place that provide home ownership opportunities to low-to-moderate income City residents as well as promote redevelopment of older neighborhoods. Through funding provided by the Community Development Block Grant (CDBG) programs such as the Homeownership Assistance Program, Housing Rehabilitation Program and First State Resource Conservation and Development Council (RC&D) provide safe and affordable neighborhoods to City residents.

During the community workshops held for the 2008 Comprehensive Plan, the majority of survey participants (61%) stated that there is a scarcity of adequate affordable housing within the City. The same number of participants also felt that there are not adequate opportunities for affordable housing in Dover for a variety of income levels. When asked to rate the desirability of housing types, a significant number of respondents ranked single family homes, townhouses/duplexes and apartment complexes as most desirable with workforce housing and age-restricted communities/housing as second in desirability; mobile homes were least desirable.

Currently there are 1,486 licensed rental properties within the City. Table 11-4 illustrates the breakdown of owner occupied vs. rental properties in the City. Once again, as this data is compiled from the US Census Bureau, more recent data will not be available until after Census 2010 is completed.

Table 11-4: Rental vs. Owner Occupied Housing Status in Dover, 1990 and 2000

	1990	Percent	2000	Percent	# Increase	% Increase
Vacant housing units	585	6%	855	7%	270	46%
Occupied housing units	9,903	94%	12,340	94%	2,437	25%
Owner occupied	5,336	54%	6,454	52%	1,118	21%
Renter occupied	4,567	46%	5,886	48%	1,319	29%
Total Units	10,488		13,195		2,707	26%

Source: US Census

Low and Moderate Income Housing

The City of Dover has a higher concentration of families below poverty levels than both Kent County and the State. This is a function of historical developments and the tendency of lower-income individuals to congregate at urban centers where employment and services are more readily available. The City addresses poverty by encouraging subsidized housing, administering federal Community Development Block Grants (Dover received \$269,266 in CDBG funds in 2008 alone), maintaining zoning ordinances friendly to inexpensive housing types, working with nonprofit and governmental community development organizations, and administering state and local aid to families and individuals. Map 11-1 reflects the Census Block Groups that are designated areas of low and moderate-income concentration.

Although affordability is an issue for all households, most affordable housing policies and programs target households at or below 80 percent of median family income (MFI). Below

that threshold, an affordability analysis typically looks at groups including the extremely low-income (at or below 30 percent), very low-income (between 30 and 50 percent), and low-income (between 50 and 80 percent). Moderate-income households are those between 80 percent and 95 percent. (NOTE: The Low-income Housing Tax Credit program assists rental households below 60 percent of MFI.)

The HUD determined 2007 MFI for a family household of four persons in Kent County to be \$58,700. Using the HUD 2007 MFI for Kent County, Table 11-5 shows household income within each of the income ranges described above.

Table 11-5: Low and Moderate Income Levels, HUD, February 2007

Income Type	Description	Family of 4	
		From	To
Extremely low-income	0-30% of MFI	\$ 0	< \$ 17,610
Very Low-income	31-50% of MFI	\$ 17,611	< \$ 29,350
Low-income	50-80% of MFI	\$ 29,351	< \$ 46,960
Low-income Tax Credit	50-60% of MFI	\$ 29,350	< \$ 35,220
Moderate-income	80-95% of MFI	\$ 38,000	< \$ 55,765
Median Income	100% of MFI	\$ 58,700	

Source: US Department of Housing and Urban Development

Assisted Housing

The City endeavors to provide resources to subsidize housing for low and moderate-income families. Two agencies, the Dover Housing Authority and the Delaware State Housing Authority, share responsibility for providing subsidized public housing to the community. As of 2008, the agencies had contributed a combined total of 558 units. In addition to public housing, federal funds are used to provide an additional 605 subsidized units through three separate programs: Section 8, Section 202, and Section 811. The final segment of assisted housing includes 563 units, which are managed by private concerns under the Low-Income Housing Tax Credit program. A total of 1,726 subsidized units exist in the City of Dover for persons of low-income. The private sector provides an additional 820 low and moderate-income housing units. In total, subsidized housing constitutes 13% of the City's housing stock.

Table 11-6: Assisted Housing

Subsidized Housing Type	Family	Elderly	Total
Public Housing	498	60	558
HUD Assisted	0	360	360
Section 8	190	55	245
Tax Credit	503	60	563
Total	1191	535	1726

Source: City of Dover Department of Planning and Inspections from DSHA information

Special Needs Housing

Persons who are homeless or at risk of homelessness and individuals with disabilities face diverse and critical housing needs. Often having extremely low-incomes, this segment of the population faces major affordability and accessibility challenges. The City recognizes the strain on individuals and the community where adequate affordable housing is not available to such persons.

There are currently two homeless shelters in the Dover area. Shepherd's Place Inc., though outside the municipal boundaries of Dover, operates a 20-bed facility, and the Whatcoat Social Service Agency Ruth N. Dorsey Shelter provides 46 beds. Both shelters allow stays of up to 30 days. The Salvation Army and the State of Delaware also have programs that house homeless individuals in motels. Ken Crest Inc. operates an 8-bed group-home on Walker Road for the disabled. Additionally, several private homes have been converted into group housing for the disabled, contributing a combined total of 22 beds. The Delaware HIV Consortium and the Delaware State Housing Authority cooperate to provide tenant-based rental assistance in "family settings" to people with HIV/AIDS. The program currently serves 16 families and maintains a waiting list of 44 families. These special needs housing throughout the Dover area may receive funding from the City in forms of CDBG to provide temporary shelter food and emergency care in times of need.

Age Restricted Housing

Housing for the elderly population has continued to grow with the expansion of existing facilities and the completion of Luther Village Phase I. There are currently total of 711 independent living senior housing units have been built in the City since 1996. The City has a large number of assisted living providers including Luther Towers, Heritage at Dover, Westminster Village, Owens Manor, Silver Lake, and Courtland Manor. There are more senior independent living facilities in the plan review or approval process such as the Arbors with DoveView Senior Apartments and Luther Village II under construction. Creekstone is completed and Seskinore is under construction in 2008. These new senior housing facilities provide more than the adequate number of housing options for the retirement community. Additionally, Dover has 1,228 dedicated senior-living units, of which 489 are independent living facilities or apartments, 450 are nursing home beds, and 290 assisted living beds. These facilities typically require a substantial entry fee in addition to rental and services fees. There are no publicly subsidized nursing homes in Kent County.

Student Housing

Each of Dover's institutions of higher learning experienced growth over the period of this update though not all provide campus housing. Delaware State University (DSU) is one of two that provides housing for students that prefer to live on-campus. DSU has five traditional dormitories on campus with three "suite-style" facilities. DSU also completed University Village consisting of four buildings with a total of 300 units in 2003. Off campus, the University Courtyard consists of seven buildings for a total of 114 apartment units. Many graduate and post-graduate students also choose to reside off-campus at various Dover and surrounding area housing. For the school year ending May 2008, approximately 2,087 students resided on-campus.

Wesley College is the second of two colleges in the Dover area that provides housing for students. Seven buildings provide housing for undergraduate and graduate students and select faculty and staff. Nearly 1,400 students reside on campus. Since 2003 the number of housing options has increased with the completion of Malmberg Hall & Zimmerman Hall constructed through a partnership with local developers.

Both Wilmington University and Delaware Technical and Community College-Terry Campus are “commuter campuses.” Neither provides housing for its students; however, both do offer a listing of housing selections within the Dover area.

Part IV - Housing Strategies & Programs

The City of Dover strives to develop a housing strategy that serves the entire population. This strategy is manifested in a three-pronged approach. First, the City strives to provide a decent living environment for all income and age groups. As part of providing decent and safe neighborhoods, the City provides programs and funds through its CDBG program to aid extremely low, very-low, and low income (based on MFI) and special needs persons. The second portion of this strategy applies to the moderate and median income individuals where barriers to affordable housing for working families prevent the private sector from providing housing in the middle price range. The third portion of the strategy involves a *Zoning Ordinance* provision for a variety of housing types and the superior design requirements for market rate housing in the City which developers are willing to produce.

As a follow-up to the *1996 Comprehensive Plan*, the concept of a Planned Neighborhood Design (PND) Concept was implemented to provide for a wide variety of housing types to appeal to a wide variety of income levels. Some examples include The Village of Cannon Mills, The Village of Westover, Clearview Meadows, Lexington Glen, and BayTree. These developments have filled a niche for affordable attached housing and have partially addressed the desire of the general public for detached single-family homes.

Traditional Neighborhood Design (TND) was introduced to the City in 2004 with the adoption of a new zoning district. Eden Hill Farm TND consists of single-family and multi-family homes in variety of housing styles adjoining a professional office, medical and financial district, commercial district, and open space areas to make up the design of this unique mixed used neighborhood.

As a CDBG (Community Development Block Grant) entitlement, the City annually prepares an Action Plan which maps the expenditure of federal funds for housing and special needs and low and moderate-income projects. In addition, Community Development Department of the City prepares a five year Consolidated Housing Plan which describes the goals and objectives for next five years. This plan serves as the community’s housing plan and maps strategies. For the purpose of this Comprehensive Plan, the goals and objectives of the Consolidated and Action Plans will be adopted as the housing strategies for the City of Dover. As a flexible document, which is annually approved by the Parks, Recreation & Community Enhancement Committee and City Council, this is the basis of the following strategies. As these plans are updated and approved, they will continue to serve as the housing plan for the City of Dover.

Community Development Block Grant (CDBG) Program

The Housing and Community Development Act of 1992 has authorized that federal funds be allocated to the entitlement community, the City of Dover, to support Community Development activities within the boundaries of the City. The City prepares a five year Consolidated Plan, which describes the goals and objectives, based on the housing and special needs of low and moderate income persons. An Action Plan is prepared annually which maps the expenditures of federal funds based on the goals and objectives of the Consolidated Plan. The Parks, Recreation and Community Enhancement Committee and City Council approve the plan annually which serves as the housing plan for the City of Dover. Following are programs that are funded either fully or in part by CDBG:

Housing Rehabilitation Assistance Program – Annually, the City makes CDBG funds available to qualified homeowners in order to contract work necessary to rehabilitate homes found in violation of the City’s Housing Code. This project assists in preserving the existing housing stock in the City of Dover.

Homeownership Assistance Program – The City of Dover homeownership program is intended to encourage homeownership in the City. The program assists low and moderate-income persons with down payment or settlement cost to purchase eligible properties in the city limits. Assistance is given up to \$10,000 to first time homebuyers and is a forgivable loan if the property is not sold within the first five years.

Dover Community Partnership – The Dover Community Partnership (DCP) an entity created and managed by the Dover Housing Authority, was established in collaboration with several housing and finance agencies, community organizations, and government entities including the City of Dover for the purpose of promoting homeownership in the City beginning with the Downtown area. The DCP has identified a 20-block area in the Downtown Target Area from Loockerman Street north to Mary Street and Governors Avenue west to North West Street. The goal for the program is to revitalize the target area into a community where pride in homeownership is evident by well maintained homes and yards and provide an area where families and businesses can work together to provide a good living environment for everyone. In 2004, CDBG funds were used for the demolition of two substandard homes in the target area purchased by DCP where new construction has since been completed with affordable housing. The home was sold to a first time homebuyer where closing cost was provided by the City of Dover. In 2005 and 2006, CDBG funds were utilized for the renovation of two existing homes in the target area to be sold to low to moderate-income families. The City of Dover fully supports the revitalization efforts of the Downtown area and will continue to support DCP’s efforts to increase affordable housing in the City of Dover.

Blue Print Communities Initiative – The City of Dover along with nine other communities in the State of Delaware has been selected for a community revitalization program known as the “Blue Print Communities Initiative” sponsored by the Federal Home Loan Bank of Pittsburgh (FHLB). FHLB will provide up to \$25,000 in free training through the University of Delaware for seven training sessions throughout the year for each eight-member team to develop a comprehensive strategic plan that will assist in the revitalization efforts of the

community. The goal for this initiative as well as the vision is based on US Senator Tom Carper's/City of Dover Homeownership Initiative. This initiative is a collaboration of government, private sector and non-profit partners to transform a typical downtown city block where substandard housing dominates into a safe, secure, vibrant neighborhood where affordable homeownership and economic development opportunities and benefits prevail. This initiative will be a model program for other cities in Delaware and a platform for collaboration within our area.

Table 11-7 illustrates the CDBG Funds Allocations from fiscal year 2003 to fiscal year 2008. Many programs are ongoing such as the Homeownership Assistance Program and the Homeowner Rehabilitation Assistance Program. Others are awarded as grant applications are received and approved. Details regarding the programs can be found in the Action Plans for the respective fiscal years.

Table 11-7: CDBG Funds Allocations 2003 – 2008

CDBG Funded Programs	2003	2004	2005	2006	2007	2008
CDBG Program Administration	\$ 66,800	\$ 65,200	\$ 61,600	\$ 57,825	\$ 59,664	\$ 64,334
Homeownership Assistance Program		\$ 35,000*		\$ 60,000	\$ 46,912	\$ 45,112
Homeownership Rehabilitation Assistance Program		\$ 75,000	\$ 30,000	\$ 61,300	\$ 50,000	\$ 91,000
First State Resource Conservation & Development Council			\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
Connections Community Support Program					\$ 11,698	\$ 15,112
Dover Community Partnership			\$ 46,000	\$ 25,000		
Community Revitalization & Infrastructure		\$ 131,743		\$ 60,000		
301. W. Loockerman Street Rental Rehabilitation					\$ 57,000	
Whatcoat Social Service Agency					\$ 15,000	
House of Pride	\$ 33,219				\$ 33,050	
Dover Police Department Community Policing	\$ 30,000	\$ 20,500	\$ 15,000			\$ 21,112
Dover Interfaith Ministry to the Homeless						\$ 60,000
City Building Accessibility		\$ 35,000	\$ 35,000			
Public Micro Enterprise Assistance Program (Main Street Dover, Inc.)	\$ 30,000	\$ 25,000	\$ 15,000			
Infrastructure Multi-Year Program (Street Improvements)			\$ 130,763			
Fair Housing Counseling		\$ 600				
Demolition Revolving Loan Fund		\$ 20,000				
Aid in Dover	\$ 35,000					
Public Assistance	\$ 33,400					
Total Allocated	\$ 228,419	\$ 408,043	\$ 358,363	\$ 289,125	\$ 298,324	\$ 321,670

Source: City of Dover, Community Development Block Grant Program

**named Dover First Start Assistance Program in FY2004*

Part V – Plan Goals: Housing and Community Development

Goal 1: Encourage Balanced Housing Opportunities for All Income Levels and Phases in Life

Ensure that adequate, safe, and affordable housing is offered to all income levels, ages and citizens of the City.

Recommendation 1: Explore the feasibility of allowing an accessory housing unit option based on strict criteria

- Develop a zoning text amendment that allows, under strict parameters, an accessory dwelling unit within one family residence zones for the use of family members.

Recommendation 2: Encourage the use of mixed use/mixed style housing types though residential zoning

- Evaluate the provisions of Planned Neighborhood Design and the Senior Citizen Housing Option.
- Evaluate and update Codes to encourage compact and diverse development throughout the City.

Recommendation 3: Update the Consolidated Plan

Maintain updates to the Consolidated Plan as required.

Goal 2: Preserve Existing Housing Stock

Preserve the existing housing stock in the City of Dover through the continuation of the rehabilitation of existing homes.

Recommendation 4: Promote development within the City limits

- Encourage “in-fill” residential development.
- Encourage housing in the Downtown and other areas that are near transit and multi-modal routes, retail areas, employment and essential services.

Recommendation 5: Encourage property owners to maintain and rehabilitate their existing housing stock

- Continue to make emergency repairs to homes/buildings with CDBG and First State Resource Conservation and Development Council Grants to eliminate severe housing conditions that constitute immediate health or safety hazards to the occupants.
- Continue to support the rehabilitation of owner-occupied homes with families who are low to moderate income.
- Support the adaptive mixed reuse of existing buildings throughout the City.

Goal 3: Provide Safe Livable Neighborhoods

Continue to provide safe livable residential and commercial neighborhoods to improve the quality of life.

Recommendation 6: Provide safe and livable neighborhoods

- Continue to conduct housing inspections on rental housing to ensure the compliance with City Codes.
- Proactively enforce City Codes for property maintenance to improve community appearance.
- Increase community policing and Dover Police foot patrols in the Downtown area to reduce crime.
- Continue to improve and maintain infrastructure in established neighborhoods throughout the City.

Goal 4: Provide Homeownership Opportunities for Low/Moderate Income

Provide homeownership opportunities throughout the City, especially within low and moderate-income neighborhoods.

Recommendation 7: Provide homeownership incentives for low to moderate income households

- Continue to support funding the Homeownership Assistance Program to provide down payment or settlement assistance of up to \$10,000 to qualified homebuyers who purchase property in the City of Dover through CDBG.
- Continue to support funding and/or technical assistance to the Dover Community Partnership to revitalize the downtown residential communities through homeownership opportunities.
- Continue to support the provision of education regarding homeownership opportunities and responsibilities.
- Support the Diamond State Community Land Trust and explore opportunities to utilize the land trust model to expand homeownership.
- Continue to implement the 2005-2010 Community Development Consolidated Plan.

CHAPTER 12

LAND DEVELOPMENT PLAN

Land Development Plan

The Land Development Plan chapter and map (Map 12-1) designate land uses for all areas of the City in accordance with the goals and policies of the Comprehensive Plan. The Land Development Plan is the basis for zoning within the City, and within 18 months of the Plan's adoption, all zoning throughout the City must be consistent with the Land Development Plan. It is important in determining consistency with the Comprehensive Plan, that the Land Development Plan text and map be consulted, as the text adds the context in which to consider the map. Additionally, Table 12-1 is a matrix of which zoning classifications are consistent with which land use classifications. In considering any rezoning application, the text, matrix and Land Development Plan map, as well as the zoning and use of surrounding parcels, must be reviewed to evaluate the application.

In preparing the Comprehensive Plan, specifically the Land Development Plan, staff reviewed the City as a whole, the existing land use patterns and current zoning, and then developed a Land Development Plan to identify future land uses. This process involves macro level or "big picture" planning, not micro level or parcel-by-parcel analysis. Following adoption of the Comprehensive Plan, staff will begin the process of preparing the Comprehensive Rezoning, whereby properties are brought forward for rezoning to be consistent with the Comprehensive Plan. This process will include a detailed parcel-by-parcel analysis of zoning and land use city-wide. It will also include an extensive public notification process whereby affected property owners and those in proximity to those properties, will be notified in writing. In performing this level of analysis and this level of public notification, corrections to the Land Development Plan will likely be identified.

For this reason, the Land Development Plan, as adopted with the *2008 Comprehensive Plan*, should not be viewed as an indication that a specific zoning classification or land use classification is appropriate for a specific parcel. Following the completion of the Comprehensive Rezoning, an updated Land Development Plan map will be adopted that reflects the parcel by parcel analysis.

The land use classification assigned to an area is not intended to supersede the zoning assigned to that area, but rather to help guide the designation of zoning district. In all cases, the requirements of a property's zoning determine what uses can take place on the property, as well as the required bulk standards.

Several Land Development Principles underlie the goals and recommendations for the land uses discussed in the Land Development Plan. Ordinance revisions enacted to implement the Comprehensive Plan should support these principles. They include:

- Encourage infill and redevelopment
- Encourage a mix of housing styles within new residential developments.
- Ensure that new development meets high standards for site design and architectural design.
- Provide appropriate areas for business development through master-planned business zones.
- Encourage and support redevelopment of the Downtown Target Area with a mix of residential, commercial and office uses.

Each individual land use classification is discussed below.

Residential Land Uses

Residential land uses are realized through a variety of housing types including single family houses, duplexes, townhouses and apartments. Various zoning categories have been established to specify permitted housing types and maximum residential densities by zone. The Land Development Plan sets forth assumptions and goals for residential land uses as follows:

Assumptions: Residential Land Uses

1. With the high cost of housing, it is essential to the economic well being of the community to provide for a range of housing opportunities for all income levels and age groups.
2. The 2000 Census reveals that the total number of households is growing faster than the total population, resulting in increased demand for housing. While this is now dated, it is expected that this trend has continued, and the upcoming 2010 Census will indicate to what degree.
3. A more efficient and effective interior circulation pattern within residential areas will provide improved traffic circulation, school bus access, service delivery access, emergency response services access and alternative access points. These elements can help foster a greater sense of community among residents while providing them with greater convenience.
4. A more efficient and effective residential development pattern can be achieved by encouraging the development of land closer to existing neighborhoods, making the delivery of police, fire, sanitation, school transportation, sewer, water, and electric services easier and less expensive.
5. Proper separation of incompatible land uses through physical distance and buffering creates stronger neighborhoods.

Goals: Residential Land Uses

To develop and maintain an adequate supply of housing of varying type, size, and densities that are aesthetically pleasing and located within neighborhoods designed or redesigned to

promote convenience, conservation, and access to the greater community, but which are properly buffered through distance and landscaping from incompatible land uses.

Policies: Residential Land Uses

- Allow flexibility in housing styles and types while regulating gross density within residential developments.
- Require linkage streets and sidewalks between adjoining residential subdivisions and street right-of way stubs to adjoining vacant developable land.
- Encourage the separation of residential areas from incompatible uses through buffering distances and the use of transitional zoning categories.
- Encourage high density residential development in infill areas that are near essential services, public transit and employment opportunities.
- Permit limited compatible neighborhood commercial uses that support surrounding residences within residential areas.

Recommendations: Residential Land Uses

The following is a summary description of the various residential densities permitted in Dover as reflected on the Comprehensive Land Development Plan:

Recommendation for Low Density Residential

Low-density residential land uses involve a maximum gross density of four (4) dwelling units per acre. Usually expressed as homogeneous single family developments, provisions are made via the *Zoning Ordinance* to permit variety in housing types through the Planned Neighborhood Design Option, provided density caps are maintained. Specific low-density residential zoning districts include: A (Agricultural); R-20 (One Family Residence); R-15 (One Family Residence); R-10 (One Family Residence); R-8 (One Family Residence) and R-7 (One Family Residence). Zoning districts allowing other housing styles may be appropriate on these parcels to allow the clustering of development on one portion of these sites while maintaining the integrity of significant natural features elsewhere on the parcels, provided the voluntary density caps are maintained.

The Land Development Plan recommends that low-density residential uses be directed toward peripheral suburban/rural fringe areas and in locations with significant environmental constraints. Vacant tracts involving vast woodland areas, wetlands, and areas impacted by the regulatory 100-year floodplain have been designated for low density residential uses where more intensive uses would be inappropriate. Low-density residential uses are also recommended in areas immediately adjacent to existing low-density residential neighborhoods for reasons of compatibility.

Recommendation for Medium Density Residential

Medium density residential land uses involve a maximum gross density of eight (8) dwelling units per acre. This type of development may include single family houses on smaller lots, duplexes, townhouses, and some apartments. Some mobile home park developments would

also be considered medium density. Medium density residential uses are permitted in the following zoning districts: R-8 (One Family Residence), R-7 (One Family Residence), RM-1 (Medium Density Residence), RM-2 (Medium Density Residence), RG-1 (General Residence), RG-2 (General Residence), RG-3 (Group Housing), and MHP (Mobile Home Park).

The Land Development Plan recommends that medium density residential uses be permitted in near existing and planned service and employment centers and in locations well supported by transportation infrastructure and mass transit services. Areas in the northern portion of the City, including the Bush Farm and Maidstone are also identified as appropriate for medium density residential development.

The Land Development Plan recommends that the area east of SR1 on White Oak Road known as Bay Village be developed as medium density residential. The developer who owns the property is interested in developing it in an environmentally sustainable manner to provide workforce housing that could provide quality housing for the middle income families within the City. While previously, there was concern that development of this area could be a “domino” leading to additional development of land east of SR1, the State’s purchase of development rights in the area has reduced the concern that development of this site will lead to additional development in the area. Additionally, the site’s location across from Garrison Oak, which is planned as a major employment center, makes it a good location for workforce housing.

The City shall ensure that the development of the Bay Village site proceeds as a master planned community with transit access and bicycle and pedestrian amenities both within the site and connecting with Garrison Oak and other areas to the west. Additionally, the City must ensure that the viability of Garrison Oak is protected by requiring that the phasing and design of development on the site minimizes any potential conflicts between the residential and industrial uses. Development of the Bay Village site should coincide with a master plan for Garrison Oak and the design of Bay Village must include adequate buffering from the industrial area. Finally, the City should look at Bay Village and other areas identified as medium and high density residential as potential receiving areas under a transfer of development rights program.

Recommendation for High Density Residential

High Density Residential land uses involve a gross density of eight or more dwelling units per acre and may include high rise, mid-rise or garden apartments, and townhouse developments. Duplexes and single family homes are also permitted in mixed-use developments. The following zoning districts permit high density residential development: RG-1 (General Residence), RG-2 (General Residence), RG-3 (Group Housing), RG-4 (Multi-Story Apartments), RG-5 (Mid-Rise Apartments), RM-2 (Medium Density Residence), RGO (General Residence and Office), and MHP (Mobile Home Park).

The Comprehensive Land Development Plan recommends that high density residential be dispersed throughout the City along arterial roadways in close proximity to other high-density residential uses, schools, neighborhood commercial areas, transit service, and other compatible non-residential land use areas. High density residential development is also

appropriate in some areas of the downtown, most of which are shown as mixed use on the Land Development Plan.

Although very few vacant developable acres have been designated for high-density residential use, housing types usually associated with higher density zones may be accommodated through the Planned Neighborhood Design option or Traditional Neighborhood Design.

Mixed Use Areas

Downtown Dover

Downtown Dover is the City's primary mixed use area. Revitalization of the Downtown will continue the mixed use pattern of land uses in the area. The historic City center -- clustered around The Dover Green -- dates back as early as the 1700s. It expands to also include the traditional City pattern of grid streets, which developed during the 19th and early 20th centuries. As a result of its earlier development, Downtown Dover like many other historic cities includes a variety of intermingled land uses. The Downtown area is bounded by Wesley College on the north, the railroad tracks on the west, Bayhealth-Kent General Hospital on the south, and St. Jones River on the east. It includes residential, commercial, office, cultural and institutional uses.

Assumptions: Downtown Dover

1. Downtown Dover is the traditional and symbolic center of the community and is vitally important to the overall image and identity of the City.
2. As the State complex and other businesses and services make Downtown the largest area of employment in the City, Downtown Dover is vital to the economy. It is important to preserve the area as a safe, convenient and aesthetically pleasing environment.
3. Downtown provides a unique residential environment near commercial, cultural, education and employment resources. There is a wide variety of housing types Downtown.
4. Downtown provides a unique and affordable commercial environment where locally owned businesses reflect the small town nature of the community.
5. The age of the buildings and infrastructure in the downtown area requires special attention and incentives to assist in continual use and revitalization activities.
6. Downtown lacks the vibrancy of years gone by, and revitalization will hinge on mixed land uses and developing a commercial niche.

Goal: Downtown Dover

Enhance the role of Downtown Dover as a major employment, residential and commercial center as well as the symbolic and cultural heart of the community, and recognize its unique heritage and historic resources. Provide for mixed use development allowing greatest variation of uses.

Policies: Downtown Dover

- Master plan the Loockerman Street corridor
- Enhance the Downtown area through economic development and historic preservation programs.
- Continue to support the preservation of buildings and infrastructure through public investments, property maintenance enforcement, housing grants and financial incentives.
- Promote zoning districts and regulations that support the traditional mixed-use nature of the Downtown area.
- Support revitalization of Downtown neighborhoods

Eden Hill Farm

Eden Hill Farm is the City's first Traditional Neighborhood Design development. Construction of this mixed-use community is currently underway and will continue to move forward during this five year planning horizon. Eden Hill Farm comprises 272 acres of land including a medical/professional office district, commercial district, residential district, and open space areas. The overall Master Plan for the TND and implementation plans for each district are complete. It will be important for the City to ensure that the intent of the Master Plan Comprehensive Design Standards Manual (Pattern Book) and Traditional Neighborhood Design concept remain in the forefront as the various phases unfold.

Goal: Eden Hill Farm

1. Continue to facilitate project development processes for construction in accordance with approved Master Plan Pattern Book and TND concept.
2. Support efforts to implement the road and walking trail connections linking Eden Hill Farm TND to the existing circulation network.
3. Encourage quality architecture within the development in accordance with the Pattern Book and intent of the TND Ordinance.
4. Participate in the planning for the project's open space areas including the area of the historic farm complex, alleys, and southern portion of the project near Puncheon Run.

Other Mixed Use Areas

A large tract of land south of Leipsic Road and west of SR1 has been identified as an area for mixed use. This area is owned by Dover International Speedway and is currently zoned C-PO (Commercial and Professional Office Development) and used for NASCAR event camping and parking. If it develops in the future, this property is an ideal location and size for a master planned mixed use community.

The identification of this area as mixed use is based on the following assumptions:

1. Dover International Speedway is a major economic force and landholder within the City of Dover, hosting two NASCAR event weekends annually as well as other events, such as harness racing.

2. The draw of NASCAR races will continue to draw visitors from the region who will utilize the campground and parking areas owned by Dover International Speedway.
3. As one of the few large vacant tracts of land within the City of Dover, the City must be prepared to work with the landowner in the event that this area develops in the future.

Goal: Other Appropriate Areas

1. Encourage creation of neighborhood centers.
2. Within the close knit neighborhood fabric there are opportunities for the creation of urban centers. These centers should be established along major roadways and feature mixed use development, pedestrian-friendly public environments and opportunities for connection to future transit.
3. In order to encourage non-automobile access to the center, the activities should be clustered within a one-half mile radius (or 10-minute walk), and be located so as to draw upon residents from a number of surrounding neighborhoods.
4. Develop a strategy for accommodating on-street and behind building parking, and the creation of build-to lines for new development. These strategies will encourage the creation of well-defined public street spaces and pedestrian-friendly village areas that encourage walking and bicycle use.

Commercial Land Uses

As a central city, Dover serves as a regional center for commerce and trade within the Delmarva Peninsula. An integrated transportation system consisting of arterial highways, freight rail service, and air transport provide for the efficient movement of goods to and from Dover in support of business development and activities. Dover's residential neighborhoods also create various local commercial needs. The Land Development Plan identifies specific locations for the development of neighborhood retail and community shopping center uses within the suburban fringe. More intensive regional commercial development is directed toward the US Route 13/113 corridor close to existing highway commercial and regional shopping center establishments. Route 8, west of the railroad tracks, has also become a key commercial corridor within the City.

Assumptions: Commercial Land Uses

1. Dover will continue to be the dominant commercial center within the central Delmarva region.
2. Ease of access to commercial establishments is highly desirable within urban environments.
3. Jobs and commerce in the retail, wholesale, and service sectors are an important part of Dover's economic vitality.
4. Well designed, aesthetically pleasing commercial centers and corridors contribute to the City's overall image and the positive feeling of its residents.

Goal: Commercial Land Uses

Maintain and improve the City's position as a regional commercial center, while providing its citizens convenient access to needed goods and services through well designed and spaced community and neighborhood commercial centers.

Policies: Commercial Land Use

1. Encourage the preservation and adaptive re-use of existing commercial buildings and properties. Continue to refine the *Zoning Ordinance* and other codes to ensure that City ordinances do not discourage adaptive re-use of vacant commercial buildings.
2. Limit the frequency of commercial site entrances along arterial roadways by promoting shared use entrances and cross-access easements among adjoining properties.
3. Periodically review the performance of commercial sign codes to determine their effectiveness and the codes' impact on the quality of commercial corridors.
4. Promote pedestrian and bicycle improvements and connecting sidewalks between existing and proposed neighborhood commercial sites and the residential areas they serve.
5. Encourage the establishment of transit amenities such as bus shelters and bicycle racks to accommodate alternative means of access to commercial centers.

Recommendations: Commercial Land Use

The Land Development Plan includes specific recommendations for each of the major commercial areas in Dover which are explained below.

US Route 13/113 Corridor

The US Route 13/113 corridor is dominated by highway commercial development. For the most part, the Comprehensive Land Development Plan proposes to continue US Route 13/113 as the major commercial corridor in Central Delaware.

Few vacant developable parcels exist within this area. However, potential exists for the redevelopment of older retail stores and strip shopping centers. The Comprehensive Plan encourages the renovation and adaptive reuse of older structures within the highway corridor as means of restoring property value, preventing blight and demolition by neglect, and enhancing the overall image of the highway environment. In some cases the demolition of older structures may be beneficial, and should be supported, to enable redevelopment to occur within the corridor.

Delaware Route 8 - Village Center

The Delaware Route 8 corridor continues to be an area subject to increasing commercial development pressure. This area is subject to the Corridor Overlay Zone (COZ-1), which has ensured that the development of this corridor does not mirror that of Route 13.

The Comprehensive Land Development Plan recommends that Route 8, west of the railroad tracks continue to develop as either commercial or professional offices. With the requirements of the Corridor Overlay Zone as well as implementation of the Route 8 study

performed by the Dover/Kent County MPO, efforts to provide cross access easements and a potential service road will be an essential component to the further development of the corridor.

Neighborhood Commercial

The Plan identifies areas for continued neighborhood commercial use to meet the convenience retail need of existing and future residential areas.

Government and Institutional Land Uses

As the capital city and county seat of government, Dover has an above average amount of land area dedicated to government use. All major departments of State Government except the Department of Agriculture are headquartered within the City limits. Dover is also home to the offices of Kent County Levy Court.

All branches of the judiciary are represented in central Dover including the State Supreme Court, Delaware Court of Chancery, Kent County Superior Court, Delaware Family Court, and the Justice of the Peace Court. As a central City, Dover is also the location of a growing medical services community with Bayhealth Medical Center (Kent General Hospital) at its center.

As the City has experienced a prolonged period of growth and development, numerous other institutions, including colleges and public schools, within the community have expanded and many others have plans for future expansion. Several charter schools are also located within the City.

Assumptions: Government and Institutional Land Uses

1. As the State Capital and County Seat, Dover projects a prominent public image as a center of government.
2. Dover will continue to be the home of major institutions including hospitals and medical centers, places of higher learning, and agencies providing services to senior citizens.
3. Employment in the government, education, and medical sectors will continue to play an important role in Dover's economic vitality.

Goal: Government and Institutional Land Uses

Maintain and improve the City's position as a center of government, education, and medicine through support of existing institutions and encouraging well designed campuses that are integrated into the community and have room to expand.

Policies: Government and Institutional Land Use

1. Preserve and promote the long-term vitality of our major institutions and governmental entities through appropriate zoning, providing protection from incompatible uses, and by providing ample land for future expansion.

2. Promote alternative modes of access to government facilities and institutions by requiring pedestrian and bicycle amenities, and bus shelters. Ensure that these areas are visually appealing with appropriate landscaping.
3. Encourage the State of Delaware to prepare, in cooperation with the City, a “Capital Complex Plan” that would establish locations for office expansion and public improvements in central Dover.
4. Participate in the “master planning” process for the development of strategies and vision plans for institutional facilities and campuses. Also encourage approval by the Planning Commission of Master Plans for multiple construction projects as outlined in the *Zoning Ordinance*.

Recommendations: Major Institutional and Governmental

The Land Development Plan recommendations for major institutional and governmental uses are presented in the following paragraphs:

Capitol Complex

The Land Development Plan recommends the continuance of institutional and office uses within the State Capitol Complex as the predominant land use. Very little vacant developable land exists within the Capitol area. Construction of the new State courthouse is now underway, and the new Anchor Library is planned for the lot adjacent to City Hall (which includes the Post Office site). As this area continues to redevelop to meet the expanding space needs, parking will be an important consideration in the area.

Hospital Complex

Bayhealth Medical Center (Kent General Hospital) is a major institutional land use within the central area of Dover. The Land Development Plan designates the hospital proper and associated hospital properties including the day surgery center, the Scull Mansion and hospital day care center for institutional use.

The Land Development Plan also recommends inclusion of the Holy Cross Church and School complex in the institutional use designation in recognition of the existing use of the premises and its adjacency to the hospital properties referenced above.

Delaware State University, Delaware Technical & Community College and Wilmington University:

Delaware State University (DSU), Delaware Technical & Community College - Terry Campus (DTCC) and Wilmington University – Dover Campus are all located within proximity of each other along US Route 13 in north Dover. All have recently made improvements to their campuses or are in the process of making improvements. The Delaware State University is in the process of constructing a new Wellness Center and Student Center on its campus. The Land Development Plan recommends that this area be designated for institutional uses.

Wesley College Area

The Land Development Plan supports the continuation of Wesley College as an important institutional use within the central area and recognizes this campus as a significant

contributor to the unique image and charm of the traditional urban neighborhoods north of the downtown business district. Review of the campus master plan for Wesley College is highly recommended due to its location in a residential neighborhood. Recent issues within the neighborhood led to approval of an ordinance establishing “student homes” as a conditional use within the RG-1 and RG-2 zoning classifications. The Land Development Plan recommends that the campus and surrounding properties controlled by the college be designated for institutional use and that these properties be zoned I-O (Institutional & Office).

Other Major Institutional Uses

The Plan recommends institutional uses north of DE Route 8 and west of Saulsbury Road on vacant lands adjacent to, and including the Dover Elks Club and Modern Maturity Center properties. The vacant land north of Modern Maturity Center and the Elks Lodge is seen as an ideal location for senior housing or similar use in conjunction with the senior center use.

At the present time, virtually all public school buildings and numerous places of worship are situated within residential areas. Properties with these uses and residential zoning will not be rezoned to the Institutional and Office (IO) zone unless they are of a campus nature and such zoning would not have the potential to negatively impact the surrounding area.

Employment Centers: Office Park, Manufacturing and Industrial Land Uses

To a large extent, office parks and industrial land uses are relegated to areas partially or completely occupied by existing industrial and/or manufacturing uses. A vast area of vacant developable land north of and adjoining Dover Air Force Base has been designated for industrial and manufacturing uses. Such uses are generally more compatible with military operations and seem to be less effected by noise associated with military over flights. While the Land Development Plan map shows this area as ‘Industrial,’ the City will not rezone residential lands within this area that are actively used as residences until such time that these residential uses cease. Other areas for employment centers are adjacent to transportation routes (vehicle and rail).

Assumptions: Employment Centers

1. The Dover community is fortunate to harbor several regional, national and international industry leaders within the City limits. Dover intends to accommodate the reasonable aspirations and expectations of its industrial and manufacturing community to support the vitality of these precious resources.
2. A healthy and well-rounded local economy will depend upon diversity in business and employment opportunities.

Goal: Employment Centers

Create a more vibrant, growing economy with a broader range of job opportunities through an increase in office and industrial development in appropriate and designated areas.

Policies: Employment Centers

1. Protect existing industrial, office park and manufacturing establishments from encroachment by incompatible land uses, which could result in nuisance complaints, hazardous situations, and human conflict.
2. Provide sufficient land area for industrial purposes to enable the expansion of existing industries and the establishments of new facilities.
3. Provide for a variety of office park and industrial development opportunities through the designation of areas for small, medium and large industrial establishments within planned industrial parks.
4. Promote alternative modes of accessibility including pedestrian and bicycle facilities, bus shelters and transit stops, and provide incentives for car and van pooling of employees.

Recommendations: Employment Centers

Office Parks

The Land Development Plan designates specific tracts of land of various sizes for office park development. Office park development involves an integrated development of office buildings with shared entrances, driveways and parking. The majority of uses permitted within an office park are generally weekday professional office uses involving very little or no activity at night or on weekends. For this reason, the office park designation may be viewed as a transitional use category when situated between more intense commercial and industrial land uses and residential land uses. This designation usually involves the C-PO (Commercial/Professional Office Zone) designation.

Another sizable area west of Bayhealth Medical Center (Kent General Hospital) which has been developing into a medical office environment has been designated for future office park development as well. This area includes frontage areas of South Queen and South New Streets and the westerly side of South Governors Avenue from Water Street to Waples Avenue. Much of this area is currently in service commercial use and includes an automobile dealership and related businesses as well as the Spence's Bazaar property.

Smaller scale areas for office parks are the Woodbrook complex on South Governors Avenue and areas along Route 8.

Large Scale Manufacturing

The Land Development Plan designates all existing major industrial facilities and associated vacant lands for industrial and manufacturing use. These properties include the manufacturing facilities of Kraft General Foods, Playtex Products, Sunroc, Scott Paper and General Metalcraft.

Industrial Parks

Several planned industrial parks have been initiated since 1986, which offer industrial development potential. The Land Development Plan designates these sites for continued industrial use. These sites include Kent County AeroPark, Enterprise Business Park, College Business Park and McKee Business Park.

Dover Air Force Base

Although Dover Air Force Base (DAFB) is within the City limits, as a land holding of the federal government it is not subject to municipal regulation. In recognition of the strategic importance of DAFB with respect to the national interest, as well as the contributions of DAFB to the local economy and overall image of Dover, it is essential that the Comprehensive Plan support and protect the vital interests of DAFB as an integral part of Dover.

A majority of the land area surrounding DAFB is within the City limits. Much of this land is impacted by noise associated with base operations and specific locations in close proximity to aircraft runways have been identified by the Department of Defense as accident potential zones. It is within these areas that Dover can play an important role in protecting the mission of DAFB by restricting development within these areas to uses that would be relatively compatible with military operations. To assist with this effort the Airport Environs Overlay Zone (AEOZ) was adopted in 2001.

Assumptions: Dover Air Force Base

1. Dover Air Force Base influences the Dover community in many positive ways. Its benefits include positive economic impacts through employment and commerce. Skilled military personnel and their families from all over the country come to Dover and become an important part of our community. Dover residents also take great pride in the important role Dover Air Force Base plays in the defense of our nation and its peacekeeping and emergency relief efforts.

Goal: Dover Air Force Base

Create a favorable and compatible environment for Dover Air Force Base through a resolute commitment to provide all reasonable planning accommodations to protect the Base.

Policies: Dover Air Force Base

1. Restrict land uses surrounding Dover Air Force Base to uses defined in the most current edition of the Air Installation Compatible Use Zone (AICUZ) document produced by the United States Department of Defense.
2. Require special noise attenuation measures to be incorporated within plans for the construction of new buildings in the vicinity of Dover Air Force Base.
3. The City designated on the official Zoning Map the Airport Environs Overlay Zone (AEOZ) which includes the accident potential zones and noise zones as defined by the Air Installation Compatible Use Zone (AICUZ) document. This ordinance sets forth regulations within the *Zoning Ordinance* governing development within these areas. The boundaries of the AEOZ may be updated in the future to coincide with the most current edition of the AICUZ document.

Recommendations: Dover Air Force Base

The Land Development Plan reflects the existing limits of Dover Air Force Base for location purposes. No enlargement of the land use area associated with DAFB is proposed at this time. Areas immediately north of DAFB within the City limits have been designated for

industrial and manufacturing uses. A few small pockets of existing residential development exist north of DAFB along Horsepond Road and Lafferty Lane. The Land Development Plan shows this area as 'Industrial', primarily because the AEOZ (Airport Environs Overlay Zone) prohibits new residential uses in this area. The City will not rezone active residential properties until or unless the residential use ceases on that property.

Parks and Open Space

While much of this plan considers the built environment in Dover, the undeveloped or natural environment is just as important. These undeveloped lands include all areas that are not formally constructed as places of human habitation and use. This can include "open space" areas within residential developments, in either private or public ownership. Another important type of non-urban area is environmentally sensitive land, such as woodlands and wetlands. Finally, the City's parks and recreation areas are developed and maintained to provide formal areas to participate in sports and simply enjoy being out of doors.

Public open space refers to park areas and nature preserves owned by the City, the State, or the federal government. There are several types of public open areas represented in Dover.

Assumptions: Public Open Space

1. Public parks are a desirable and necessary element of any community. Parks provide relief to the urban environment, allowing residents to enjoy nature and participate in sports in close proximity to their homes.
2. Significant natural features should be preserved as public parks where these areas provide benefits to the public such as aesthetic enhancement of the community, passive or active recreation, and/or resource conservation.

Goal: Public Open Space

Preserve and enhance the existing network of public parks, and expand the public park system to meet the needs of the current and future population. Special consideration should be given to preserving natural features, such as Silver Lake and the St. Jones River, for public use and aesthetic enjoyment, and to make future and existing parks more accessible via a citywide network of bicycle and pedestrian pathways.

Policies: Public Open Space

1. Maintain existing parks and recreation areas.
2. Develop new active and passive open spaces in public ownership to serve the needs of the current and future population in accordance with a Parks and Recreation Master Plan (to be developed) and the Bicycle and Pedestrian Transportation Plan.
3. Continue to promote civic open spaces and squares, such as The Green, as places for public events and community interaction. It should be the City's policy to require the creation of new civic open spaces as a component of large institutional, commercial, or residential projects where appropriate.

Recommendations: Public Open Space

It will be necessary throughout the planning period to provide various types of open spaces for public use. Different segments of the population have different recreational needs, which can be met with a combination of active recreation areas, passive or “natural” parks, and formal greens and squares.

Recreation areas are publicly owned and managed lands which contain playing fields, playground equipment, and other developed recreational equipment. These areas are designed for the public to participate in active recreation and fitness programs. Dover Park in east Dover, Schutte Park in west Dover, and Silver Lake Park in central Dover are the largest examples of this type of park in the Dover park system. Numerous other recreational facilities are located throughout the City in smaller neighborhood settings and as part of educational facilities.

Passive open spaces are park areas that are designed to preserve the natural environment, and provide the public with opportunities to enjoy nature in the midst of the City. These types of areas often include open fields, mature woodlands, and preserved waterfronts. Many park areas combine active and passive open spaces to serve a variety of users. Silver Lake Park is an example that contains both passive (woods, swimming beach, St. Jones River) and active (boat ramp, play equipment) recreational features.

A third type of public open space is formal squares and greens that serve as places of public assembly in key locations. Local examples include The Green, which dates back to the 1700s, and Legislative Mall at the State Capitol Complex. Institutional complexes also include areas of public open space.

Private Open Space

Private open space is most often located within residential communities. These lands are frequently owned and maintained by private homeowners associations. Private open space may be improved to include playground equipment and playing fields to serve active recreational needs. Private open space may also consist of vacant fields, wooded areas, stormwater ponds, and floodplain areas, which serve as passive recreation.

A purely recreational type of private open space comes in the form of private clubs. These include golf and country clubs, such as the Maple Dale Country Club. Other types of clubs, such as the Kent Swim Club, provide various recreational opportunities to their members.

Assumptions: Private Open Space

1. Neighborhood parks and other recreation areas under the management of private homeowners associations allow residents to have a sense of ownership of these areas and more freedom in terms of the type of park area desired.
2. Private clubs and organizations provide significant opportunities for the recreation of members.

Goal: Private Open Space

Promote the construction of neighborhood parks and playgrounds within new residential developments and cooperate with the private sector and community homeowners associations

to help them meet their recreational needs. Support the creation of new private efforts that help meet the recreational needs of the community.

Policies: Private Open Space

1. Continue, through provisions of the *Zoning Ordinance*, to ensure that new developments are provided with private recreational areas and open space commensurate with the size and nature of the development.
2. Develop creative ways to meet the City's recreational needs, possibly through partnerships with the private sector, the State, or local community groups.

Recommendations: Private Open Space

The Land Development Plan does not generally specify open space areas within large tracts of developable land. Their placement and size is dependent on individual design proposals and the needs of the particular community. In general, these areas should be centrally located and accessible to residents via sidewalks and pedestrian paths.

Agricultural Land Uses

There are currently properties within the City limits that are in active agricultural use. Some of these properties are zoned for residential or other uses, and are being farmed for the time being until being converted to another land use. Other properties are zoned "A" for Agriculture, which is a zone that specifically permits agricultural uses. Several properties in the Agriculture zone are also enrolled in agricultural preservation programs with the State of Delaware Department of Agriculture, indicating that the owners intend to continue farming at least for the five to ten year duration of the program and potentially for a longer time. The bulk of the land zoned A is located east of SR 1, south of Dover Air Force Base and along Route 8 in the western portion of the City adjacent to the Cranberry Run development.

Assumptions: Agricultural Land Uses

1. Some agricultural land uses, particularly those which the owners have chosen to place in agricultural preservation programs, are likely to continue as a long term component in the City's land use mix.
2. Agricultural land uses are appropriate where they form logical transitions to larger tracts of farmland in the County, where they compliment sensitive natural features, and where they can be economically viable while retaining open space in the City.
3. Higher density urban land uses, such as those anticipated in the City, are not always compatible with active agricultural operations. Consideration will have to be given to proper buffering and other measures to mitigate conflicts between agricultural and other land uses.

Goal: Agricultural Land Uses

Support the continuation of existing active agricultural uses as a viable and important component of the land use and open space mix in Dover, especially where agricultural lands form logical transitions between developed areas in the City and rural, agricultural areas in the County.

Policies: Agricultural Land Uses

1. Support efforts of property owners in appropriate areas who elect to enroll their properties in agricultural preservation districts.
2. Evaluate the impact of new development applications on active farming operations, especially those that have been preserved through the farmland preservation program. Conversely, evaluate new agricultural zoning requests based on the potential impact of long term farming activities on existing neighborhoods and planned or existing City infrastructure investments.
3. Collaborate with the County and the State regarding planning for agricultural preservation and open space protection on the periphery of the City.

Recommendations: Agricultural Land Uses

The Land Development Plan indicates active agricultural land uses in two locations: south of Dover Air Force Base and east of SR1.

Environmentally Sensitive Areas

Environmentally sensitive areas refer to lands that are unsuitable for development because of moderate to severe environmental constraints. These areas often have significant ecological benefits, which are worthy of preserving. Conservation areas consist of wetlands, rivers and tributaries, significant woodlands, and areas in the floodplain.

Environmentally sensitive areas may be either in public or private ownership. In some cases, the City or the State owns these natural areas to protect them and maintain their ecological capacities. Often, these areas are in private ownership. The preservation of sensitive areas on private lands relies upon stewardship by the owner and relevant environmental regulations. Natural areas, such as woodlands and wetlands, can be preserved as a part of the open space network in a residential development. At times, these lands are preserved simply due to their unsuitability for placing buildings upon them.

Assumptions: Environmentally Sensitive Areas

1. Environmentally Sensitive Areas should be protected in order to preserve the numerous ecological benefits provided by these lands.
2. Lands with certain environmental features (wetlands, woodlands, steep slopes, and poor soils) are undesirable for urban development because of increased construction and engineering costs as well as higher long-term maintenance costs.

Goal: Environmentally Sensitive Areas

Protect the natural environment and prevent the destruction of property through the preservation of significant ecological systems that naturally work to enhance the quality of life for residents.

Policies: Environmentally Sensitive Areas

1. Identify for preservation as private or public open space environmentally sensitive areas within development projects early in the approval process, so accurate base data can be collected and the project redesigned if necessary.
2. Encourage developers of residential projects to take advantage of the provisions of the Planned Neighborhood Design Option, which allows considerable design flexibility and encourages the preservation of natural features.
3. Continue to work with state and federal environmental regulatory agencies to help them meet their conservation goals. Respect other agencies' ordinances through sound land use planning.

Recommendations: Environmentally Sensitive Areas

Environmentally sensitive areas are shown on the Natural Features Map (Map 5-1), including wetlands, woodlands, and floodplains. Generally, environmentally sensitive areas follow the stream courses of the St. Jones River, the Puncheon Run, the Maidstone Branch, the Fork Branch and the tributaries of the Little River. Chapter 5 describes these areas in more detail and outlines areas of special consideration.

The following is the matrix of possible zoning categories in each of the land use categories included on the Land Development Plan Map:

Table 12-1 Land Use and Zoning Matrix

Land Use Category	Zoning District
Residential Low Density	R-20 (One Family Residential) R-15 (One Family Residential) R-10 (One Family Residential) R-8 (One Family Residential) R-7 (One Family Residential) C-1 (Neighborhood Commercial)
Residential Medium Density	R-8 (One Family Residential) R-7 (One Family Residential) RM-1 (Medium Density Residential) RM-2 (Medium Density Residential) RG-1 (General Residential) RG-2 (General Residential) RG-3 (Group Housing) RGO (General Residence and Office) C-1 (Neighborhood Commercial) MHP (Mobile Home Park)

Residential High Density	RM-2 (Medium Density Residential) RGO (General Residence and Office) RG-1 (General Residential) RG-2 (General Residential) RG-3 (Group Housing Residential) RG-4 (High Rise Residential) RG-5 (Mid Rise Residential) MHP (Mobile Home Park) C-1 (Neighborhood Commercial)
Commercial	C-1 (Neighborhood Commercial) C-1A (Limited Commercial) C-2 (Central Commercial) C-2A (Limited Central Commercial) C-3 (Service Commercial) C-4 (Highway Commercial) SC-1 (Shopping Center Commercial) SC-2 (Shopping Center Commercial) SC-3 (Shopping Center Commercial) RC (Recreational and Commercial) RGO (General Residence and Office) CPO (Commercial/Professional Office) IO (Institutional and Office)
Mixed-Use	C-2 (Central Commercial) (Downtown Target Area Only) C-2A (Limited Central Commercial) TND (Traditional Neighborhood Design) C-1 (Neighborhood Commercial) C-1A (Limited Commercial) RGO (General Residence and Office) (Downtown Target Area Only) R-8 (One Family Residence) R-10 (One Family Residence) RG-1 (General Residence) RG-2 (General Residence) RG-4 (Multi-Story Apartments) C-3 (Service Commercial) CPO (Commercial/Professional Office) IO (Institutional and Office)
Industrial and Public Utilities	M (Manufacturing) IPM (Industrial Park Manufacturing) IPM-2 (Technology Center Manufacturing) C-3 (Service Commercial)
Institutional	IO (Institutional and Office) Institutional uses may be conditionally permitted in residential zones

Office and Office Parks	CPO (Commercial/Professional Office) IO (Institutional and Office) IPM (Industrial Park Manufacturing) RGO (General Residence and Office)
Active Agriculture	A (Agriculture)
Open Space	ROS (Recreational and Open Space) RC (Recreational and Commercial)

CHAPTER 13

GROWTH AND ANNEXATION PLAN

Part I – Growth and Annexation Background

Dover has a history of growth through annexation. One of the most outspoken advocates of annexation was the late Mayor Crawford Carroll. Under his guidance and leadership, Dover's land area grew in size from 8,267 acres in 1969 to 12,287 acres in 1971 through annexation. Mayor Carroll understood the wisdom of annexing lands surrounding the City that were under development pressure and, during this period, the City had a policy of not providing services unless the property was annexed into the City. Over time, these lands developed into bustling commercial, industrial, institutional, and residential areas that provided Dover with the tax base needed to continue to offer the high quality public services which are the trademark of the City.

Since Mayor Carroll's time, the City has continued to grow through annexation at a more modest pace. By 1996, the City's land area was approximately 14,400 acres, and between 1996 and 2003, only a few parcels consisting of approximately 59 acres were annexed. Since 2003, the City's land base expanded more substantially, by a total of 596 acres. A number of the more recent annexations were enclaves that were mostly surrounded by other lands in the City; however, there were several large areas of expansion, particularly the south side of State Route 8 west to Artis Drive, as well as the Bush Farm north of Denneys Road.

Dover is now at a time when rounding out the boundary and filling in the holes are the priorities for annexation. Annexation of enclaves is important, as these "holes" within the City often benefit from City services without the opportunity to participate in the local government that provides those services, or fulfilling the obligation to pay municipal taxes. Additionally, these enclaves often cause confusion to service providers, including emergency services, in that it is often unclear whose jurisdiction the parcels belong.

This plan represents an evaluation and restatement of Dover's annexation policies, and a new set of annexation objectives that are consistent with Delaware law, the Governor's Livable Delaware initiatives, the *State Strategies for Policies and Spending*, and the plans of adjacent municipalities and Kent County. The following sections will discuss the above-mentioned plans, and how this Growth and Annexation Plan has been coordinated with them.

General Policy Statement

Annexation is the systematic expansion of the City's corporate boundaries into an unincorporated area. The process for annexation is detailed both in the City's charter and within Title 22, Chapter 1, Section 101, Delaware Code.

With annexation properties gain access to municipal services and property owners gain political voice within the City government that is providing them with City services and utilities. Without timely and properly planned annexations, developing local jurisdictions would be burdened with tax inequities, municipal service inefficiencies, political fragmentation, and disorderly growth patterns.

People residing adjacent a local boundary often enjoy many of the services of the municipality without providing monies to support the cost of the services such as parks, recreation programs, libraries, police and fire, as well as other essential services provided by incorporated jurisdictions. Some problems that result from fragmentation of boundaries include the fact that cities and towns cannot properly plan or address orderly growth, transportation issues, environmental issues including, but not limited to, pollution control, sewer districts, water services, and school districts.

Benefits of Annexation

- Orderly Growth – Presents a true reflection of existing social, economic and cultural components of the local jurisdiction.
- Unified Community – Prevents fragmentation of government authority and duplication of services.
- Transportation Issues – Roads, sidewalks, mass transportation and bike paths are more easily addressed within an incorporated area.
- Unified Political Representation – Citizens may participate in the local government jurisdiction which is providing them with City services.
- Access to Full Range of Municipal Services – Properties that are annexed become eligible for the full range of City services provided by the municipality, such as street sweeping, trash removal, street lighting and the like.

Coordination with Relevant Planning Documents and Efforts

Strategies for State Policies and Spending

The *Strategies for State Policies and Spending* sets forth the State's policy on land use and development. The *Strategies* document and associated maps (originally approved in 1999) were updated and approved with Governor Ruth Ann Minner's signature on September 23, 2004. The *Strategies for State Policies and Spending* identifies land as Level 1 through 4, indicating the appropriateness of development. These levels differ from the Categories identified on the Dover Potential Annexation Areas Map.

One of the core principles guiding Livable Delaware is to direct urban development to occur in and adjacent to existing towns and developed areas. The *Strategies* Map 14-1 designates the majority of the land within the City of Dover boundaries as Level 1, described as higher density development, a variety of transportation options, mixed uses and a sense of place with a common identity. The State policy will be to encourage redevelopment and reinvestment along with providing services to the community. The Level 1 areas have the highest priority for State investment and spending. The *Strategies* indicate that the State will invest in infrastructure, public facilities, and employment and social services in these areas.

With the small exception of lands that have significant environmental or policy impediments to development, the balance of the land within the City is designated as Level 2. These are described as less developed areas either near larger communities or as independent small towns and rural villages, but all with services. The State's intent for properties within these areas is to "...use spending and management tools to promote well designed development...(that) provides for a variety of housing types, user-friendly transportation

systems and provides essential open spaces and recreational facilities, other public facilities, and services to promote a sense of community.”

There are few Level 3 areas within the City and they generally are on the upper reaches of the St. Jones River or the Mudstone Branch, and the agricultural lands east of State Route 1. These lands in the City of Dover context are described as being “...adjacent to or intermingled with fast growing areas...” identified as Level 1 or 2. The State intends that while these lands may be developed, there are issues of timing, phasing, site characteristics or State agency programs that may make the development inappropriate in the short term. The investments encouraged by the State are for “... agricultural preservation, natural resource protection, (and) parks and open space...” The State will maintain the existing infrastructure, while supporting local growth management efforts.

A few parcels or areas are identified as “out-of-play” by the state. These are the waterways of the St. Jones, the Mudstone Branch, the two agricultural parcels whose owners have sold their development rights to the state, and the Dover Air Force Base. These are identified as “...not at all available for development or redevelopment...”

There are no Level 4 areas within the City, but a portion of the Growth Area is identified as such. Level 4 properties are identified as predominantly agricultural and agriculture related or natural areas, parks and preserves. As documented in *Strategies for State Policies and Spending Update-2004*, “It is the state’s intent to discourage additional development in Investment Level 4 areas unrelated to the area’s need.”

In looking at the City’s Growth and Annexation Plan, the areas identified for annexation during the five-year horizon are largely consistent with the Level 1, 2 and 3 areas. The exceptions to this include the Papan Farm east of Wyoming Mill Road, which recently came out of an Agricultural Preservation District, which is reflected as Level 3 and Level 4, and a portion of the lands along Artis Drive west of the City which are Level 4.

In addition, the lands owned by Dover International Speedway (and immediately surrounding these lands), immediately north and south of Leipsic Road, are located within the Level 4 area. If any development is planned in this area, it will be subject to a master plan developed in cooperation with the property owner, the State of Delaware, and the City of Dover.

Kent County Comprehensive Plan

The City also reviewed the Growth Zone identified in the Kent County Comprehensive Plan⁵ in developing its Growth and Annexation Plan. With the exception of the lands identified above in the area of Artis Drive, lands identified within the Growth and Annexation Plan are largely consistent with the Kent County Growth Zone. The Kent County Comprehensive Plan is supportive of growth in and around municipalities. The City will continue to coordinate development efforts with Kent County in areas of mutual concern and will work with the County to ensure development along the shared boundary remains consistent.

⁵ Kent County adopted its County Comprehensive Plan on October 7, 2008.

Camden and Wyoming are the only two municipalities that are close to or adjacent to the boundaries of the City of Dover. The Town of Camden adopted its 2007 Comprehensive Plan in May 2008, and the Town of Wyoming is in the process of updating its plan.

The Town of Camden 2007 Comprehensive Plan, does not include any potential annexation areas that approach the Dover area. The annexations anticipated by Camden are to the south and west of the town, infill parcels or enclaves.

Wyoming's most recent plan was adopted in January 2004 and includes an annexation component. The town is currently in the process of updating its Comprehensive Plan. City of Dover Planning staff met with the Mayor and staff from Wyoming to discuss areas of common interest. The three areas of common interest in annexation are the lands south of Webbs Lane and east of New Burton Road, the Papan Farm east of Wyoming Mill Road, and the Papan Farm parcels west of Wyoming Mill Road. In response to concerns raised by the Town of Wyoming, the City removed the Papan Farm parcels west of Wyoming Mill Road from the Category 3 Annexation Area, but still shows them as an Area of Concern on Map 13-1.

The City of Dover and the Town of Wyoming determined that both jurisdictions have a vested interest in the Papan Farm east of Wyoming Mill Road and the lands east of New Burton Road and Webbs Lane, and that both municipalities will continue to show these within their annexation areas. If, and when, a property owner requests annexation into either municipality, the municipality receiving the request will notify the other, at which time such municipality will have the opportunity to comment through the public process. Both Wyoming and Dover agree that if the West Dover Connector bisects the parcel, this road would become an appropriate southern boundary to Dover and an appropriate northern boundary to Wyoming.

The City of Dover continues to assert that Dover is in a stronger position to provide utilities, including water, sewer and electric, to these areas, along with the wide array of other City services including trash collection, street sweeping, planning support, inspection services, and code enforcement.

Part II -- Annexation Goals and Policies

Purpose

The purpose of having an annexation policy is to provide the City Council, Planning Commission, and staff a basis from which to make sound and consistent decisions regarding the growth of the City. Specific goals to support this policy include:

- Direct urban development toward the City center where more efficient and effective provision of City services is provided.
- Direct urban development away from agricultural lands, environmentally sensitive areas, and natural open spaces existing at the City's periphery.

- Avoid premature annexation of lands that could lead to development contrary to the goal of containing urban development within planned areas where the basic services of sewer, water, streets, waste management, police, fire, electricity, community facilities, schools, recreation and transportation can be provided without lowering the quality of services currently provided to the existing population.

Part III - City of Dover 2008 Annexation Plan

Lands Considered for Annexation

The City of Dover's 2008 Growth and Annexation Plan is described in this chapter and is graphically depicted on Map 13-1. **The term "Growth and Annexation Plan" refers to both the text and the map, and in practice, neither should be considered or relied upon without referencing the other.** Using the above goals as a framework, the City has identified three distinct areas of annexation potential for the City of Dover, identified as Category 1, 2, and 3. These categories are based on those developed in the *2003 Comprehensive Plan*, but they have been refined to address current circumstances.

Category 1 – High Priority Annexation Areas

These lands are shown in dark green on Map 13-1. Lands in this category are primarily enclaves of unincorporated territory mostly surrounded by the City of Dover. In all or most of these cases, the City provides these parcels with one or more essential service (sewer, water, police, fire, trash). It is the intention of the City to annex these properties within the five-year planning period. The City will work with those interested in annexation and their neighbors, as well as incentivize annexation to residents of these areas. Because annexation often comes with City property taxes and costs associated with connecting to the City's water and sewer systems, the City should make efforts to incentivize annexation within Category 1 areas.

Category 1 Recommendations:

- In Category 1 areas, the City will not utilize the cost-revenue analysis model, as the parcels are primarily small parcels for which the model is not correctly calibrated. Additionally, because the Category 1 areas consist primarily of enclaves, they should be annexed regardless of the results of the model.
- The City will explore incentives for property owners within these areas to annex into the City. Incentives may include phasing in of taxes, a limited tax abatement, and/or developing a payment plan for connection fees and impact fees to the City's water and sewer system.
- The City will not extend sewer and/or water infrastructure to Category 1 areas unless the property owners annex into the City. In cases where there is an immediate need due to a failing septic system or another issue impacting the health, safety and welfare of the area residents, the City may connect the properties to utilities with the condition of annexation. This may be necessary, as the annexation process can take up to three months. Exceptions to this requirement may be made with the approval of

the City Planner and City Manager, with documentation as to why annexation is not technically or legally feasible.

Category 2 – Priority Annexation Areas (0 – 10 Years)

These lands are shown in yellow on Map 13-1. Lands in this category are on the periphery of the City, and in many cases close gaps or holes in what would appear to be the orderly limits of the City. Many of these areas help to round out City boundaries. In some cases, owners of these parcels have expressed interest in annexation. In other cases, these parcels would provide for a logical extension of City services and utilities. It is the intention of the City to consider annexing these properties within the next ten years, as properties express interest. Lands in Category 2 will be further scrutinized by using the cost-revenue analysis model.

The Category 1 and 2 lands represent the extent of the City's annexation interest within the five-year planning horizon. With the exception of the new Category 2 property along Route 8 and Artis Drive all Category 1 and 2 lands are consistent with the Kent County Comprehensive Plan.

One area of land included in the Category 2 annexation area is land owned by Dover International Speedway (and lands immediately surrounding these lands) that is located east of State Route 1, immediately north and south of Leipsic Road. Much of this land is used for RV camping associated with NASCAR racing events.

Because of its location east of State Route 1 and adjacent to active agricultural lands (some of which are in agricultural preservation districts or easements), the City is sensitive to the concerns that any development planned in this area be very carefully planned in a way that respects the natural and agricultural environment. While Dover International Speedway has no immediate plans for development in this area, they have expressed interest in possible annexation of this land into the City. As Map 13-2 Potential Land Use for Annexation Areas indicates, the appropriate zoning for this land will be determined at the time of annexation. If any of this area annexes prior to plans for development, the land will be zoned A (Agriculture Zone). If annexation is associated with a development application, a zoning district will be applied that is compatible with a master plan associated with the property to be annexed. No amendment to the Comprehensive Plan is required as long as development is proposed in accordance with a master plan developed in coordination with the property owner, the State of Delaware and the City of Dover.

Category 3 – Areas to Be Considered for Long Term Annexation (5+ years)

These lands are shown in orange on Map 13-1. These lands are generally adjacent to or near the City boundaries, but slightly beyond the parcels in Categories 1 and 2. Some of these lands are vacant, while some include existing developments that may or may not be already receiving City services at unincorporated rates. The City does not intend to annex these parcels within the five-year planning period, but rather believes it is important to begin planning for potential annexation over the long term.

The majority of the Category 3 lands are consistent with the Kent County Comprehensive Plan. Some of the Category 3 lands are within Agricultural Preservation Districts. The City does not intend to annex these lands as long as they are in preservation; however, if they

come out of the Agricultural Preservation Program and are proposed for development, the City would like to consider annexation.

Areas of Concern

Map 13-1 identifies “Areas of Concern” as areas where the City has a vested interest in the future of the areas but does not intend to annex them during the planning horizon. Most notably, these include areas east of State Route 1 and areas west of Wyoming Mill Road. The areas east of State Route 1 north of Garrison Oak are predominantly lands that were requested for inclusion in the City’s annexation area by Dover International Speedway. Earlier drafts of the Potential Annexation Areas map depicted these as Category 2 Annexation Areas; however, these areas were removed from this designation following objection by the Delaware Department of Agriculture. The Areas of Concern shown west of Wyoming Mill Road are areas shown in earlier drafts as Category 3 Annexation Areas; however, these areas were removed after discussions with the Town of Wyoming during which the Town expressed their interest in annexing these areas. If developed, the City would like to be notified by the Town of Wyoming or Kent County so that the City can work with the relevant jurisdiction to ensure that land planning includes interconnections with areas that may ultimately develop in the City of Dover.

Classification of Potential Annexation Lands

Map 13-2 shows land use classifications for lands within the Category 1 and Category 2 Annexation Areas. The zoning classifications considered for each land use classification are identified in Table 12-1: Land Use and Zoning Matrix.

Map 13-2 identifies lands the following areas for medium density residential land use if annexed into the City: the Papan Farm east of Wyoming Mill Road, the Kesselring Farm south of Webbs Lane, the enclave area along Nixon Lane and Acorn Lane, and the area north of Denneys Road. The plan identifies areas to the west of the City, including Fox Hall Drive and the Artis Drive area, as low density residential land use. This designation is also recommended in the area east of State Route 1 along Fox Road (currently developed residential lots). The map identifies the large enclave area north of the Dover Mall (which is currently a mobile home park) as mixed use, as if this area were to annex and redevelop, it is an ideal opportunity for a master-planned mixed use community.

The large enclave area east of McKee Road and north of College Road has been identified as potential industrial land if annexed. This area is adjacent to other industrially zoned areas and is bisected by the railroad tracks. There is a small enclave area along McKee Road north of College Road that has been identified as Office and Office Parks. Most of the remainder enclave areas have been designated as Commercial in use if annexed.

Zoning Review for Annexations

The review of zoning for each parcel proposed for annexation should reflect a consideration of the details that may not be accommodated in a citywide Plan. That review may include:

- Proposed zoning be in compliance with the land use category shown on Map 13-2 and used in conjunction with Table 12-1: Land Use and Zoning Matrix;

- Character and compatibility of the surrounding land uses and properties;
- The street type and capacity serving the property;
- Environmental concerns and conditions that may influence land use and zoning;
- Market concerns and conditions;
- The compatibility with the overall goals of the Comprehensive Plan.

Each annexation request will be evaluated based on these criteria. Again, any request for exceptions to these criteria must be made through and subject to the approval of, the Planning Director and City Manager with documentation as to why exceptions are made and if they are technically and/or legally feasible.

Cost-Revenue Analysis Model

Overview

The City of Dover developed a model cost/revenue analysis model to apply in evaluating individual annexation requests. Conceptually, the model seeks to measure all potential fees and revenues associated with a particular annexation and all direct and indirect service costs as well as potential opportunity costs. Where appropriate, it accounts for quality of life impact factors and indicators.

The analysis model consists of a series of calculations and tables preceded by a development program for each annexation area under consideration. The development program draws physical data from existing City information, presents population and housing unit data from the US Census, and shows base calculations for land and property values as well as property tax impact for non-residential uses. The model analyzes both existing and proposed development and considers residential and non-residential uses separately. Non-residential uses include both commercial and industrial development.

The analysis model calculates fiscal impacts for ten primary cost areas including sewer and water, sanitation, police, fire, planning and inspections, streets, library, parks and recreation, electric, and general administrative (tax assessor, city clerk, council, mayor, city manager, information technology, finance, public works, central services, facilities management, fleet maintenance, administrative services, human resources, insurance, and retiree health care). Eleven revenue sources are included in the model: property tax, transfer tax, municipal street aid fund, electric, sewer and water, sanitation, permits and licenses, wastewater impact fees, Comcast franchise, library, emergency services (police, fire, ambulance), and miscellaneous (fines, 911 fees, miscellaneous charges, and recreation).

The detailed methodology for the cost/revenue analysis is a 465-page document available from the Department of Planning and Inspections. Other relevant data, calculations, and tables prepared by Kise Straw & Kolodner/Urban Partners are also available at the Department. The model will be used for the actual parcels proposed to be annexed as requests are submitted.

Interpretation of Results:

Findings vary widely depending on factors such as number and value of existing housing units and square feet of non-residential uses, developable area, and proposed zoning type for new development. In interpreting these findings, it is important to consider the following key points:

1. Findings should not be viewed cumulatively:
 - Not all areas will be annexed and developed simultaneously. The tool is intended to review the fiscal impact of individual annexations and does not consider cumulative impacts;
 - The pace of development will vary depending on specific development proposals.
2. Findings will vary as the analysis tool is updated to reflect specific development proposals:

As areas come up for annexation consideration, the City may wish to update the analysis inputs to reflect particular development proposals or alternative zoning.
3. Annexation decisions should not be made solely on cost/revenue analysis findings:
 - Analysis findings are intended to be considered as one of several variables taken into account by the City when weighing the pros and cons of the annexation of a particular site, as identified above;
 - Other variables include quality of life and social benefits not accounted for in the tool, City growth management objectives, and infrastructure capacity.

Implementation

The City of Dover has or will take the following steps to implement the Annexation Plan:

1. Adoption of the Growth and Annexation Chapter and Annexation Plan Maps 13-1 and 13-2;
2. Develop incentives for annexation of lands within the Category 1 area, such as:
 - a. Developing a payment plan for utility connection charges and impact fees;
 - b. Abating City property taxes for a period of time or phasing in City property taxes over a period of time.
3. Initiate Owner-requested Annexations following the Adoption of the Annexation Plan;
4. Implement the Cost/Revenue Analysis Model as a means of reviewing annexation proposals within Category 2 annexation areas.

An annexation policy would not effectively bring about the City's desired goal of directing urban development toward the City center and away from rural, valued agricultural and environmentally sensitive areas without coordination with Kent County

Planning Services Staff and zoning practices. Therefore, the City will work with the County to develop the required coordination.

Annexation Requirements as per the Delaware Code and City Charter: The current process for the City to annex properties is a multi-step process. Annexations must comply with the following requirements of the Delaware Code:

1. All annexations must be consistent with the City's most recently adopted municipal comprehensive plan. The area(s) being considered must be depicted as area(s) for future annexation on the adopted plan.
2. The City shall have the ability to annex a parcel only if and to the extent that such parcel is contiguous with existing municipal boundaries. Nothing herein shall be construed to allow rights of way, utility easements and waterways or like entities to be annexed in corridor fashion or to be utilized as a corridor route for annexation to gain contiguity.
3. The City shall prepare a plan of services indicating those services it expects to provide to the newly annexed area, how such services will be provided, and the fiscal and operating capabilities of the City to provide such services.
4. At the time of annexation, the City shall by ordinance rezone the area being annexed to a zoning classification consistent with the adopted comprehensive plan or development strategy.
5. The City when proposing annexation must fully comply with the provisions of Chapter 92 of Title 29 as to state notice, and must demonstrate that it has notified all other affected jurisdictions, conducted a public hearing, and provided a comment period of at least 30 days before formal annexation. The City shall file with the State Office of Planning Coordination any written comments received concerning such proposed annexation together with any response(s) thereto.
6. The Advisory Council on Planning Coordination has established a mechanism for resolving disputes between jurisdictions regarding annexations. The mechanism developed by the Council includes:
 - a. Determination of how the costs for the dispute resolution process are born among the parties;
 - b. Timeline for the dispute resolution process; and
 - c. Extent to which the dispute resolution process will be enforceable. (42 Del. Laws, c. 120, §1; 22 Del. C. 1953, §101; 55 Del. Laws, c. 265; 70 Del. Laws, c. 186, §1; 73 Del. Laws, c. 186, §10; 73 Del. Laws, c. 213.)

CHAPTER 14

INTERGOVERNMENTAL COORDINATION

Intergovernmental coordination is essential to accomplish the goals identified through the planning process. The coordination of planning and other activities with those of nearby municipalities, Kent County, and the State of Delaware will have a direct impact on the well-being and quality of life for all residents living in or near Dover.

Coordination with Nearby Municipalities

- **Camden:** The *Town of Camden 2007 Comprehensive Plan* was reviewed and it was determined that Camden intended to annex and grow south of their current town limits. It is not anticipated that Camden and Dover will have any jurisdictional issues, at least not during this planning period. However, Dover and Camden officials should keep each other apprised of activities in either municipality that could have an effect on the other.
- **Cheswold:** The City of Dover provides Cheswold with trash service. This service was arranged at the request of the town, but there is currently no binding contract which requires Dover to provide this service. Each individual property owner requests the service, and billing is done on an individual basis.
- **Little Creek:** The Town of Little Creek's Comprehensive Plan was certified by the State in 2006. The Plan does not indicate annexation, but rather an area of concern extending a one-mile radius around the Town. Dover provides trash service to Little Creek through the same arrangement as service is provided to Cheswold. There have also been discussions in the past about the potential for Dover providing water service to this small community. Dover should continue to work with the Town of Little Creek regarding these service arrangements.
- **Wyoming:** The Town of Wyoming is in the process of updating its comprehensive plan. Dover Planning Staff met with the Mayor and Clerk of Wyoming and discussed three areas where both communities have some interest in future annexation activities. The areas in question are the area south of Webbs Lane, just east of New Burton Road and north of Isaacs Branch; the Papan Farm that lies east of Wyoming Mill Road, south of Hidden Creek; and the other farm areas of the Papan family that lie west of Wyoming Mill Road. The City will need to work with the Town to determine which municipality should annex the property if the owners become interested in development. The Papan Farm east of Wyoming Mill Road and the Kesselring Farm and adjacent properties south of Webbs Lane are logical expansions of the City of Dover within the next five years. Dover has infrastructure proximate to these properties that would make these logical expansions of the City's sewer, water and electric systems. The Papan properties west of Wyoming Mill Road have recently renewed their commitment to remain in agricultural preservation, and would therefore not be likely expansions to Dover's boundary within the five year planning horizon. Regardless, the City will need to coordinate with the Town of Wyoming when and if the properties become developed to ensure that land planning occurs in a way that is beneficial to both jurisdictions.

Coordination with Kent County

The Dover Plan used the *Kent County Comprehensive Plan* as a guiding document when preparing the Growth and Annexation map and plan component. The direction of the *Kent County Comprehensive Plan* utilized the Growth Zone boundary that was developed in the County's 2002 *Comprehensive Plan*. The City used this in developing its Growth and Annexation Plan. One notable difference between the City's proposed Growth and Annexation Plan and the County's Growth Zone is the area around Artis Drive, west of Dover. To date, the City has annexed land along Route 8 as far west as Artis Drive. The 2008 Growth and Annexation Plan includes land surrounding Artis Drive and is in Category 2: Priority Annexation Areas (0-10 years).

City Planning Staff have met with the Kent County Planning Staff to coordinate on issues of common interest within the Comprehensive Plans. Additionally, the County Administrator served on the working group that helped to develop the Economic Development chapter of this Comprehensive Plan.

Coordination with the State of Delaware

The City of Dover has worked with the Office of State Planning Coordination throughout the process of preparing this Comprehensive Plan. The City Planning Staff has met with the Director of the Office of State Planning Coordination and the Circuit Rider Planner for Kent County on several occasions, and has made every attempt to address agency concerns in different elements of the text. Data layers from certain state agencies (notably State Department of Natural Resources and Environmental Control (DNREC) and State Historic Preservation Office (SHPO) and the Dover/Kent County Metropolitan Planning Organization (MPO) were used to prepare the plan maps for this plan update. The *Strategies for State Policies and Spending* for the Dover area is found in the map appendix of this document. This map demonstrates that Dover is a "Community" area where the State will focus infrastructure investments and direct growth. The City of Dover will continue to work with the State through the Office of State Planning Coordination on planning, growth management and infrastructure issues.

The Planning Staff has also met with staff from DNREC, the Department of Transportation (DelDOT), Department of Agriculture, and the Dover/Kent County MPO in development of the Comprehensive Plan. Their input has been reflected in the various chapters and associated maps.

The City submitted the preliminary draft of this Plan to the Preliminary Land Use Service (PLUS) of the Office of State Planning Coordination for review and received comments from various State agencies. These comments have been reviewed by City Planning Staff and incorporated within this Plan, and the Planning Office has sent a response letter to the Office of State Planning Coordination.

Future and Ongoing Coordination Activities

The City of Dover recognizes the importance of ongoing coordination with other municipalities, Kent County, regional agencies, and State agencies to ensure that growth and development occur in an orderly fashion. The following is a summary of ongoing efforts to

coordinate with other governmental agencies, as well as future opportunities for coordination.

- **Continue the Development Advisory Committee Process** – The City of Dover has a Development Advisory Committee (DAC) that is made up of both City agencies and State and regional agencies responsible for various aspects of the development review process. DelDOT and the Kent Conservation District are members of the Committee. This process ensures that development decisions within the City of Dover are well-coordinated with the appropriate regulatory agencies. Projects cannot receive final approval from the City until they have received approval from all other regulatory agencies. While DelDOT and the Kent Conservation District are the most active participants within the DAC process, DAC agendas with application descriptions are also sent to other agencies, including the school districts (Capital School District and Caesar Rodney School District) and DNREC.
- **Continue to Be an Active Participant in the Dover/Kent County MPO** – The City is an active participant in the MPO, both on the MPO Council and the Technical Advisory Committee. This position ensures that Dover is aware of the larger region and the transportation issues that extend beyond the City.
- **Continue to Participate in Transportation Studies Impacting the Dover Area** – The City has been an active participant in the various transportation studies in the Dover area. This is important in ensuring that the local expertise is present as transportation projects are planned and in incorporating the results of the various studies in the land use planning process at the local level.
- **Look for Opportunities to Coordinate with State and Regional Agencies** – City Staff have begun to forge partnerships with such State agencies as the Division of Public Health, DNREC, and the Delaware State Housing Authority to share information, provide and receive technical expertise, and eliminate potential for duplication of efforts and/or services. City Staff and elected officials should continue to work with other local, regional and State agencies to develop new partnerships that can increase efficiency and improve service provision in Dover.
- **Continue to work with Kent Conservation District and DNREC on Implementation of Source Water Protection** – The City will continue to rely on Kent Conservation District and DNREC, as needed, to provide technical support and implementation of the Source Water Protection Overlay Zone as development projects come in for review.

Coordination with Planning Activities

The City should become involved in planning activities of other agencies when they are addressing land use, transportation, infrastructure, or service delivery in and around the Dover area. In addition to participating in regional planning activities, the City should review and comment on draft comprehensive and/or development plans by neighboring jurisdictions to ensure coordination.

CHAPTER 15

IMPLEMENTATION

Part I – Implementation Plan

In order for a Comprehensive Plan to be effective in guiding the growth and improving quality of life within a city, it must identify specific actions and timeframes for implementation. This chapter identifies the actions and projects necessary for implementation of the Comprehensive Plan, as well as the process for amending the Plan.

The City's success in meeting the upcoming challenges will in large part be determined by the actions it takes in the coming years. While each chapter of the Comprehensive Plan includes a series of recommendations for the specific topic area, this chapter focuses on the projects, studies, and code amendments necessary to implement the Comprehensive Plan. The actions are grouped by timeframe for accomplishment of the specific action item.

The City Manager, City Planner, and other department directors will be responsible for incorporating the various actions and projects into their annual work plans to ensure that projects and tasks are completed in accordance with the Comprehensive Plan. The Planning Office will report annually to City Council and to the Office of State Planning Coordination on the progress of implementation.

Immediate Actions

The two most important and time-sensitive actions that are required by Delaware Code are the adoption of the Comprehensive Plan and the Comprehensive Rezoning of all parcels inconsistent with the Land Development Plan.

Adoption of the Comprehensive Plan

The first step in the implementation process of the Comprehensive Plan is the official adoption by the Planning Commission and City Council as required under Delaware law. Both Planning Commission and City Council adopting the Plan affirms their common goal with respect to the future. This occurred on December 2, 2008 and February 9, 2009, respectively.

Zoning Map Revisions

As a part of the Comprehensive Plan implementation process, the City's Official Zoning Map must be evaluated for consistency with the Land Development Plan. Zoning changes necessary to implement the Land Development Plan will be evaluated immediately after the Plan is adopted. The Land Development Plan (Chapter 12 and Map 12-1) is the basis for zoning within the City, and within 18 months of the Comprehensive Plan's adoption, all zoning throughout the City must be consistent with the Land Development Plan. This Comprehensive Rezoning project will involve review by the Planning Commission and City Council, with opportunities for public input through public hearings before each body.

Short Term Implementation (2009-2010)

The following is a listing of projects and code revisions that will be initiated during the two years immediately following Comprehensive Plan adoption.

Implementation Projects and Studies

Develop and Construct a New Public Library

The development and planning of the new library should be a coordinated effort between the citizens of Dover, City Representatives, City Staff, State and County governments, and the private sector to ensure the most up to date and comprehensive facility possible is made available to the public.

Work with DNREC to implement the Silver Lake/St. Jones River Revitalization Project

Continue efforts to restore natural riparian areas that help to improve the water quality of Silver Lake and the St. Jones River.

Develop an Open Space and Parks Master Plan

- Identify within the Master Plan a variety of park and recreation facilities suitable to different ages, cultures, economic status, and interests.
- The Open Space and Park Master Plan should meet the open space and recreational needs in the Downtown and a plan of action for implementation should be created as part of the process.
- Implement improved water based facilities and other non-traditional recreation activities as part of any Open Space and Park Master Plan.

Evaluate Historic District Design Standards and Guidelines

- Evaluate and update the *Design Standards and Guidelines for the City of Dover Historic District Zone*.
- Ensure that this updated identifies the difference in levels protection for The Green and Loockerman Street historic context.
- Additionally, a study needs to be conducted regarding the creation of a separate district for The Green to preserve the architecture and historic importance of the area.

Obtain Certified Local Government (CLG) through the National Park Service

Continue process to complete application to achieve Certified Local Government (CLG) status in the National Park Service's Certified Local Government program for Historic Preservation.

Encourage Citywide Recycling through Modification of City Solid Waste Management Practices

- Continue to promote and increase participation in the City's Curbside Recycling Program. Work with the Delaware Solid Waste Authority to increase public awareness of recycling, specifically among youth.
- Evaluate the feasibility of a "Pay as You Throw" program for solid waste collection throughout the City. Implement recommendations of feasibility report as approved by City Council.

Update and Implement the City's Emergency Operations Plan

Continue to develop, finalize, and fully implement the City's Emergency Operation Plan, under the guidance of the Emergency Management Coordinator.

Develop a Master Plan for Garrison Oak

Formulate a Master Plan for Garrison Oak that allow for interested parties for expedite the development process as well as marketing Garrison Oak for green building/alternative energy and large manufacturing and technological firms.

Develop and Implement a Plan for Long-Term Energy Generation for the City of Dover

Continue to work with PACE to negotiate power purchase and development rights for the short-listed gas fired combined cycle and solar energy options for the City of Dover. Continue to pursue Garrison Oak as a site for clean energy development.

Develop a Downtown Master Plan

Create a visual Master Plan for the Downtown Target Area that supports mixed use development and encourages form based code for Downtown.

Continue to Develop and Promote Incentives for Downtown Redevelopment

Work through the Downtown Dover Partnership and the Dover Economic Development Office to continue development and promotion of incentives for Downtown Redevelopment.

Incentivize Annexation of Category 1 Annexation Areas

Develop incentives to encourage in-fill annexations and other parcels in Category 1 on the Growth and Annexation Map.

Form Bicycle/Pedestrian Advisory Group

Form an advisory group made up of bicyclists, pedestrians, DelDOT staff, MPO staff, and City staff to begin identifying gaps in the pedestrian and bicycle network. This work will ultimately be used in the update of the Bicycle and Pedestrian Plan, but it may also be used to focus on filling in gaps in the bicycle and pedestrian network ahead of this plan.

Code Amendments

Evaluate and Update Environmental Standards within the Zoning Ordinance

- Re-write portions of the *Zoning Ordinance* which no longer adequately address the current environmental concerns within the City.
- Revise Source Water Protection Overlay Zone to include wellhead protection areas omitted in initial adoption.
- Develop an Open Space Zone within the *Zoning Ordinance* to be applied to public and private open space area.
- Revise the definition of Wetlands as currently defined in the City of Dover Code of Ordinances to better reflect current standards.

Incentive Zoning for Affordable Housing Options

- The City of Dover is involved in several efforts to promote homeownership, throughout the City, but particularly in the Downtown area. The City will review

alternatives for zoning amendments that promote the construction or general availability of affordable homeownership opportunities.

Update the Agriculture (A) Zone

- Rewrite the Agriculture zone to ensure that it supports agricultural uses and uses consistent with agriculture.

Update Sign Regulations within the Zoning Ordinance

Ensure that the sign regulations allow for appropriate signage for businesses while fitting with building architecture and respecting community character and appearance.

Amend Zoning Ordinance to Require Bicycle Parking

Add requirements in the *Zoning Ordinance* to address bicycle parking within new non-residential and multi-family residential development.

Intermediate Term Implementation (2010 – 2013)

The following is a listing of projects and code revisions that will be initiated two to four years following Comprehensive Plan adoption.

Implementation Projects and Studies

Evaluate the Process and Procedures for Architecture Review Certification within the Historic District Zone

Evaluate existing regulatory process and procedures for Architectural Review Certification for properties located within the designated local Historic District (H) Zone.

Determine the Feasibility of Implementing a Stormwater Utility within the City of Dover

Develop a feasibility study for initiating a stormwater utility within the City. This will include an analysis of the staffing needs and fees necessary to support a stormwater utility. Implement recommendations of the study as approved by City Council

Encourage and Possibly Require Green Technology for Stormwater Management in New Development Projects

Work with City engineering staff, Kent Conservation District, and the Department of Natural Resources and Environmental Control to determine the appropriate changes to City codes and processes to require stormwater management practices that mimic natural conditions for new development. Implement necessary changes to codes and processes.

Evaluate the Responsibilities for Maintaining Active Recreation Areas and Common Open Space within Residential Developments

- Evaluate the process and responsibilities for maintaining active recreation areas and common open space within residential developments.
- Develop recommendations for improving the maintenance and management of active recreation areas and common open space and implement recommendations as approved by City Council.

Update Bicycle and Pedestrian Plan

The plan should identify needs for public investment in filling gaps in the bicycle and pedestrian networks as well as identify requirements for private investment associated with future development.

Work with DelDOT and Dover/Kent County MPO to Conduct and East/West Routes Study

Conduct and implement a study to address east-west traffic issues in West Dover. Work with DelDOT and the Dover/Kent County MPO to study ways to review alternatives for preserving capacity on east-west routes.

Code Amendments

Review and Realign Existing Industrial, Office and Commercial Zones

- Ensure that industrial uses are separated from incompatible uses and that zoning districts support the economic development strategy of the Comprehensive Plan.
- Separate light and heavy manufacturing to prohibit non-manufacturing entities within the heavy manufacturing zone.
- Evaluate and update home occupation requirements in the *Zoning Ordinance* to encourage infill and better align uses.
- Better define permitted and conditional uses in commercial and industrial zones.

Review and Amend the Residential Zoning Districts to Encourage a Balanced Housing Stock

- Explore the feasibility of allowing an accessory dwelling unit based on strict criteria within the one-family residential zones.
- Allow a mix of housing styles within one-family residence zones while maintaining density caps consistent with the relevant zones.

Review Building and Zoning Code Requirements to Ensure That They Do Not Prohibit Green Building Practices

- Ensure that solar and wind power are not prohibited by building height restrictions
- Review parking requirements to ensure that they do not require excessive impervious cover nor discourage pervious alternatives to impervious surfaces.

Long Term Implementation (2012 – 2014)

Explore options to restore piped streams into natural channels.

Evaluate Appropriate Areas for Expansion of the Historic District (H) Zone

Evaluate areas listed or eligible to be listed on the National Register for Historic Places for inclusion within the City's Historic District (H) Zone.

Evaluate and improve the process for the City's Tax Credit Program for Historic Properties.

Develop a Transfer of Development Rights Program

The City will develop a Transfer of Development Rights (TDR) that allows property owners to protect their agricultural land or environmentally sensitive areas, while selling their development rights to increase the density or intensity of land within designated growth areas. Many specifics need to be worked out to develop a proposal that reflects the needs of Dover.

Comprehensive Plan Update

Initiate a process to complete the 2014 Comprehensive Plan Update.

Comprehensive Plan Amendments

The City may, from time to time, amend the Comprehensive Plan as circumstances unforeseen at this time arise that require such amendments. Any amendments to the Comprehensive Plan must be approved by City Council, by recommendation of the Planning Commission, and submitted to the Office of State Planning Commission for review before they become effective. Comprehensive Plan Amendments can fall into two categories:

1. **Minor Variations** - Any application for rezoning or annexation that is inconsistent with the City of Dover's Comprehensive Plan, but where the non-conformity is of a minor, relatively insignificant nature shall be considered a minor variation. A rezoning shall be considered a minor variation from the Comprehensive Plan when the following conditions are met:
 - a. The rezoning is of a unique circumstance and cannot set precedent for other lands in the vicinity of the rezoning,
 - b. The relative size of the rezoning or the variation from the land use recommended by the Comprehensive Plan is so minor that it would have no impact on the goals and objectives of the Comprehensive Plan, and
 - c. The proposed zoning is adjacent to or in the immediate vicinity of other similarly zoned lands and would not alter the pattern of development in the area.
2. **Comprehensive Amendment Request** - For those requests that may not be considered a Minor Variation, the applicant must still file a **Comprehensive Plan Amendment Request**, along with the annexation application, but may be considered concurrent with the rezoning process. As established in the Memorandum of Understanding for PLUS, the City has agreed to submit an application for comments to the State Office of Planning Coordination's Preliminary Land Use Services (PLUS) review process. In these cases, the City is the entity that must submit a request for PLUS review.

Requests to amend the Comprehensive Plan may be initiated by Planning Staff, City Council, or applications from the general public. Upon receiving a request to amend the Comprehensive Plan, the City Planner will determine whether the request is considered a Minor Variation or a Comprehensive Plan Amendment Request.

When the City Planner determines that a request qualifies as a Minor Variation he/she will submit the requested variation to the Office of State Planning Coordination in writing,

including a map of the area with the Land Development Plan classifications and an explanation of how the proposal qualifies as a Minor Variation. If the Office of State Planning Coordination concurs with the City Planner, the application will be considered consistent with the Comprehensive Plan and processed according to the proper procedure for the rezoning or annexation request. If the Office of State Planning Coordination does not concur, then the application will be considered a Comprehensive Plan Amendment Request.

When the City Planner determines that a request is considered a Comprehensive Plan Amendment Request (not a Minor Variation), it will be subject to the following process:

The City will submit Comprehensive Plan Amendment Requests for consideration through the PLUS Process in **January of each year**. Applications for amendments to the Comprehensive Plan must be received by the City Planning Office by December 15th. The City will compile any requests received into one submission to the Office of State Planning Coordination, regardless of Planning Staff concurrence with the request. Comprehensive Plan Amendment Requests will be processed annually, in accordance with the schedule below:

Table 15-1: Amendment Submission Schedule

Milestone	Date
Application Deadline	December 15 th
Submission to PLUS	1 st Working Day of January
PLUS Meeting	Late January
DAC Staff Meeting	Late January/February
DAC Applicant Meeting	February
Planning Commission Hearing	February
City Council Hearing & Action	March

The Planning Office will develop application forms and checklists for Comprehensive Plan Amendment Requests. Prior to submitting an application for Comprehensive Plan Amendment, an applicant must hold a Pre-Application meeting with Planning Staff. Submission materials for Comprehensive Plan Amendments will require the applicant to provide the following information (prepared by a design professional): a completed comprehensive plan amendment/rezoning application, property information (drawing), an analysis of the surrounding land uses and zoning classifications, a statement on how the request is consistent with the goals of the Comprehensive Plan and the fee associated with the application. For rezoning applications, all other requirements must be met for a rezoning submission.

Conclusion

The *2008 Comprehensive Plan* is the culmination of more than a year's effort, led by the Planning Office, in conjunction with City Council, the Planning Commission, the Historic District Commission, and the citizens of Dover, to define the future of Dover. Public input is at the heart of the goals, recommendations, and implementation actions of the Comprehensive Plan. The Comprehensive Plan is intended to be a living document that will guide the actions of City government as it addresses the challenges of a growing City. The public input does not end with the adoption of the Comprehensive Plan; rather, the public is

encouraged to stay involved in the implementation of the Plan to ensure that Dover continues to be a place where people want to live.