

# Introduction

## Comprehensive Plan for the Town of Ocean City, Maryland

The Town of Ocean City Comprehensive Plan tells the story of Maryland’s seaside community and how it will respond to changing times over the next 10 to 20 years. Just like Worcester County and other communities across the state, Ocean City must regularly prepare and update a master plan based on a common framework of ways to manage growth and change over time. Each chapter describes an element of this management tool and includes recommendations for the future. This plan builds on the values and guidance of previous Comprehensive Plans adopted in 1969, 1989, 1997, 2005 and 2009.

First and foremost the Comprehensive Plan guides the general arrangement of land uses within the community such as: housing, commercial, recreation and public facilities. The Comprehensive Plan provides a way to communicate a shared vision of the community, and a common set of objectives for managing growth and change. Once adopted, these ideas are implemented through the Zoning Ordinance, Subdivision Ordinance and other City codes and public infrastructure investments.

Why does the Comprehensive Plan need to be updated?

- The Plan should respond to new trends or changes
- The Plan will incorporate new information such as Census data
- The Plan can align with County, State or National priorities

### ***State of Maryland Requirements***

Maryland’s municipalities and counties use three basic powers to control land use within their boundaries: the power to prepare a comprehensive or master plan, a zoning ordinance, and subdivision regulations. Together these documents direct how land will be developed.

The State of Maryland entrusts local jurisdictions such as the Town of Ocean City with land use planning authority to guide growth and development through the Land Use Article of the Maryland Annotated Code. The state statute outlines the responsibilities, roles, and functions of the planning commission and sets the ground rules for planning and zoning powers.

Maryland’s Planning Visions law (from 2009) created 12 Visions which reflect the State’s overall goal to develop and implement sound growth and development policy in every community. Local jurisdictions are required to include the visions in the local comprehensive plan and implement them through zoning ordinances and regulations.

1. Quality of life and sustainability;
2. Public participation;
3. Growth areas;
4. Community design;

### Ocean City, Maryland 1969

*“The broad white beach had attracted bathers to the place where Ocean City now stands for some years before the first hotel was opened in 1875.*

*The automobile has virtually supplanted the railroad, but a continuing force nourishes the growth of the town. It is accessible to an ever increasing number of people. These people have a growing amount of leisure time. Many of them have funds to satisfy tastes formerly regarded as the whims of tycoons.*

*Thus there is not only a growth of the number of customers but a change in their achievable desires. Furthermore young people now have more money as well as more freedom than did their parents as youths.”*

- Introduction to the  
Comprehensive Plan  
In 1969

5. Infrastructure;
6. Transportation;
7. Housing;
8. Economic development;
9. Environmental protection;
10. Resource conservation;
11. Stewardship; and
12. Implementation approaches

The current 5-year review and update of the Comprehensive Plan is intended to comply with all applicable State of Maryland requirements as amended.

### ***Location, Population and Economy***

Ocean City is located on a barrier island 8.4 miles long in Worcester County, Maryland and was originally founded as a fishing village in 1875. Today, the Town has over 7,000 permanent residents, with over 6,000 registered voters and hosts millions of visitors annually to its beautiful wide beaches, 2.5 mile long boardwalk, coastal bays and natural resources. The Town also offers a wide variety of activities including festivals, fishing tournaments, amusement parks, golf courses, restaurants, bars and nightclubs.

Incorporated by the State of Maryland in 1898, Ocean City is located approximately 150 miles from Washington, D.C., and 135 miles from Baltimore, Maryland. It is bordered on the north by Fenwick Island, Delaware, on the south by an inlet which separates Ocean City from Assateague Island state and national seashore parks, on the west by the Maryland Coastal Bays estuary and on the east by the Atlantic Ocean.

Ocean City is one of the premier seaside resorts on America's east coast due to a variety of attributes including its convenience to major metropolitan areas and access by automobile using US Route 50 to the west and US Route 13 and Delaware Route 1 to the north. A destination resort, Ocean City is nationally recognized as a clean and safe community for its residents, vacation homeowners and visitors with tourism as the basis of its economy. On busy summer weekends, it is estimated that over 300,000 people visit the resort. Although the peak months are June, July and August, tourism is also strong in April, May, September and October. Depending on the weekend weather, these off-season months may average over 200,000 people.

The Town government, in conjunction with local businesses and non-profit groups, has sought to increase business with the use of festivals, entertainment, sporting events and key public investments in infrastructure and facilities. The Town also widely uses advertising, promotions, and social media to publicize the vacation and leisure opportunities in Ocean City, increasing from \$2.1 million a decade ago to \$6.5 million in 2015.

When the Roland E. Powell Convention Center was renovated in 1995, it led to two decades of improved hotel and restaurant sales. The Performing Arts Center, which opened at the Convention Center in December 2014, is anticipated to similarly increase economic activity and help to make Ocean City an even more attractive and lively year-round residential community. As Maryland's premier seaside resort, the Town of Ocean City is a major economic engine and recreational resource for the entire state and region.

## ***Overview of Comprehensive Planning***

Each section of the Comprehensive Plan will describe a different element of what makes up the overall community form, how it has changed over time, and what trends or needs must be addressed in the future. The plan will include goals and policies that will continue to guide the development and enforcement of codes and regulations regarding the town's physical features.

Changes in the overall concepts and major objectives of the Plan will be approached very gradually during at this time, if changed at all during the next 10 years. The purpose of this 5-year review is to identify the current and most important ideas for adapting to change and growth so that Ocean City will continue to be a first choice place to live, play, and invest in the future. The Comprehensive Plan will be evaluated and updated again in 2022 in order to coincide with the release of new Census information.

A few quick notes are offered to illustrate how the adopted Comprehensive Plan has helped to guide community development over the years:

**1969 Plan** – Annexation of undeveloped areas north to the Delaware State line after the 1962 storm was promoted in order to provide an adequate tax base for redevelopment of the resort community. Allowable density for residential high-rise development transformed the area between 94<sup>th</sup> Street and 118<sup>th</sup> Street into the current 'high rise row' along the ocean front. During the 1970s construction flourished, and there were more than 10,000 condominium units built on the beach. Significant land modification was permitted on the bayside prior to the adoption of statewide environmental controls which allowed the creation of single family neighborhoods with homes that back up to an extensive waterfront canal system. MD Route 90 was constructed as a two-lane expressway to provide one of the main access routes into Ocean City, especially the northern part of the resort. The state highway construction started in 1970, was opened west to MD 589 in 1972 and to US 113 in 1975. MD 90 was completed west to US 50 in 1976. Convention Hall opened under Mayor Harry Kelley's administration in April of 1970.

**1989 Plan** – Density reductions for residential development were adopted in 1986 which limited future ocean block development to mid-rise buildings. Under the administration of Mayor Powell, Phase I of the Beach Replenishment and Hurricane Protection Project began in 1988. Increased emphasis was placed on architectural review and issues of non-conformity as comprehensive zoning regulations were adopted in 1993 and enforced with infill and re-development of older properties.

**1997 Plan** - In 2001 Ocean City was named an All-America City, an award that recognizes communities whose citizen's work together to identify and tackle community-wide challenges and achieves uncommon results. In 2000 during Mathias' administration, revitalization of the Boardwalk included replacing the entire promenade from end to end entirely with wood. A much-needed expansion of Convention Hall was completed in 1997, and the building was renamed the Roland E. Powell Convention Center.

**2006/09 Plan** – New state requirements for adopting a Municipal Growth Element, a Water Resources Element and the 12 Planning Visions, reflected the current priorities for encouraging 'smart growth' in existing communities where adequate road, utilities and civic infrastructure already exists. Ocean City is designated as a Growth Tier One area that is intended to be served by public sewerage systems.

## ***Strategic planning***

In the spring of 2014, the Mayor and City Council updated their strategic plan which has a 15-year vision statement and 5-year goals for the Town. The strategic plan is designed to enable the Town government to focus its limited resources on the most important priorities as established by the Mayor and City Council and continue to improve our visitor experience and the high quality of life our residents enjoy. After engaging staff, residents and business leaders in the community, the Mayor and City Council determined their long range Vision for the community and established 5-year strategic planning goals:

### **VISION STATEMENT - 2029**

***Ocean City is a Vibrant Coastal Resort Community; with a World Class Public Beach and Waterways; and an Authentic Historic Boardwalk; and is the Choice of Today's Families.***

***Ocean City is Safe and Clean, has Quality Neighborhoods for Residents, is Accessible for Easy Travel, and is a place for Enjoyable Experiences for All.***



1st class resort and tourist destination



Financially sound town government



A more livable community for residents



Excellent service through a high performing town organization



Revitalized Ocean City: development and redevelopment

Many of the goals and priority actions outlined in the Town Strategic Plan align with the structure of the Comprehensive Plan and are incorporated in this review and update. Other goals and priorities are also included that traditionally look outside of the municipal boundaries to address how the Town will coordinate its management plan with County, State and National scale planning activities. The question of off-shore energy development provides a good example of how plans at all scales need to be coordinated to avoid adverse impacts and to provide community benefits.

### ***New Trends and Changes***

Each chapter of the Comprehensive Plan will focus on a separate planning element that will identify new trends or changes which need to be addressed through goals, objectives and implementation strategies. Based upon its history and patterns of growth over the years, Ocean City's new challenges for the future will likely be organized around the following common themes:

Redevelopment and Infill / Slow Growth

Next Generation of Family Demographics

Environmental Change and Resilience

# CHAPTER 1: Population Characteristics and Trends (text only)

Ocean City has experienced consistent, and in some time periods, remarkable growth. The number of both ~~year-round residents and daily and~~ seasonal visitors has increased ~~substantially~~ steadily over the years. The year-round population, in particular, has ~~shown a dramatic increase in recent years~~ remained stable within the past 15 years even during a national economic recession. US Census estimates of the permanent resident population in April are 7,172 (2000), 7,102 (2010) and 7,055 (2015) with less than 1% change between each period. This chapter reviews past changes in both year-round and seasonal populations, provides a profile of the characteristics of these populations, identifies expected future population trends and projections and assesses the implications of expected future population trends for purposes related to ~~future~~ community planning.

## Goal:

To collect and utilize information regarding the demographic characteristics of Ocean City (both year round and seasonal) and to identify trends or changes which should be evaluated by the Comprehensive Plan.

Objectives: In order to achieve the population characteristics and trends goal, the following objectives are adopted:

1.1 Update population estimates and other data collected through the US Census and American Community Survey.

1.2 Review traditional and new methods of estimating peak seasonal population to identify trends or changes. Improve data collection and tracking methods.

1.3 Communicate information with other City Departments, Planning Commission, Mayor and City Council to support local decision making in other planning documents such as the Capital Improvement Plan, Code revisions, etc.

1.4 Reference data collected in Chapter 1 throughout the Comprehensive Plan to evaluate adequate public facilities.

1.5 Study seasonal visitor demographics by zip code origin to determine unique population characteristics.

1.6 Incorporate Town of Ocean City, MD Strategic Plan principles into the evaluation of demographic information.

The Town of Ocean City is a diverse and international community. This diversity is underscored by the wide range in characteristics of the seasonal visitor population and ~~growing number of~~ the stable base of year-round residents. These residents and visitors to Ocean City can be characterized as follows:

- Year-round residents
- Non-resident property owners
- Overnight visitors
- Day visitors
- Seasonal workers

The Town of Ocean City is a ‘hard to count’ community for the U.S. Census because of the high percentage of seasonal rental housing and the population survey count based on a single day in April, once every 10 years. The American Community Survey is completed more often, however the method of sampling representative sites does not adequately capture the dynamic seasonal changes that occur and data collected by zip code includes areas outside of the municipal boundary. The limited

Limited availability of data ~~requires~~ has traditionally meant that ~~the above groups population be~~ statistics are consolidated into two groups: year-round residents and seasonal visitors. ~~Despite this consolidation, available information provides a substantial amount of~~ Best available information from many sources is used to provide a basis for understanding and meeting present and future planning needs. This Chapter is organized in three parts, each providing discussion of:

- Population size and characteristics. Population size serves as the benchmark for planning the physical needs of the community. It provides the basis for estimating overall land and facility needs. Analyzing the characteristics of the population assists policymakers in making informed judgments regarding how the needs and service demands of the present population can best be met.
- Population projections. Population projections provide the basis for estimating future service, housing, and employment needs and determining how community demand for services can be expected to change over time. Projections are based on both recent trends and the capacity of the Town of Ocean City to ~~support future~~ adapt to growth and redevelopment. Given a wide range of variables that can influence future year-round and visitor population characteristics, projections should be considered less than precise, but nevertheless ~~invaluable~~ useful for estimating future demand for community facilities and services.
- Proposals for action. The proposals for action identify key items or issues to be addressed related to population. They are designed to implement the spirit of the Comprehensive Plan and facilitate the progress of Ocean City’s ongoing planning program.

Ocean City at Night (photo)

As a tourist destination with many scheduled special events and destination locations, the location of the population can be very important as well as the time of day or night. The downtown area of the Boardwalk provides a gathering point for thousands of summer visitors in the evening hours, and special events such as the annual Air Show will concentrate the visitor population and increase the demand for public services.

### **Healthy Eating Active Living**

The Town of Ocean City is now recognized as a healthy community by joining with the HEAL – healthy eating and active living – Cities & Towns Campaign for the Mid-Atlantic, which champions local government policies that improve access to healthy foods and physical activity. ‘HEAL’ wants all Marylanders to live high quality, healthy lives and Ocean City works to maximize free resources that can benefit our citizens and the wellbeing of our entire community.

## **POPULATION SIZE AND CHARACTERISTICS**

### **Year-round Population**

During its early years, Ocean City was a small resort community experiencing slow year-round resident growth. Through four decades from the period 1930-1970 the Town’s resident population grew by only 547 new residents. The Town’s population declined in the 1950s only to recover in the 1960s when the northern section of the island was annexed. The modest population decline in the 1950s has been attributed to permanent residents moving to the mainland, either selling or renting their high-value island property. ~~Since~~ During the 1970’s, 1980’s and 1990’s growth in the year-round population ~~has~~ increased ~~dramatically~~ steadily. ~~This~~ growth in the 1970s and 1980s period resulted from the increasing tourist economy enabling more households to be supported year-round by the summer trade, and the expansion of public facilities to serve an increasing population. In addition, there has been an influx of retirees who have found Ocean City to be a desirable place to live. ~~Over the past 34 years the year-round population has increased over 5 fold: from 1,493 residents in 1970 to an estimated 8,187 today.~~

Table 1-1  
Figure 1-1

As a resort town, Ocean City is affected by the strength of the national economy. Year-round resident population has stabilized but generally not dropped significantly during recent recessionary periods in the early 1980’s and again recently beginning in 2008/09. Although the year-round resident population has increased almost 5 fold since 1970, current Census data indicates the resident population on April 1<sup>st</sup> may have stabilized around 7,100 persons.

Table 1-2

Table 1-2 compares the growth of Ocean City's permanent population to that of the County, Eastern Shore Region and the State of Maryland. ~~The substantially higher rate of growth in year-round population reflected in Ocean City probably influenced by a number of factors including its growing desirability as more than a resort community and its capacity to absorb year-round growth with existing housing stock and available infrastructure which has traditionally been required to support its visitor population. Traditional growth rates across the State of Maryland and especially on the Eastern Shore have been stable over the last 10 year period ranging from 1 to 1.5 percent annual average increase. The slight decline of year-round population in Ocean City is easily within the margin for error in the Census count and does not necessarily indicate a demographic trend.~~

~~It should be noted that~~ The Ocean City Office of Planning and Community Development has indicated the official ~~1990-2010~~ Ocean City population of ~~5,146,102~~ as determined by the U.S. Census ~~was considered substantially lower than~~ may not accurately represent the number of actual year-round residents ~~based on the single April 1<sup>st</sup> survey date and the seasonal nature of the resident population. However, for~~ For planning purposes ~~however,~~ the number of permanent residents ~~has been identified as an important indicator of stable residential neighborhoods, as a benchmark for providing minimum year-round public services, as a core employee workforce, and as a critical factor to maintain a strong base of registered voters and local governance. The permanent resident population is not as important in many other ways as the total maximum number of people in the Town-at any time, including both the permanent and transient population.~~

## Seasonal Visitor Population

In a resort such as Ocean City, it is much more important to understand the demographics of the total population, including year-round residents and seasonal visitors, rather than only the ~~permanent resident~~ population. Planning for future development and for the provision of public facilities must be based on the total maximum population to be accommodated and served within a 10 to 20 year planning period. With recent efforts to expand events and activities for seasonal visitors throughout the year, there will be a need to evaluate the implications of an extended peak season and higher sustained service levels year-round.

Measuring the seasonal visitor population is a difficult task for any resort community. Since the 1970s, Ocean City has estimated its total population by a mathematical formula called "demoflush". Demoflush estimates population based on flow amounts through the sewage treatment system. When compared to other indicators of population, demoflush population estimates may seem to overstate the actual number of people in Ocean City, ~~but however it is~~ has served as a valuable as a tool to compare population over time and by season since it provides a consistent methodology for estimating seasonal and year to year changes in population ~~through the course of the year and for estimation of changes from year to year.~~

Over the last 5 years, the Mayor and City Council have directed that an alternative way of estimating seasonal visitor population should be developed and calibrated so that the use of the

demoflush method can be phased out. The Tourism Commission has been collecting a consistent set of statistics since May 2012 that may allow the use of a tax revenue and room occupancy based approach in the future. With this Plan update, the traditional demoflush information has been updated for comparison purposes until a new method is adopted.

#### Table 1-3

**Peak Day-** Table 1-3 shows the peak ~~demoflush-seasonal~~ population for each year ~~since 1977~~from 1990 to 2015. This is the estimated number of people in Ocean City on the peak day in each year. The table indicates that ~~the a~~ peak day population of ~~162,900~~332,547 in 2010 ~~in 1977~~ virtually doubled some 10 years later to 332,400 by 1987 and a 25 year average of 326,658 with a maximum annual variance of 6%. ~~Since that time the peak population has remained relatively stable within the range of 320,000 to about 345,000 in subsequent years.~~

#### Table 1-4

**Average Weekend-** The average weekend population by month is shown in Table 1- 4. Since ~~1992~~1993 the year-round average weekend population has ~~shown only a slight increase of just under two~~ varied from 5 to 8 percent above or below the 24 year average and typically ranges from ~~153,000~~150,000 to ~~158,500~~160,000 over ~~the course of~~ the years. The average weekend populations through the summer months have remained quite stable through the 1992-~~2005~~2015 period. Most noteworthy are trends reflecting more substantial increases in average weekend populations during the peak season shoulder months and winter months. Through the period shown in Table 4, the months of January, ~~February, and March, April, October 2015, November and December~~ each recorded substantial weekend population increases ~~in excess of 23% or more of 13 to 18% above average.~~

#### Table 1-5

**Shoulder Season-** Information shown in Table 1-5 appears to confirm trends toward increases in visitor populations during the shoulder seasons (non-summer months). Table 5 shows the average weekend population during the summer season from 1992 through 2015~~05~~ has typically reflected virtually no change ~~remained constant although there was a 4 to 5% reduction in the last few years~~. In absolute numbers, the population for all seasons has increased over the past decade as a result of significant increases in average weekend populations in all other seasons, particularly the winter months where average weekend populations have grown by over 11.84% over the ~~past 11 years~~24 year average. These changes suggest that efforts to expand the traditional tourist season have been ~~somewhat~~ successful.

**Annual-** Total annual visitor population has been estimated at 8.1 million in 2009 (3.6M in the summer months), 7.6 million in 2012 (3.4M in the summer months), and 8 million in 2015.

As noted earlier, estimating the visitor population using the Demoflush methodology ~~probably may overestimates~~ the population. To illustrate, comparing the ~~2000-2015~~ average summer population ~~estimate~~ (~~286,213~~~~277,932~~), less about 10 percent day visitors, to the number of housing units (~~26,320~~~~30,119~~ as reported by the 20~~1000~~ Census plus about ~~9,500~~~~10,000~~ hotel units) results in an average of 7.~~05~~ persons per unit. It seems more likely that, if the average unit contains 2 bedrooms, four to six people would occupy the average unit in the summer.

Thus, a population estimating methodology that incorporates persons per unit indicates that ~~between 170,000 and 240,000~~~~up to 204,607~~ people are in Ocean City at any time during the peak season (~~based on an assumed 85% occupancy and~~ excluding day visitors ~~and non-resident workforce~~). Adding another 10 percent to account for day visitors who are not staying overnight, ~~and an estimated 5,294 non-resident employees~~ yields a maximum of about ~~264,000~~~~230,362~~ -as a total average summer population (about ~~835~~ percent of the Demoflush figure). This is probably a more accurate population estimate for purposes of planning for parks, recreation, police, fire and emergency medical facilities and services as well as Town administrative facilities. However, demoflush figures should be utilized as a basis for ongoing planning to assure adequate water supplies and satisfy wastewater treatment capacity needs ~~until another methodology is tested and approved.~~

## Population Density

Total land area within the Town of Ocean City is approximately 4.~~46~~ square miles or just under ~~3,000~~~~2,853~~ acres. Table 1-6 presents the population density (persons per square mile) for the year round population (1,~~592~~~~59~~ persons per square mile) and for the average weekend demoflush population by season (16,~~746~~~~307~~ to 62,~~316~~~~220~~ person per square mile, depending on the season). By way of comparison, the population density of Baltimore City is approximately ~~9,109~~~~7,700~~ persons per square mile and the density within the City of Annapolis is approximately ~~5,300~~~~5,700~~ persons per square mile.

### Table 1-6

## Resident Population Characteristics

It is common for a comprehensive plan to ~~reference the US Census as a consistent way to~~ analyze the various characteristics of a community's population, such as age, sex, race, ~~income~~ and education. ~~Since such data only exists for the year round population, some discussion is provided regarding the characteristics of Ocean City's resident population. Selected data from both the 2010 Census and the 2015 American Community Survey have been used to complete a current update of the Comprehensive Plan with emphasis on meeting the adopted goals and principles of Ocean City's Strategic Plan.~~ While such information can serve to inform many actions related to future planning, the size and characteristics of the community's visitor population ~~will continue to be~~is of greater import for planning purposes due to its much greater size which drives a much greater demand for public facilities and services.

As noted earlier, growth in the Town's resident population accelerated during the period 1990 to 2000 and then stabilized over the last 15 years near 7,100 residents. This stable rate of growth in the resident population is expected to continue. Worcester County also sustained an accelerated rate of growth during the 1990's. County population grew from 35,028 residents in 1990 to 46,543 in 2000, reflecting a 33% increase for the decade, and now has stabilized with 51,454 residents in 2010 and an estimated 51,540 in 2015 reflecting a 0.2% growth rate. ~~a much greater rate of growth than had been evident in the County in previous decades.~~ (See Table 1-7)

#### Table 1-7

~~While Ocean City remains a popular tourist destination, few young adults and households migrate here. For the most part those relocating to the Town are in pre-retirement and retirement age groups. Both Ocean City and Worcester County are similar to many other locations in the US where the population age 65 and older is growing much faster than the age 18 and under population. However, the year round population of working households in the surrounding County is also expanding. Ocean City completed a strategic planning process in recent years which resulted in the identification of certain demographic characteristics which are incorporated into the Strategic Plan vision, goals, principles, and strategies. More detailed information is available from the 2010 US Census which allows these characteristics to be measured and evaluated along with the traditional measures of change in population and community characteristics. One example is Strategic Plan vision principle # 4: Choice of today's families, and Goal #1: 1<sup>st</sup> Class Resort and Goal #3 More Livable Community for Residents to increase the number of year round residents. 2010 US Census data on these topics has been added with this update.~~

#### **Age and Sex Characteristics of Year-Round Population**

Table 1-8 presents a breakdown comparison of the age characteristics ~~for~~ of the year-round permanent population of Ocean City in 2000 and 2010. Based on the evident shift in population to increases in all age groups over 45 years, Table 1-9 has been modified to provide additional detail regarding this area ~~identifies the sex characteristics~~ of the resident population.

#### Table 1-8

#### Table 1-9

#### Table 1-10

Certain characteristics or trends regarding the age and sex characteristics are noteworthy. They include:

- The general population is remains evenly divided between males (51.43%) and females (48.37%). ~~However the male population represents a larger percentage of the population~~

than it did in 1990 when only 50.7% were males and 49.3% were females. Within the seniors age group (65 and older) representing 30% of the population, there is a larger difference between males 46% and females 54%.

- The population under 18 years of age represents a much smaller percentage of total population (~~9.1~~11.3%) than population under 18 years of age in Worcester County (~~20.5~~18.3%) and the State of Maryland (~~25.6~~23.4%)
- The school-aged population, in the age group 5-17 years of age, makes up ~~a mere~~only 6.38 percent of the total population as compared to the County school age population which represents ~~13.8~~15.3% of the total County population.
- The median age of the Town's population is ~~54.2~~47.2 years of age. This is substantially higher than the median age of the Worcester County population (~~48.1~~43.0) and the State (~~38.0~~36.0) From 2000 to 2010, there was an increase in all age groups over 45 and decrease in all age groups under 45. The age group 85 and older doubled in size over the 10 year period.
- ~~There is a significant difference between the~~ median age of men (~~52.5~~44.7 years of age) and women (~~55.8~~49.7 years of age) as compared to the County (~~47.0~~43.0 years of age for men and ~~49.2~~42.5 years of age for women) and State (~~36.4 for men and 39.3~~36.1 for women and 35.9 for men) demonstrates the general aging of the existing population and the attractiveness of Ocean City for seniors and retirees.-
- Probably the most important observation of the analysis of the age characteristics of the Ocean City year-round population is the large percentage of the population over 55 years of age. In Ocean City, 40.1% of the year-round population is over 55 years of age, compared to 33.0% in the County and 20.3% in the State as a whole. The trends demonstrating a substantial increase in this age group as a percentage of total population in the Town over the past 30 years are also important to note (Table 1-10).

In both Ocean City and Worcester County, the older population is growing almost three times as rapidly as the general population. From 1995 to 2020, the population age 55 and over is projected to increase by over 100% while the general population will likely increase by only 40%. The numerical and percentage increase in the retirement age group has been substantial, especially in the 1980s. It is likely to continue to be an important ongoing trend as the Town's year-round population continues to grow over time, and may require planning for various forms of assisted housing and place greater demands on emergency medical services and health care services in the future.

Key senior statistics compiled from US Census data at [www.seniorcare.com](http://www.seniorcare.com) are highlighted below to illustrate both the strengths and vulnerability of a growing segment of the Ocean City resident population.

## Figure 1-2

### **Family and Racial Characteristics of the Year-Round Population**

The 2010 Census provides greater detail about the family characteristics of households than in previous years. With a stable resident population of 7,102, it is important to track changes in family population (4,300 or 60.5%) compared to non-family population (2,802 or 39.5%). Over the last ten years, there has been a 2.5% decrease in resident family population. Census data estimates that 533 children under age 18 reside in Ocean City (59% in a two parent household, 41% in a single parent household).

Table 1-11 shows that the 2010 population by race of Ocean City continues to be overwhelming white compared to previous Census surveys. The black population has increased relative to the total, but only by 1% since 1980. Year-round residents of other races grew from 61 residents in 1990 to over 150 by the year 2000 and represented the greatest proportionate share increase in the total population from 1990 to 2000. This was primarily driven by growth in residents of Asian or Mixed Race origin. Significant growth in the Hispanic or Latino population is likely the result of increased efforts in the 2010 Census to collect this data, as well as a reflection of the natural progression of day trip visitors and vacationers to full time residents and resident employees. All minority populations increased by 1 to 6% with a corresponding reduction in the white population to 89% of the total year round residents.

#### Table 1-11

### **Educational Attainment of the Year-Round Population**

Educational levels in Ocean City are high compared to have increased along with Worcester the County and Maryland in general. Table 1-12 shows the educational attainment level of the year-round population of Ocean City compared to the County and State. Among Ocean City's year-round residents, well over one-half (60.5%) have some college experience as compared to 56.147.5 percent of County residents. Similar comparison with State-wide educational attainment levels shows the Ocean City population with slightly less educational attainment than the State as a whole (55.5 percent of Ocean City residents with some college experience versus 57 percent of State residents). As the area recovers from the Great Recession, a weak job market has led to increased educational attainment as more people stay in school gaining the skills and training needed to compete effectively. (Source: MDP Status Report on the ACS Survey 2005-2014)

#### Table 1-12

### **Income**

The last 10 years included a great deal of economic turmoil in the Nation and Maryland with the peak of the housing bubble as well as the devastating Great Recession. By and large, Ocean City

has continued to thrive while many of the rural areas on the Eastern Shore have had a hard time recovering from lost income, unemployment, and cost burdens for homeowners and renters on fixed incomes. During this time, Maryland's median income fell by 3.3%, and Worcester County's unemployment rate increased 5.9 percent. (Source: MDP Status Report on the ACS Survey 2005-2014)

People who work in the service and hospitality industries depend on the tourist season for a majority of their income. ~~However, owners of businesses in these industries may make rely on making healthy enough profits during the summer season and in order to~~ sustain themselves through the year. ~~This situation is reflected in the distribution of income in the Town (Table 1-1314) illustrates increases of income levels over \$50,000 and reductions in all lower income levels indicating general upward growth in income over the last 5 years along with workforce reductions.~~

- The median household income is \$36,549~~56,458~~.
- ~~Almost half~~Approximately 30% of the households make less than \$35,000 annually, which is ~~a significantly higher proportion than similar to in~~ the County at 31.7%.
- Around ~~284~~28% of the households have an income of above \$100,000.

#### Table 1-13

### **Visitor Population Characteristics**

Since 1987, each summer, the Ocean City ~~Public Relations~~Tourism/Public Relations office conducts a non-scientific sample survey of vacationers to attempt to learn where the Town's visitors come from and to frame a profile of visitor characteristics. This information is important to the city government and to various private entities in their attempt to identify visitor needs, assess market trends, and identify service demands, business opportunities, and recreational offerings that respond to dynamic changes in visitor population interests over time. In ~~2003, the Public Relations staff interviewed 1,481 visitors at 4 pre-set locations in Ocean City. Recent years there has been an emphasis on the collection of zip code information in order to evaluate the effectiveness of location specific marketing efforts. Some of the key findings include:~~

- ~~83.7% of visitors surveyed indicated their visit to Ocean City was a return visit. Only 16.2% were first time visitors.~~
- ~~78.1% of interviewed visitors indicated they visit Ocean City each year. Only 21.8% were not perennial visitors.~~
- ~~46.1% of the sample surveyed indicated they have been visiting Ocean City for over 10 years.~~
- ~~44.1% of visitors indicated they would be visiting Ocean City only once in 2003. 23% indicated they had or would visit Ocean City 3 or more times during the course of the year.~~
- ~~Length of stay in Ocean City by visitors surveyed ranged as follows:  
Weekend 20.9%~~

3 days—12.2%  
 4 days—13.3%  
 Week—38.5%  
 Longer—14.1%  
 Daytrip—0.7%

- The same survey conducted in 1994 found 50% of those surveyed stayed for one week with Daytrips representing a much larger proportion of visitors (6%).
- Among visitors sampled, just under half (49.1%) had visited Ocean City's Website. 50.8% had not.
- Accommodations selected by visitors during their stay included:

Hotel/Motel—39.4%  
 Condo/Apartment—35.3%  
 Camping—6.3%  
 House—6.1%  
 With Family—11.8%

- Total Household incomes for visitors interviewed were:

\$18,000 to \$25,000—9.1%  
 \$26,000 to \$35,000—11.5%  
 \$36,000 to \$50,000—22.6%  
 \$51,000 to \$75,000—24.3%  
 \$76,000 to \$95,000—19%  
 \$96,000 or more—13.2%

- 33.6% of visitors drove Five hours or more to get to Ocean City
- The level of spending by visitors during their stay was wide ranging. 29.7% spent less than \$500; 26.8% spent between \$500 and \$1,000; 31% spent from \$1,000 to \$2,000 and 11.5% spent over \$2,000 during their stay.
- Visitors to Ocean City surveyed in 2003 were from the following states:

Delaware—2.1%  
 Maryland—33.7%  
 New Jersey—5.8%  
 New York—6.2%  
 Ohio—2.0%  
 Pennsylvania—31.3%  
 Virginia/DC—6.9%  
 West Virginia—1.7%  
 Misc. States—7.6%  
 International—1.2%

- ~~Activities engaged in by those interviewed included:~~

<del>Visiting the Boardwalk</del>	<del>96.7%</del>
<del>Fishing</del>	<del>28.2%</del>
<del>Golf</del>	<del>18.7%</del>

Review of the results of ~~a similar survey conducted in 1994 standardized questions~~ indicates that the profile of the visitor population has not changed substantially over the past 10 years.

~~Geographic diversity was influenced recently with the impact of Hurricane Sandy on communities and beaches in New Jersey causing an increase in visitors from those locations, and more recently with targeted advertising to larger market areas in New York and New Jersey.~~

### **J-1 Visa students**

~~Ocean City, Maryland maintains a long tradition of organizing and welcoming international students for summer seasonal employment under the J-1 visa work program. Each year approximately 4,000 young adults join the local population as both visitors and workforce. Meeting housing needs of this seasonal workforce is discussed in Chapter 6.~~

### **Short Term Visitors**

~~Seasonal populations have different characteristics and impacts on the community depending on their length of stay: monthly, weekly, or weekend only. Over the last 10 to 20 years, Ocean City has adapted as family vacations became shorter, more frequent, organized around school and sport schedules, enhanced with new activities and special events, and reliant on homes, condos or hotels for lodging.~~

~~Current trends toward internet based reservation systems, short term rental of single family housing in established neighborhoods, and new hotel construction and competition from national flagship corporations demand new approaches. This demographic change of short term visitors will have positive and negative effects on the local economy and the stability of established residential neighborhoods.~~

~~Day trip visitors also have their own unique characteristics which change over time. Growth projections for West Ocean City and Berlin, suggest that there will be more shuttles to the beach from remote hotels and campgrounds and more demand for parking and public services from a non-resident population.~~

~~Non-resident property owners continue to play an important role in defining the future of Ocean City. Second home owners carry all of the expectations of their primary home communities plus the demand for high levels of outdoor recreation, entertainment and public services. Encouraging reinvestment and maintenance of all properties is increasingly important as construction from the early development years reaches 50 years old. A zip code map illustrates~~

the geographic location of existing non-resident property owners who consider Ocean City to be their second home

Figure 1-3

## POPULATION PROJECTIONS

Population projections are based on assumptions and projected trends. They cannot necessarily consider unknown future changes in policies regarding growth or major market forces that can influence community growth over time. The projections of permanent and seasonal population which follow assume a continuation of current policies, and no major economic downturns. The projections are intended to provide a range for policy analysis and consideration of future facility needs.

Projecting year-round resident and seasonal population in Ocean City is complicated by several factors. The uncertainty about the accuracy of the Census and the small size of the year-round population compared to the total population decreases the accuracy and importance of projecting future year-round population.

Seasonal population projections present their own set of problems. Vacationers and seasonal workers are not counted by the Census, so historical counts rely on symptomatic data, such as wastewater flows, traffic counts or tax collections which can only offer a surrogate measure as a basis for projection. Future growth depends of a variety of economic and demographic characteristics. Finally, Ocean City's physical capacity (a largely built community with 985% of the land developed) and land use policies will have a major effect. It is likely that much of the change in the capacity of the City to absorb increases in the peak seasonal visitor population will be largely influenced by City redevelopment policies as much as new development over the next 20 years.

Regional and national trends will also influence future increases in population and/or the rate of occupancy for existing housing units. The National Coastal Population Report (March 2013) prepared by NOAA and the US Census is a reminder that 52% of the U.S. population lives in coastal counties in 2010. This report projects that Maryland coastal shoreline counties are projected to receive a 10% increase in population between 2010 and 2020 many of which will be age 65 and older based on past trends.

### **Year-round Population Projections**

For planning purposes, the size of Ocean City's year-round population is ~~relatively unimportant~~ an important indicator of the community as a whole. The number of people in the city at any time is much larger than the year-round population and is of much greater import in influencing demand for community facilities and services.

~~Nevertheless the rate of growth in the Town's year-round population increased rather dramatically from 1990 to 2000 when compared to most previous decades; rapid growth from 1970 to 1980 being the exception. Likewise Worcester County sustained a much greater rate of growth through the 1990's. Population projections from MDP for Maryland jurisdictions (July 2014) incorporate projections for the Baltimore Region based on Rounds 8A from the Baltimore Metropolitan Council of Government's Cooperative Forecasting Committee. Worcester County is projected to increase population beginning at a rate of 1.18% between 2015 and 2020, and decreasing to a rate of 0.37% by 2040.~~

Table 1-~~14~~5 presents both the historic and projected year-round population. Given the unique characteristics of Ocean City as a resort community ~~it is difficult to develop a single set of year-round resident population forecasts that can be considered reliable. Therefore,~~ two alternative forecasts or projections are provided utilizing ~~two~~ different approaches ~~based on two varying assumptions~~. Assumptions made are provided to define the likely range of growth in the year round population that might be anticipated.

The projections provided in column one titled “*Proportionate Share*” (about 1% per year increase) are based on the assumption that the proportion of the Worcester County population that lives in Ocean City [(14.69% in 1990), ~~and~~ (15.4% in 2,000) and (13.8% in 2010)] will remain relatively constant at ~~14.5.4%~~ of the County population in the future. Population projections prepared by the Maryland Office of Planning for Worcester County are used to derive Ocean City “Proportionate Share” projections.

Projections provided in Column two titled “*trend growth*” assume that the rate of increase in the year-round residential population will be more affected by recent growth trends within the Town itself, which were approximately ~~1.53%~~ annually over the twenty-~~five~~ year period from 1990~~80~~ to 201~~500~~.

The actual rate of future growth in the Town of Ocean City will be influenced by a number of factors including the state of the national and regional economies over time, as well as the ~~success or failure~~ implementation of Maryland's ~~Smart Growth initiatives~~ Planning Visions as they are applied in Worcester County over time. It is likely that the rate of growth will fall somewhere between the two alternative projections provided with future resident population between 7,598 and 8,834 within another 25 years.

~~However, since~~ The Town of Ocean City has the capacity to absorb a surge in year-round population growth with existing seasonal housing stock and available infrastructure which has traditionally been required to support its visitor population, ~~it is not inconceivable that the trend growth projections may materialize.~~

Table 1-14

## Total (Seasonal) Population Projections

The projection of future total, or seasonal, population is ~~more-also~~ important to planning efforts in Ocean City ~~than the projection of year-round population.~~ It is the total number of people in the city that impact the environment and demand for public services and facilities.

~~Projecting the future total, or seasonal, population is as difficult and uncertain as estimating the current total year-round resident population.~~ This plan ~~continues to~~ projects future ~~total-peak seasonal~~ population based on the demoflush population figures from 1994 through 20~~1505~~ (Table 1-15). Until such time that another method of measuring and estimating seasonal population is developed and calibrated, the demoflush data will be maintained for reference.

In this recent 6 year period the peak seasonal visitor population has been relatively stable with an average peak weekend day of 323,547.; ~~growing at a rate of less than one-half of one percent annually and~~ This plan ~~update projects-anticipates~~ that the trend toward a maximum carrying capacity for Ocean City will ~~continue-be maintained~~ in the foreseeable future, in part because of the successful expansion of shoulder seasons which allow visitors multiple opportunities to visit Ocean City rather than just during peak periods.

“Adjusted” population figures are presented which are 835 percent of the demoflush population. (See discussion on page 1-68.) ~~Both the adjusted peak population and the adjusted average weekend population are projected to increase at an average of 0.47 percent per year which reflects the increase from 1994-2005.~~ These projections assume that there is no major change in local policy toward or regulation of development, and that ~~some additional~~new hotel ~~facility construction and condominium development~~ and/or redevelopment will occur through the 20~~1505~~-20~~4025~~ period that will increase capacity to ~~absorb-attract~~ visitors during peak weekends.

### Table 1-15

~~Growth within the area of Worcester County near Ocean City has an effect on Ocean City’s services, since many of the residents and property owners of Ocean Pines, West Ocean City, and the Route 611 corridor visit Ocean City regularly. Growth in West Ocean City, in particular, has accelerated over the past 10 years. This is partially accounted for by a 10-percent addition to the adjusted demoflush data for day visitors. The impact of the nearby area may become greater if growth in Worcester County reflects the “Visions” of the Maryland Planning Act of 1992 which encourages growth to be directed to existing growth centers. The growth policies of the recently adopted Worcester County Comprehensive Plan reflect this vision.~~

## RECOMMENDATIONS-PROPOSED ACTIONS

Based on the historic data and projections presented in this Population Element, the following recommendations are made:

1. Continued growth in year—round population should be encouraged in order to provide the critical mass for expanded offerings of economic, social and cultural goods and services and to reflect the “Visions” of the Maryland Planning Act of 1992 which call for growth to be directed to existing population centers and suitable areas.
2. The Town’s ability to provide park facilities and health, safety, and other vital services should be coordinated with seasonal population growth over time.
3. The composition of seasonal and off—season population should be monitored regularly for market research purposes and to assure the Town’s range of services and facilities and visitor attractions and offerings are responsive to any changes in the characteristics of the visitor population over time.
4. Continued growth in the older population both in numbers and as a percentage of the total year-round population should be anticipated. This may prompt additional demand for medical and EMS services which should be monitored over time to assure such services are responsive to this special population need.
5. Projections of the resident and seasonal population should be reviewed and updated every five years since characteristic of growth in both populations are dynamic and have not always shown consistent patterns of growth. Adjustments to anticipated facility and service needs should be made accordingly.
6. Evaluate the implications of an extended peak season and higher sustained service levels year-round based on recent efforts to expand events and activities for seasonal visitors throughout the year. While the “Demoflush” method of estimating population is valuable in allowing comparison of levels from one year to another, the “adjusted” Demoflush figures should be used when greater accuracy is needed.
7. Develop aAn improved Demoflush formula, or other method of estimating seasonal population, should be developed which incorporates data known as the Tourism Metrics Report. Changes in water consumption have caused questions about the accuracy of demoflush previous methods and may not accurately predict future peak periods.

# CHAPTER 2: Economic Development

## (Text only)

### Introduction

Ocean City is nationally recognized as a destination resort that is a clean, safe, diversified and successful community for its residents, vacation homeowners and visitors. Its tourism industry, which is the basis of its economy, can be broken down into ~~three-four~~ categories: 1) accommodations (hotels, motels, and condominium rentals), 2) restaurants and nightclubs, and 3) retail shops and malls, and 4) amusements. ~~Two businesses founded in Ocean City, Phillips Seafood Restaurants and Seacrets nightclub, are nationally recognized and among the top privately held restaurants and nightclubs in the country.~~ It is estimated that over eight million people visit the resort each year. Although the peak months are June, July and August, tourism is also strong in April, May, September, and October. During these off season, or “shoulder” months, the weekend population of the Town can average over 150,000 people.

Ocean City’s Tourism Master Plan provides organization and direction to the combined marketing efforts of many public and private partners in economic development. By reference it is incorporated as a part of this Comprehensive Plan.

### Goal:

To maintain a healthy and growing economy that supports the quality of life of residents and tourists, and encourages reinvestment. ~~E~~The economic development efforts should focus on retaining and attracting jobs that are more varied and better paid; maintaining and increasing year round employment; expanding the commercial base through business retention, expansion and attraction; and growing the economy to provide goods and services that match the needs of residents and tourists.

**Objectives:** In order to achieve the economic development goal, the following objectives are adopted:

2.1 Continue to advertise and promote a family friendly beach and boardwalk experience, enhanced by area attractions and special events.

2.2 Support bayside marine and natural area recreational use for expanded tourist activities.

- 2.3 Promote orderly real estate development that enhances the Town and generates taxes to support required services.
- 2.4 Promote redevelopment of properties and locations that are underdeveloped or obsolete.
- 2.5 Promote mixed-use projects that integrate commercial and residential development.
- 2.6 Encourage the County to ~~develop an industrial park~~ direct new industries and commercial development into the northern part of the County in order to provide additional year round work opportunities for Ocean City residents.
- 2.7 Promote opportunities for job development in technical and other skilled employment sectors within the Town.
- 2.8 Support ~~expanded~~ technical education at the Community College to meet tourism industry and other requirements.
- 2.9 Support small local businesses that offer unique goods and services and provide jobs and ~~profits~~ revenue for the resident population.
- 2.10 Promote the Green Business Registry, and Healthy Eating Active Living (HEAL) community and business goals.
- 2.11 Encourage the Chamber of Commerce to eEnhance the local retail environment with specialty stores that provide entertainment and capture a larger share of potential tourist spending.
- 2.12 Coordinate with Worcester County to eExpand year-round social services to meet demand from the growing population.
- 2.13 Expand year-round cultural activities in the Town and the County.
- 2.14 ~~Provide enhanced support~~ Support non-profit sponsors offer seasonal workers ~~with~~ by promoting additional workforce housing, public transportation support services, ~~including~~ training and legal assistance.
- 2.15 Support County economic development efforts to expand commercial air service from the Ocean City Municipal Airport.
- 2.16 Request Worcester County to expand the existing State Priority Funding Area boundary to include the OC Municipal Airport and adjacent commercial development properties.

- 2.17 Expand the Convention Center to maintain it is as one of the top meeting centers in the Mid-Atlantic region, generating a significant level of visitation and spending.
- 2.18 ~~Attract~~ Encourage and promote good quality restaurants with a broad range of cuisines ~~to face increasing competition in eating and drinking establishments.~~
- 2.19 Expand the range of tourist attractions to include entertainment venues, ~~better~~ quality restaurants, ~~etc.~~ and boardwalk activities.
- 2.20 Conduct an in-depth analysis of the tourism market in order to identify trends and specific gaps in the range of attractions presently available.
- 2.21 ~~Increase~~ Maintain expenditures on tourism marketing to meet growing competition from other locations in the Mid-Atlantic region.
- 2.22 Continue to expand visitation in shoulder seasons with golf packages, weekend themes and special events.
- 2.23 Create a seamless approach to promote the Town and the region with a clear message that binds the distinct elements---the Beach and Boardwalk district, Downtown/Midtown/Uptown commercial districts, Convention Center, tourism and business development entities---with a single brand and message.
- 2.24 Maintain the public commitment to downtown redevelopment, including the boardside boardwalk extension, retail attraction and parking improvements.
- 2.25 Consider a mixed-use development project (including parking, retail and possibly housing) in the vicinity of the Worcester Street parking site including a 'Model Block' to encourage redevelopment.
- 2.26 Maintain the amusement parks, as they are essential to the success of the resort.
- 2.27 Take advantage of the benefits offered by participation in the Lower Eastern Shore Heritage Management Plan and being part of location along the Blue Crab Scenic Byway.

## Fiscal and Economic Trends

The Town's fiscal position appears to be remain healthy based on reported revenues and expenditures. -Impacts from the National Economic Recession beginning in 2008 have generally been offset by a strategy of increased marketing and public investment in expanded

recreational opportunities in Ocean City. Overall growth in tax revenues from 2005-1993 to 2015-04 was \$6.1 million in constant dollars, representing a real (i.e., inflation-adjusted) increase of \$2,198,284 average per year over the 10 year period. Table 2-1 summarizes General Fund revenues and expenditures in 1994-2000, 2003-2005 and 2005-2015.

### Table 2-1

On the revenue side, taxes other than property taxes, licenses, permits and service charges make up a larger share of the recent budget, while property taxes are dramatically less. In its expenditures the Town is now allocating far more of its budget to public safety (40%) while tourism and community relations are a much smaller piece of the budget. Revenue sources continue to be balanced with expenditures providing stability to the local economy, provision of services to meet seasonal high demand, and predictability for real estate investment.

The reduced share of revenues that property tax revenues make up is somewhat surprising in light of recent trends in development, especially in relation to real estate development in the last two years.

The importance of residential property in the overall distribution of land use is apparent; residential properties make up almost 80 percent of the total value of taxable real estate. Figure 2-1 shows the relative values of residential and commercial real estate assessments in 2004-2015.

### Figure 2-1 (pie chart)

The dData for the two years last ten years (Table-Figure 2-12) show the tremendous growth over the two-year period in real estate development and property value leading up to 2008 and the slow correction that has occurred following the economic recession. Condominium and multi-family housing are not only the largest category of value (63.61% of the total) but also the fastest growing (average 10% per year 35%) over the last period.

### Figure 2-1 (bar graph)

The recent growth trend in new hotel construction has increased the real estate tax base and provided additional impact fee revenue and room tax revenue to offset any decreases in property assessments.

New development is driving and reconstruction typically drives an the increased level of real estate assessments. Figure 2-2 shows the trend in terms of value of building permits issued in the period 1994-2006-2003-2015. Previously T there was a growth spike in 1996 and then steady growth from 1999-2002 with and a very big increase in 2003 continuing through 2005. The national recession beginning in 2008 had a negative effect on the tax base however the pattern of 3 year assessments tempers rapid change in value and tax revenue. The other trend visible in Figure 2-2 is the steady number of permits for smaller renovation and single family

~~home construction projects. The construction resulting from these permits drove the increased assessments described earlier.~~

The ~~ten-year~~long term trend in assessed value of taxable property also tells a positive story (Table 2-3 and Figure 2-3), based on ~~a tremendous increase between 2001 and 2002~~the apparent stabilization in property values and indication of a 0.7% increase in the last year. Assessments were ~~\$8.69 billion for fiscal year 2015, similar to the value in 2007 before the peak and correction period.~~

Table 2-3

Figure 2-3

~~The new construction category accounted for the largest share of growth over this period (Table 2-4). Alterations have declined from roughly a third to a fifth of the value of permits issued.~~

## Employment

Service, retail sales, and ~~marketing~~tourism based businesses are traditionally the major employers, creating more than ~~half~~85% of the Town's year round jobs (Table 2-5). ~~Almost a third of the 3500~~Approximately 3,232 Town jobs are ~~sales and office positions, estimated by the American Community Survey, which does not include over 10,000 seasonal jobs each year.~~

The three main activities that generate employment are:

- Hotels, motels and condominiums
- Restaurants and nightclubs
- Retail Shops and Malls

The ~~ten~~six major employers in Ocean City (2015) are all in tourism and property management/development industries:

- Harrison Group 1,050 ~~(golf resort)~~
- ~~Purnell Properties (hotel management)~~
- O.C. Seacrets, Inc. 502 ~~(night club)~~
- Bayshore Development 480
- KTG, llc 342
- Clarion Resort Fontaine Bleau 342
- Fagers Island, Ltd 285
- Candy Kitchen 232
- 91<sup>st</sup> Street Joint Venture 222
- Phillips 210
- Trimpers Rides 200 ~~(amusement park)~~

● ~~Dough Roller Restaurants~~

● ~~Bayshore Development~~

● ~~Clarion/Gateway Hotels~~

- Source: Maryland DLLR Career and Workforce Information 2015

The real estate business remains a major economic force. There are approximately 85 realty companies and 770 active licensed realtors/brokers in and around Ocean City.

The US Census, Center for Economic Studies, provides location specific data for Ocean City employment and workforce statistics that will serve as a comparative tool in the future for evaluation of economic development efforts. Information included in the web based tool generally describes the community's reliance on a workforce with 81.7% of workers who live outside of Ocean City, and over 65% of jobs in the Accommodations/Food Service/Retail/Entertainment sectors.

Figure 2-x

## Tourism

~~Tourism drives employment in Ocean Town, and strongly influences household incomes.~~—A destination resort, Ocean City is nationally recognized as a clean, safe, and successful community for its residents, vacation homeowners and visitors. More than eight million people visit Ocean City every year. Tourism drives employment in Ocean Town, and strongly influences household incomes.

Issues associated with tourism are complex. Visitation has been stable at approximately 8 million per year for the past ten years. Roughly half this figure comes in peak season, June through August, and the other half comes in offseason (April-May, September-October). The objective is to maintain present levels and not lose visitors to competitive locations. A steady transition to more year round activities and events, along with a change in vacation patterns to more frequent weekend visits, can be observed in recent years.

### Special Events

The Town government, in conjunction with local businesses and non-profit organizations, has sought to increase off-season visitation with the development of festivals and entertainment and sporting events. The largest events, Sunfest, Winter Festival of Lights, Springfest, Air Show and auto rallies, attract thousands of visitors during the “shoulder” months of the peak tourist season. Ocean City has also maintained a strong identity as a group meeting and conference destination and as a premier golf destination (there are 157 courses in the area); these two markets contribute significantly to visitor attendance in the spring, fall, and winter months.

In addition to the expansion of special event programming, the local economy is growing to include added value tourism activities that expand a beach visit to include: organized sports, nature based exploration, heritage/cultural sites, brewery tours, art instruction, and performing arts. Many activities sponsored by the Town of Ocean City are free to the public and enhance the visitor vacation experience, as well as enrich the lifestyle of year round residents.

Ocean City has joined with others in the region to incorporate Sport Tournaments into the Town's Tourism Strategic Plan. Attracting competitive sport teams to the Eastern Shore will expand the economic impact of this special event type with direct benefits to hotel room occupancy.

## Heritage Tourism

In April, 2002, the Maryland Heritage Authority officially granted certification status to the Lower Eastern shore Heritage Area, including heritage sites and places in Ocean City, as well as Worcester, Wicomico, and Somerset Counties. This status recognizes the unique heritage and heritage tourism destinations within these areas and offers an opportunity for coordinated and enhanced tourism activity. The *Lower Eastern Shore Heritage Area Management Plan* is hereby incorporated, by reference, in *The Comprehensive Plan for Ocean City*.

The Ocean City Lifesaving Museum located at the south end of the Boardwalk is a natural center for information about local history and provides several walking tour brochures in the Downtown area. An expansion is planned to improve accessibility, provide additional display and activity areas, and continue to tell the Ocean City story as history is made with each vacation.

## The Convention Center

The Roland E. Powell Convention Center is one of the top attractions in Ocean City, generating a significant level of visitation and spending. It is a major employer and an obvious reference point for economic development in the Town. It is Maryland's major convention facility on the Eastern Shore.

The original convention center was built in 1970 with 40,000 square feet of exhibit space on two levels along with 7 meeting rooms and site improvements including 1,100 parking spaces. In 1997, 2012 and 2014 the center was expanded and a final phase expansion is planned in the CIP. The OCCC currently offers approximately 60,000 square feet of exhibit space, 19,126 square feet of ballroom space, 23,295 square feet of meeting space, a 1,200 seat Performing Arts Center and 1,320 parking spaces.

- The facility has a footprint of ~~189,000~~214,000 square feet and includes approximately 70,000 square feet of meeting space. The largest space is 15,000 square feet and there are 15 smaller meeting rooms.
- It hosted a total of ~~108-110~~ events, including ~~4033~~ conventions, in ~~2008~~2002.
- These events generated ~~292,027~~435,000 visitors to the center, ~~a 19% increase over 2001~~.
- The facility has created about 1,900 full-time jobs, and also generates \$5 million in sales and local taxes.
- Construction of a new 1,200 seat Performing Arts Center has greatly enhanced the range of events and activities

The City and State of Maryland are equal partners with respect to debt service and operating expenses. Under the present arrangement the City pays its share of these costs with a 1 percent tax surcharge on the food and beverage tax. The cost sharing agreement ~~is set to expire in 2015 when the debt is fully retired~~has been extended to allow for phased expansions of the facility. At that time the Town will take over full responsibility for tThe operational deficit (negative cash flow last year was \$1.~~48~~ million) is common among convention centers that create benefits by attracting out of town attendees who generate spending on lodging, restaurants, retail, transportation and entertainment. There had been growth in this activity after the expansion of the Convention Center several years ago but the activity in recent years has been flat. According to the facility manager there are ~~three~~ limiting factors on convention business in Ocean City which will be addressed by the planned expansion of a 30,000 square foot/third exhibit hall:

- Size of the facility limits its appeal and some groups that have used it for years are getting larger and may have to meet elsewhere.
- Competition from other major meeting places in the region, notably Virginia Beach and Hampton, is getting more intense. Competitive facilities in both locations are expanding. Moreover, Montgomery County is constructing a small convention center that will siphon off some business that now goes to the beach.

### Municipal Airport

Ocean City Municipal Airport is a publicly owned, public use general aviation airport owned by the Town of Ocean City. The airport serves the business, recreational, and flight training needs of the community through the services and employment opportunities provided by numerous successful on-airport businesses. The airport contributes to both the State and Local economy by generating business revenues from all types of aviation-related activities – aircraft operations and fuel sales; cargo and package freight service; goods and services provided to pilots and

passengers; and, the rents, leases, and services of on-airport businesses. In turn, these airport-related businesses hire people and, through the salaries paid to those employees, additional spending is generated in the economy. In addition, these on-airport firms also purchase goods and services from local and regional vendors. Ultimately, all of these jobholders pay taxes to State and local governments.

The Maryland Aviation Authority prepares an annual report which shows how business activity at an airport creates economic impacts throughout the economy. Based on the 2015 study, the Ocean City Municipal Airport had the following positive impact on the economy:

<u>BUSINESS REVENUE:</u>	<u>\$22,895,000</u>
<u>JOBS:</u>	<u>393</u>
<u>PERSONAL INCOME:</u>	<u>\$14,146,000</u>
<u>TAXES:</u>	<u>\$1,500,000</u>
<u>LOCAL PURCHASES:</u>	<u>\$8,316,000</u>

- Air service has recently expanded with a new charter service. is limited: just one carrier, USAirways continues to; serves the Salisbury/Ocean City/Wicomico Regional Airport, which is located just 30 miles to the west on Route 50.

## Accommodations

The hotel/motel and condominium rental industry is a very large part of the Town's economic picture. Overnight accommodations generate roughly \$13.89 million per year for the general fund from a 9 percent tax (4 percent County, 5 percent State). Room ~~use occupancy and room rates~~ has been ~~flat steadily increasing~~ in the past ~~104-5~~ years, ~~according to the Executive Director of the Hotel/Motel Association using the room tax increase as evidence. However, the trend in room tax collections over the past ten years (Figure 2-4) shows dramatic growth from 2001 to 2005.~~

Tourism Metrics are now available on a monthly basis at 'ococean.com' by clicking on the Media tab. This resource has collected and published information about lodging and other statistics since May 2013 which assist in planning for our seasonal visitors. Figure 2-x illustrates how occupancy rates and room tax receipts has help to evaluate trends for the future.

### Figure 2-x

Industry issues ~~continue to, according to the Director,~~ include the following:

- ~~The City spends \$1.2 million on tourism advertising, an inadequate amount in relation to competitive locations.~~

—The Association has been intensifying its efforts to work with the golf industry, a sector that has declined in recent years.

- ~~The Association is strongly opposed to gambling on the belief that it will not engender additional spending and may cause problems as have occurred at other ocean resorts. West Ocean City Casino at Ocean Downs has been successful. Recent statewide legislation to control gaming had unintended effect on boardwalk amusements and had to be resolved by State Code amendment.~~
- ~~The loss of over 1,000 restaurant seats in the past 2 years is significant, the result of pressures for development of residential condos.~~
- ~~Trend in Hotel development – expansion of tourism marketing through national flagships~~

## Retail, Restaurants, Nightclubs and Amusements

Ocean City's economy depends heavily on retail sales and the activity generated by restaurants, nightclubs and amusements. These industries are both a source of jobs and income based on the Sales and Use taxes as well as food and beverage and amusement taxes they generate. Food and Beverage Tax Revenues to Ocean City have remained strong through the period 2000 through 2015, and have increased by 14 percent over the last 4 years. Typically over 50% of the revenues derived from food and beverage taxes are generated during the summer months.~~In spite of the loss of restaurant seating reported by the Hotel/Motel Association over the past two years Food and Beverage Tax Revenues to Ocean City have remained strong through the period 1998 through 2004, and have increased by over 26 percent through the period (see Table 2-6). Not surprisingly some 58% of the revenues derived from food and beverage taxes are generated during the summer months.~~

The Town of Ocean City also accounts for a sizable portion of the Sales and Use taxes generated in Worcester County from sales of Apparel, Furniture and Appliances, Building and Industrial supplies and General Merchandise.

Recent trends toward locally crafted beer has resulted in 3 breweries and 1 distillery operating in Ocean City. A new network of these businesses is supported by Shore Craft Brewery tours and festivals. Bayside restaurants have also expanded on the tradition of indoor and outdoor seating with family friendly entertainment and playgrounds.

Ocean City at Night – Live entertainment and music is provided at a large number of business establishments in Ocean City. This partnership creates an exceptional opportunity for seasonal employment of musicians, and in many cases provides free entertainment to resort visitors.

## The Golf Industry

Ocean City ~~has in recent years become a mecca for golfers~~continues to compete effectively in the resort golf market. The temperate climate and championship golfing opportunities at more than a dozen highly rated courses all within close proximity to each other, coupled with a myriad of lodging choices, restaurants, golf schools, outfitters and other services have combined to make the community a year-round golf destination.

Studies performed in 1998 indicated that the total economic impact of golf in Ocean City was \$112.4 million, and estimates indicate it has been steadily growing since that time. Of that amount, \$66.7 million was spent directly on golf, both at golf courses and off-course on accommodations, food, beverages, and other items. Re-spending of golfer dollars in the local economy produced an additional \$22.4 million in indirect and 23.3 million in induced impact. Off-course spending by golfers contributed \$61.8 million of economic impact to the local economy. The overall economic multiplier was 1.69: that is to say that 69 cents of every dollar in direct spending was re-spent in the local economy.

In addition, a total of 15 operating golf courses in the area were estimated to generate approximately 2,321 full-time jobs in 1998 (source: *Economic Impact of Golf in Ocean City Maryland*, Study Conducted for the Town of Ocean City and Ocean City Golf Getaway, Inc., May, 2000). New golf course construction since that time has generated yet additional jobs.

Several golf courses in the Ocean City area can be characterized as golf communities with residential development integrated into overall design of the course. Ocean City area golf communities comprise a total of over \$54.2 million in residential real estate generating over 1.1 million in real property taxes annually. Other benefits include aesthetic benefits in the form of expansive views, creation of open space, and wildlife habitat. Eagle's Landing, the Town's municipal course, was the first certified Audubon Cooperative Sanctuary in the State of Maryland. Table 2-7 provides a summary of the economic impact of golf in Ocean City.

Golf tournaments have a significant benefit to the community as a charitable fundraising event. Recent trends were presented in the Maryland Coast Dispatch article (March 31, 2016) which noted a competitive force in third party online sales which may have an impact to the golf course industry in the future.

## The Sport Fishing Industry

Ocean City's sport fishing industry was borne in the wake of a violent storm that cut an inlet through the island in August, 1933. The inlet linked the ocean with the bay, and the newly created access meant that fishermen no longer had to launch boats through the surf or limit themselves to bay fishing. In 1934, the first white marlin was caught off the coast and Ocean City claimed the title of "White Marlin Capital of the World." Today the White Marlin Open, considered the East Coast's premier fishing tournament, is the centerpiece of the town's sport fishing industry. The Open draws about 400 boats to compete for the largest prize money payouts in tournament sport fishing in the world. Winning boats collected record setting awards ~~with~~over \$1 million each

in 2003 and 2004 \$1.18 million awarded in 2015 for the biggest white marlin. In 2004, the revenue generated for Ocean City during this annual, week-long event was estimated to be \$20 million. Last summer, the anglers competed for \$4 million in prize money, however of the 695 billfish caught during the 2015 event, 687 (99.8%) were released following established conservation practices.

A variety of businesses in Ocean City are heavily dependent on recreational bay and ocean fishing year-round, including boat builders, party and charter boat businesses, bait and tackle retailers, and several marinas.

The Ocean City Inlet and its long term maintenance with the assistance of the US Army Corps of Engineers, the National Park Service, and Worcester County is one of the critical infrastructure elements of the local and regional economy.

### Nature based tourism

Opportunities to bring first time visitors to a resort destination are possible through the promotion of nature based tourism that engages people with education, experiences and programmed activities to explore the natural world around the traditional beach and boardwalk attractions. Partnerships with the National Park Service, Maryland Coastal Bays Program, Maryland State Parks and Worcester County help to expand and sustain tourism activities in a way that can benefit natural resource management and local economy.

## Downtown Development

In recent years the City has made the downtown the focus of economic development efforts. The ~~City organized~~ Ocean City Development Corporation was organized as a non-profit charitable organization with the power to sell tax credits and accept tax-deductible contributions. This organization has responsibility for implementing the recommendations of the 1999 Downtown Action Plan. Discussion of this plan, its various components, and status of implementation of projects defined therein is provided in Chapter 8 of this Plan.

Ocean City has a relatively fixed base of existing land uses and developed properties. Economic development in this context has remained focused on strategies which encourage continued investment in property renovation and redevelopment. Mixed use redevelopment of large single ownership parcels will continue to build the tax base and offset any conversion to public ownership for needed infrastructure improvements.

## Other Business Issues and Views

The Director of the Chamber of Commerce expresses the views of the business community in seeking economic development and growth. The key issues for the Chamber include the following:

- There is a need for a more skilled work force. As one sees the tremendous retail growth in west Ocean City, the work force will be the key to healthy economic development. ~~There is a push for D~~development of a vocational school in Worcester County ~~that would offer~~s vocational internships and apprenticeships for the local service based economy needed to support Tourism.
- There is a significant disparity between wages and housing costs, as has happened in so many places around the U.S. and particularly in resort areas. With many families relocating to the area to enjoy the higher quality of life and the regional year-round population grows, housing costs have increased. For most people living in the resort area is out of the question. Teachers, for example, find close-in housing unaffordable.
- The resort is becoming a year-round community. It is a year-round place where residents need all the support and services that they have traditionally had available in larger cities.
- The retail sector has been growing tremendously and its orientation is increasingly to the year-round population. The community needs a wider range of business and professional services. Chain retailers have begun to recognize the buying power of the population: WalMart and Home Depot have ~~already~~ opened new big box stores along the Route 50 gateway corridor to serve Berlin, Ocean Pines and Ocean City.

## Future ~~Business Park~~ Economic Development/Regional Trends

~~Worcester~~The County partners with the Town and the Ocean City Development Corporation in economic development matters. ~~The County's economic development office sees the need to locate an industrial park in the northern part of the County, closer to Ocean City than the Pocomoke Park, but the challenge is to acquire property at a reasonable price. The County is now reviewing the distribution of water and sewer infrastructure, and Ocean City has the highest priority in this review.~~The County has continued to expand the commercial business corridor along Route 50/Ocean Gateway. Racetrack Road/Route 589 and Route 611/Stephen Decatur Highway provide additional development corridors serving Ocean Pines and the Assateague Island National Seashore respectively. Capital improvements to water and sewer services generally regulate the pace and location of growth in this area. Chapter 4- Transportation identifies the potential impact of development along the Route 50 corridor and the need for expansion of Route 90 capacity.

Recent private investment in campground properties, and new hotel construction in West Ocean City indicate a possible transition away from complimentary retail land use development to competitive uses which provide tax benefit to Worcester County while

demanding services from the Town of Ocean City as day trip visitors travel to enjoy the beach and boardwalk destination. Recognizing the need for cooperative planning and actions, the Town and County have entered into extended discussions regarding tax differential studies and grants to equitably balance tax revenues and budget expenditures.

Broadband connectivity is increasingly important as seasonal visitors create peak demand and social media provides new tools to drive the local economy. Ocean City's 2013 and 2015 awards as one of America's eCities by Google recognizes the strongest online business community in each state.

Offshore Wind Energy is proposed with a new 120 MW wind farm to be located 17 nautical miles off the coast of Maryland and interconnecting with the existing Delmarva Power transmission system in Ocean City. If approved by the Maryland PSC in 2017, the wind farm will be in service by 2022.

Offshore Oil/Natural Gas exploration off the coast of Maryland was opposed by resolution of the Mayor and City Council due to its potential severe impacts on coastal fisheries and the recreational beaches which sustain the local economy. Delays in licensing at the federal level appear to have extended this concern beyond the scope of this update.

Scenic Railroad excursion trips from Berlin to Snow Hill are working through a feasibility stage with the assistance of the Worcester County Economic Development Director. This destination tourist attraction is one example of a regional approach to marketing unique and complementary recreational activities for area visitors.

A Sports Tournaments Plan is supported by an agreement between Wicomico and Worcester Counties, and Ocean City to establish the Mid-Atlantic Amateur Sports Alliance (MAASA). In July 2015 the USSSA Girls Softball Eastern World Series was hosted over a three week period with almost 400 teams participating. Estimated economic impact to the region was \$20 million, with a hotel room night demand of 12,000.

## ConclusionsRecommendations

Ocean City ~~seems to be~~ is in good fiscal condition, as a result, in part, from steady appreciation in real estate values and positive tourism activity. Trends in the past decade that affect this situation include the following:

- Tourist visitation has remained steady as the result of a concentrated marketing effort and the actions of all partners in the local economy. Weather conditions remain the main factor in determining any significant variation in economic activity.

- ~~New real estate development~~Property renovations and redevelopment generally have ~~brought an increased~~maintained the level of real estate assessments value as a result of significant growth in 1996, steady growth from 1999–2002 and a very big increase beginning in 2003.even through the National Economic Recession period beginning in 2008.
- ~~The trend in room tax collections over the past ten years shows modest increases and then dramatic growth~~dramatic growth beginning in 2004new and redeveloped hotel room construction has responded to market demand for long weekend vacations with over 1,000 rooms recently developed or in the development process.
- The Convention Center, including the new 1,200 seat performing arts center, is now one of the top attractions in Ocean City, generating a significant level of visitation and spending.

While conditions are positive, there are important issues and challenges:

- Ocean City and Worcester County are increasingly attractive as year-round places to live. This trend is enhancing the retail environment and increasing the need for year round social services.
- Ocean City is increasingly an international place, especially in its seasonal worker population, and there is a growing need for a solution to the problem of housing seasonal workers. The County has identified a site in the County but the workers lack ready transportation and prefer housing in the Town. There are other problems associated with the retention and development of the increasingly foreign work force, including training and legal assistance.
- The Town has ~~lost some businesses to residential redevelopment~~adapted to business and real estate cycles which may affect different sectors of the economy. Development activity has shifted from new condominiums to new hotel rooms in recent years. Lower land values and taxes in West Ocean City are attracting some retailing activity away from the Town.; ~~where residential development is more attractive to developers since it commands higher returns on land.~~ Retailing in general is strongly attracted to less expensive locations outside the resort area that are closer to the growing, year-round population. However, these trends are largely market driven and demand for services influences the supply. Regular turn over in small business ventures on the Boardwalk provides opportunity for innovation to meet market demand, including healthy food options.
- There is a need to give visitors more reasons to spend money at attractions, such as entertainment venues and better quality restaurants. ~~However, while additional entertainment may be a key factor in increasing visitation, market area demographics will not support this on a year-round basis.~~ Moreover, entertainment in itself is a high-risk business that offers little in economic benefit to the local economy.

- The growth of the retirement population, aged 55-65, is a national trend that creates new challenges in the health care field and the need for projects and programs related to independent and assisted living. As new facilities are developed in the centralized areas between Berlin, Ocean Pines, and Ocean City, all residents benefit from increased social and medical services.
- The Ocean City Development Corporation (OCDC), established to lead the downtown redevelopment process, ~~seems to have~~has good support from the Town and the business community and it has made significant progress on its initial agenda. ~~Now there is a need to~~Updates to the work plan with additional priorities and projects for the Model Block will likely be the focus of the next planning period.
- The competitive environment related to resort area conference and convention activity is growing always changing and the Town should continue to reevaluate its spending on marketing and business development. ~~Reduced-~~ Maintaining current levels of spending on tourism marketing may ~~not~~ be ~~the answer~~necessary in the face of increasing competition from other locations in the Mid-Atlantic region.
- Worcester County partners with the Town in its formal economic development efforts, ~~and the relationship seems to be positive. The eventual development of an industrial park in the northern part of the County, closer to Ocean City than the Pocomoke Park, will provide additional work opportunities for Ocean City residents.~~
- The Town and County must preserve, protect and restore the island's and bay's natural assets and water quality to sustain their attractiveness to tourism in a continued partnership with the Maryland Coastal Bays Program.
- Tourism trends are subject to volatility and Ocean City faces economic challenges as it becomes more of a year-round community with an older population and an international work force.
- Storm readiness and public safety are priorities to a strong and resilient local economy.

| • economy.

# Chapter CHAPTER 3: ——— Land Use & Community ——— Character (text only)

## Introduction

The Land Use Plan should be considered the most important element of this Comprehensive Plan. It establishes the relationship between the Town's existing patterns of growth and development and the location, distribution and scale of future development. It builds on the history of growth of Ocean City. It influences the location and needed capacity of public facilities and transportation system improvements. It affects both the quality and character of the overall community. The scale of future development will have an impact on the fiscal and natural resources of the Town.

The Land Use Plan provides the means to integrate ~~the~~ various planning goals and objectives into a comprehensive whole and incorporate public participation as the plan is updated. Ocean City's ~~plan~~ Land Use Plan is the basis for future changes in zoning and development regulations.

With this update, the established land use pattern which has developed over the years is reaffirmed and the recommendations extended until the next comprehensive plan review. Minor revisions have been proposed to address current issues.

## Goal:

To foster a legible clear pattern of land use which accommodates variety in development type and scale appropriate to distinct neighborhoods or districts within the town, to meet the residential, commercial and cultural needs of the community, and to protect natural resources and open spaces, improve transportation systems, maintain and enhance community facilities, enhance pedestrian connectivity within the Downtown, and ~~protect the Town's character are all elements associated with and incorporated into the Land Use Plan. Ocean City's Land Use Plan is the fundamental element that will determine the Town's future qualities and character.~~ to protect the Town's seaside character.

Objectives: In order to achieve the land use goal, the following objectives are adopted:

- 3.1 Mixed Use Development - To the extent practical, document and describe a series of land use districts or neighborhoods that serve to guide development and

re-development — design in a manner that is consistent with the mix of uses and character/scale of — development that is currently established in each district.

3.2 Residential - Maintain the integrity of existing residential neighborhoods to promote long term property ownership and quality of life for year round resident populations.

3.3 Residential - Identify single family areas with a high percentage of resident owners who may support the proposed R-1A district with limitations on short term seasonal rental use.

3.4 Residential - Protect residential neighborhoods from unwanted incompatible traffic and encroachment by commercial activities, except in a planned mixed use context.

3.5 Economic Development - Encourage infill and redevelopment of existing vacant or underutilized sites.

3.6 Economic Development - Maintain opportunities to grow the tourist economy and support a viable diversified economic base, which encourages further investment, diversification, and expansion creating more employment opportunities to meet the needs of Town residents and tourists while enhancing the tax base.

3.7 Commercial - Encourage a full array of commercial services that meet the needs of the Town and its residents and visitors.

3.8 Commercial - Encourage new development and re-development to minimize the impacts of strip commercial development by encouraging clustering of commercial uses and activity at optimal locations.

Study the potential for — additional free standing commercial zoning and uses in selected locations on the Oceanside to reduce vehicle trips — and encourage pedestrian safety.

3.9 Environment - Minimize the environmental impacts of development and re-development to minimize adverse impacts of pollution on ~~insure pollution does not adversely affect~~ the Coastal Bays and ocean, dunes, and beaches. Promote the positive benefits of nature based tourism.

3.10 Municipal Services - Expand guidelines for development design that reflect the traditional character of those districts where appropriate, notably the Southern portions of the Town. Continue to support the OCDC with emphasis architectural design review and redevelopment opportunities.

3.11 Municipal Services - Establish more flexible guidelines for development design for distinct districts in northern portions of the Town, (17th street north), that encourage quality in architectural design, and a mix of uses. Guidelines should reflect the existing character of these districts, or contribute to better definition of character where it may be absent and therefore appropriate.

3.12 Municipal Services - Review existing zoning district standards to study the possible benefits and consequences of transitioning away from pyramidal zoning.

3.13 Economic Development - Increase the downtown retail base and cultural opportunities. Enrich the quality of the pedestrian experience, including improved signage, storefront design, wider walkways, and landscaping while maintaining the traditional character of downtown structures.

3.14 Economic Development - Support the continuing improvement to the Boardwalk and the development of inlet and bayside public use areas to increase opportunities for water vistas.

## Growth History

Ocean City began in the resort business in 1875 with the opening of the Atlantic Hotel, on the boardwalk south of Somerset Street. Prior to its settlement, the island served as pastureland for mainland farms. The first town limits were at North and South Division Streets.

By 1880 three major hotels, several cottages, the United States lifesaving station, a post office, two general stores, several churches, and a railroad station had been established in Ocean City.

A railroad bridge built in 1876 coming into the resort at South Division Street provided a direct line to the mainland, and served as the primary means of transportation to and from the resort community.

In 1890, the Sinepuxent Beach Company purchased all the land available from South 7<sup>th</sup> Street (now part of Assateague Island) north to 33<sup>rd</sup> Street and platted the land into lots, blocks and streets. The Town's corporate limits were extended ~~from~~ from South 7<sup>th</sup> Street to North 15<sup>th</sup> Street in 1898. The 1890's saw the construction of additional hotels, casinos, cottages, a power plant and the advent of the resort's fishing industry with fishing camps located between South 2<sup>nd</sup> Street and South 7<sup>th</sup> Street. Pound fishing grew ~~to support~~ along ~~with~~ tourism as the major community source of income.

An automobile/railroad bridge in 1910 replaced the original and the town's growth continued. The Fenwick Land Company and the Isle of Wight Land Company purchased the land to the Delaware State line and platted blocks and streets in the area that is now referred to as north Ocean City.

By 1918 a number of Town Streets were paved and an automobile bridge was constructed from Worcester Street across Sinepuxent Bay to the mainland.

Throughout the years, major fires and storms ravaged portions of town. Most notable are the fires of 1925 and 1929 and the storm of 1933. The two fires destroyed twelve city blocks including portions of the original town. The storm of 1933 destroyed the fishing camps and cut the inlet, reducing the part of Fenwick Island now occupied by Ocean City to an area of about four square miles. ~~By now, The storm also knocked out the railroad bridge resulting in~~ more and more tourists ~~were~~ traveling by car ~~and by 1933, Coastal Highway,~~ was first extended from the resort's northern limits to the Delaware State line ~~as an unpaved 2 lane road in this period.~~

Growth in 1940s was slowed by the war. The next decade brought the first span of the Chesapeake Bay Bridge (1953) and more growth. Throughout the town's development, fill had been used to create land. The 1960s saw a great expansion in land creation and consequently the ~~destruction of wetlands. Also the first high-rise, the Highpoint, was constructed in 1969. During this period public utilities were extended to the town's new boundary, the Maryland/Delaware state line. The early 1970s brought the completion of the second span of the Bay Bridge.~~ loss of wetlands. Up until this point, the plan for expansion of the Town was accomplished in large sections with the creation of a survey and subdivision plat which followed the traditional development pattern of connected streets and small lots.

Modern day Ocean City has grown in stages that are the direct result of the 1968 Comprehensive Plan. This plan was the outcome of the 1962 Storm, after which federal recovery funding was tied to the adoption of a master plan. Harland Bartholomew was hired as the best planning firm in the nation and a plan was put in motion for high rise density of 1 unit per 600 square feet of land (80 units/acre) in part to build an adequate tax base for annexation of Ocean City municipal limits to the Delaware state line. Storm recovery funds were used to put into place the public facilities and infrastructure which continue to support the Town today.

The first high-rise, Highpoint, was constructed in 1969 along with adoption of the Maryland Property Act which allowed condominium ownership and expanded the real estate market to small individual investors for purchase of a vacation property. The early 1970s brought the completion of the second span of the Bay Bridge, adoption of the first comprehensive zoning map for Ocean City, and the start of a sidewalk program for all public streets.

Two major ~~development boom~~ periods of rapid growth occurred during the last three decades. The first occurred ~~in from the late 1960's into~~ the early 1970s ~~which lasted for three years~~ and created north Ocean City's "High-Rise Row". The second and more recent between 1981—1985 was largely driven by renewed interest in purchase of second homes in the resort community. This development continued the land use pattern referred to in the 1968 Comprehensive Plan as "natural", i.e., driven by market forces rather than a preconceived plan.

A mixed use development pattern was encouraged by pyramidal zoning which allows multiple land uses in the same district, and market forces which established 'highest and best use' of the land. By 1986, Ocean City had completed comprehensive density reductions which reduced multi-family density by 50%, recognized new residential neighborhoods at lower density, revised permitted density for Hotel/Motel use and adopted the first landscape ordinance.

1986 brought the third great storm, Hurricane Gloria, which had a significant impact on land use in Ocean City by triggering the USACE beach renourishment and primary sand dune system project that provides property protection and flood risk reduction today. This project included density transfer from land east of the project limit line and the creation of 312 development rights that may be used to increase density up to 25%. The resulting public ownership of the majority of Ocean City's beach is an important legacy for future generations.

The Comprehensive Plan in 1989 recognized the previous density reductions and continued to direct comprehensive zoning changes in 1993 which addressed large parcel redevelopment through new planned overlay districts, bayside mixed use regulations, existing non-conformity with new parking standards, and building 'height by right' based on size of the parcel. Increased emphasis was placed on applying design guidelines and redevelopment strategies in the downtown area which led to establishing the Ocean City Development Corporation (OCDC) in 2000.

A growth period from 2000 until 2008-09 capped off an extended period of residential condominium construction included the construction several high end condominium buildings which added several hundred units over 10 years.

By 2009 when the current Comprehensive Plan was adopted, the measurements of growth and change were indicating an extended period of stability, and the beginning of a national economic recession. New State laws and guidance required the preparation of two new Plan elements in 2011: Municipal Growth and Water Resources as a means of estimating future needs and demands on resources. In both areas, Ocean City demonstrated adequate capacity to meet current and future needs.

Today, 95% or more of the land located within Ocean City has been developed. Recent growth~~Today, 95% or more of the land located within Ocean City has been developed.~~  
~~Much recent development~~ has been in the form of redevelopment; new modern structures are replacing older less desirable ones. Redevelopment projects show a net increase in number and average size per housing unit. Recent redevelopment projects show an average increase in units of 25 percent. Coordination of land use policies with Worcester County is more important than ever in order to meet increased needs for regional services: schools, large retail, medical facilities, athletic fields, golf, etc.

Following the national recession in 2008-2012, the next wave of development in Ocean City has been the addition over 1,000 new hotel rooms under construction or in the development process in 2015. Several hotel sites located on the Bayside have created new landmark buildings and raised new land use challenges for guests to safely cross Coastal Highway to reach the beach.

The history of ~~the~~ development ~~in~~ Ocean City, together with a present day emphasis being placed on quality of life and community values, has led to a greater interest in preserving components of the Town's character, particularly the Downtown area, and to ~~give~~ giving greater consideration to the quality of development and redevelopment that will occur over the next several years and will define and reflect the character of Ocean City in the future. ~~These considerations today prompt the following land use goal and objectives:~~ planning period.

**~~GOAL:~~ To foster a legible pattern of land use which accommodates variety in development type and scale appropriate to distinct neighborhoods or districts within the town and which meets the residential, commercial and cultural needs of the community.**

**~~Objectives:~~ In order to achieve the land use goal, the following objectives are adopted:**

- ~~To the extent practicable, establish and define a series of land use districts that serve to guide development and re-development design in a manner that is consistent with the mix of uses and character/scale of development that is currently manifest in each district.~~
- ~~Maintain the integrity of existing residential neighborhoods.~~
- ~~Protect residential neighborhoods from through traffic and encroachment by commercial activities.~~
- ~~Encourage infill and redevelopment of existing vacant or underutilized sites.~~
- ~~Maintain opportunities to grow the tourist economy and support a viable economic base, which encourages further investment, diversification, and expansion creating more employment opportunities to meet the needs of Town residents and tourists while enhancing the tax base.~~
- ~~Provide for a full array of commercial services that meet the needs of the Town and its residents and visitors.~~
- ~~Encourage new development and re-development to minimize the impacts of strip commercial development by encouraging clustering of commercial uses and activity at optimal locations.~~

- ~~Minimize the impacts of all development and re-development to insure pollution does not adversely affect the Coastal Bays and Ocean Dunes and beaches.~~
- ~~Establish guidelines for development design that reflect the traditional character of those districts where appropriate, notably the Southern portions of the Town.~~
- ~~Establish more flexible guidelines for development design for distinct districts in northern portions of the Town, (33<sup>rd</sup> street north), that encourage quality in architectural design, and a mix of uses, but nevertheless reflect the existing character of these districts or contribute to better definition of character where it may be absent and therefore appropriate.~~
- ~~Utilize an appropriate mix of regulations and incentives to retain a healthy mix of Commercial retail and service uses to support the shopping and personal service needs of Town residents.~~
- ~~Increase the downtown retail base and enrich the quality of the pedestrian experience, including improved signage, storefront design, wider walkways, and landscaping while maintaining the traditional character of downtown structures.~~
- ~~Support the continuing improvement to the Boardwalk and the development of an inlet and bayside boardwalk to increase opportunities for water vistas.~~

## Existing Land Use

~~The present land use pattern contains a thorough mixing of residential types and substantial commercial strip and center development along Coastal Highway (see Existing Land Use is illustrated on Map 3-1 at the end of this chapter). The present land use pattern contains a thorough mixing of residential types and substantial commercial strip and center development along Coastal Highway. Industrial development, other than a few locally specific examples, is notably absent. This unusual traditional mixed use development pattern resulted from several factors:~~

- ✦ ~~\_\_\_\_\_ Ocean City has a large proportion of absentee property owners. The orientation of these owners is more both as an investor rather than and as a member of the traditional community.~~
- ✦ ~~\_\_\_\_\_ In the past, vacationers' transience led them seasonal visitors tended to overlook development aspects which in their home community might be unacceptable. A growing As the year-round residential population is showing became more established, there is increased concern about the quality of life and compatible development in recent years.~~

- ✖● ~~\_\_\_\_\_~~ The island's long narrow shape and simple traffic circulation system limited the creation of more traditional distinct identifiable single use neighborhoods. The exception are areas along the bayside, zoned R-1 single family residential and several single use commercial centers.
- ✖● ~~\_\_\_\_\_~~ A strong ~~vacationer~~ demand exitexists for ocean side and bayside seasonal accommodations, and development has occurred to meet that demand. Higher density residential use is directed to the ocean side of Coastal Highway and commercial uses are generally restricted to the bay side.
- ✖ ~~Few large developments were platted and developed~~ planned as an integrated whole, except for a few residential neighborhoods, resulting in many development decisions being made independently on smaller individual parcels.

~~Under ordinary circumstances, resistance to such an intermixing of uses and density would be great, but Ocean City is different. Property values have grown dramatically despite this unorthodox situation. While unusual for year-round communities, such a pattern is not uncommon among resorts that have experienced intense growth pressure.~~

Now established, Ocean City's land use ~~this~~ pattern and variety of neighborhoods will continue into the future. ~~\_- (see Land Use Map). Visitors to Ocean City seek out favorite places to stay, landmark commercial establishments, and new attractions each year.~~ The recently constructed Sunset Island community on the bayside at 67<sup>th</sup> Street is one example that reimagines the traditional seaside resort experience with a mix of housing options, civic park space, and now a 'mid-town boardwalk' at the adjacent commercial Town Center.

In recent years the ocean side's residential diversity has tended to decrease. ~~In filling as single family homes are rebuilt and converted into higher density rental units.~~ Infill and redevelopment has largely involved multifamily structures in condominium forms of ownership. Therefore, the character of the ocean block has become increasingly multifamily with a rise in the number and size of individual units within condominium projects developed in recent years.

There is a great variation in the density of residential development overall. The oceanfront areas range from 20 units per acre to over 80 units per acre in completely developed blocks. In these areas most blocks average from 40 to 70 units per acre.

On the bay side ~~bayside~~, a few higher density projects dot the waterfront. However, the majority of land is developed at less than ten units to the acre. This is due to extensive use of land committed to commercial uses and the location of a number of single family

neighborhoods. Areas developed with Townhouse and manufactured homes approach a density of twenty units per acre.

New hotel construction and mixed use redevelopment on the bayside are creating high density concentrations of visitors and new opportunities to plan for improved east/west pedestrian and transit connections to and from the Oceanside.

Most important to the analysis of existing land use is the fact that ~~only 5.5~~less than three (3) percent of land in Ocean City is ~~vacant~~undeveloped. Thus the potential for new development, other than redevelopment, is limited.

Several trends are causing an increase of interim surface parking lots particularly in the downtown areas. Market demand can encourage property owners to seek rReduction of nonconformity in meeting current parking requirements for redevelopment projects by demolition of existing structures, and interim use of vacant lots to meet seasonal peak demand for-paid parking. Both actions tend to cause a temporary reduction in assessed value, and change the traditional architectural character of downtown.

Figure 3-1 illustrates Town of Ocean City land area by land use type.

**Insert Figure 3-1**

**Residential Land Uses**

Ocean City’s residential land uses ~~range from a travel trailer park to high rise luxury condominiums. In between the extremes are include~~ mobile homes, rooming houses, motels, hotels, single family residential units, duplexes, ~~and mid-rise apartments, and high rise condominiums.~~

Residential development is distributed throughout the town. The lack of a major industrial area or other ~~noxious~~non-compatible uses affords residential use more locational flexibility. On the high value ocean block, multifamily apartments dominate with hotels, motels, townhouses and less intense residential uses sharing this prime location.

Dramatic changes in building scale are common in the ocean block. “High rise row” (94th St to 118th St) is exclusively a tall building (eight or more stories) area. To the north and south, tall buildings are dispersed in clusters and as ~~individuals~~individual landmarks along the beach.

West of Coastal Highway, a variety of residential and commercial development ~~intermingles~~intermingle. Several distinct neighborhoods exist. Much of the land for the bayside neighborhoods was created by filling the bay. This land was then, in most cases, subdivided and sold as lots. Each neighborhood has direct bay front lots, canal frontage, non-

waterfront, or a combination of the ~~two~~three. Some vacant lots remain, but many of these subdivisions are built-out.

Several Mobile Home and Trailer Parks remain a viable option for seasonal home ownership and often meet affordable housing needs in the community. Trends for reinvestment of new manufactured housing and construction of ‘small footprint’ single family homes within the five existing areas are expected to continue. As older homes are replaced or rebuilt, incremental compliance with current building codes and floodplain ordinance requirements are met.

Another trend currently impacting established residential neighborhoods is an increase in short term vacation rental use. The traditional weekly condominium rental for a stay at the beach has dramatically expanded to include daily and weekend rental agreements largely as a result of a change in consumer demand, and the convenience of internet web applications for reservations.

Seasonal workforce housing shortages have also expanded the impacts of individual room rentals into all housing types. Rental housing is currently regulated by Ocean City through an annual rental license and noise permit process. Transient, short term, shared housing, and workforce rental use often exhibit characteristics that are non-compatible with established residential neighborhoods (noise, late night activity, adequate parking, care of premise). Enforcement of maximum permitted occupancy, property maintenance, and zoning codes for required parking help to mitigate these conflicts.

Residential zoning districts are generally separated by housing type and density. Ocean City has adopted additional districts when necessary to establish unique areas to further control permitted land uses and bulk regulations (R-2A and R-3A). A similar alternative has been proposed for several established single family neighborhoods to control or prohibit short term rental of residential property in the R-1 district by creating an R-1A district.

Figure 3-2 illustrates the percentage and number of residential housing types

**Insert Figure 3-2**

**Commercial Land Uses**

~~Six~~ Several main types of commercial development exist in Ocean City:

- ~~✦~~ Boardwalk businesses.
- ~~✦~~ Free standing ~~Freestanding~~ retail, office and service operations; ~~for example,~~ convenience markets, gas stations, ~~and~~ general retail operations, restaurants and bars
- ~~✦~~ Neighborhood shopping centers.

- ✖● ~~\_\_\_\_\_~~Community shopping centers (large centers generally over 100,000 square feet with one or more major anchor stores, usually a supermarket)-)
- ✖● ~~\_\_\_\_\_~~Marine – related commercial-
- ✖● ~~\_\_\_\_\_~~Amusement and recreational uses-
- Other ~~fn~~New uses include: micro breweriesmicrobreweries, distilleries

Commercial development occurs predominantly along Coastal Highway. The Current land use policy encourages the greatest concentrations to occur on the bayside in order to reserve proximity to the ocean for residential use where land is less costly.

Presently, neighborhood shopping centers of a variety of configurations are distributed about town. Five community shopping centers are concentrated north of the Route 90 Bridge. Two major amusement areas exist, one at the south end of the boardwalk and pier area, and the other at 30th Street on the bayside. Other concentrations of amusements include putt putt golf, theaters and indoor arcades.

All areas of the Town fall within the standard trade area of a convenience market or a major grocery store. This indicates that, for the most common needs of vacationers, existing commercial developments adequately serve the market. Land use policies should continue to support retail uses such as grocery, clothing, pharmacy and others which supportprovide the basic daily needs of both permanent and seasonal residents.

Lacking a formal central business district, Ocean City’s commercial uses are distributed along Coastal Highway and sized to meet neighborhood needs. ~~This strip development carriesCoastal Highway improvements with it all the problems commonly associated with such development; for example, numerous mid-block curb cuts exist which encourage a variety of medians to limit turning movements into and out of high, synchronized traffic generators. However, thissignals and pedestrian crossing controls have improved traffic flow and safety in the corridor.~~ The dispersal of commercial uses does have some advantages in that many residential areas are within walking distance of restaurants and shopping.

In addition to Coastal Highway, a major commercial focal point is the Boardwalk- and Downtown area. Commercial and residential developments are interspersed along the Boardwalk between 3rd Street and 12th Street. South of 3rd Street, the Boardwalk is almost completely commercial at the ground level. A variety of restaurants, clothing, souvenirs, amusements and sundries are available. OCDC Main Street goals for Downtown include a possible extension of the Boardwalk commercial uses west to the bayside and additional design standards to the north.

In recent years there has been substantial pressure for condominium residential development that in many cases has prompted redevelopment which has displaced a number of commercial uses including restaurants, office uses and shops. ~~An evaluation of opportunities~~Opportunities to maintain or encourage development of ground level commercial uses and/or to promote mixed use development ~~is presently being~~have been explored to maintain such uses as an important component of the Town's tax base.

Sustaining the distribution of commercial restaurant, retail, and service uses throughout Ocean City and promotion of mixed use developments can reduce dependence on automobile use by residents and visitors, thereby reducing demand on transportation system infrastructure and services over time. Established commercial areas should be considered during a comprehensive zoning review to identify an acceptable transition away from pyramidal zoning to a primary commercial use district.

~~As the City works to retain a mix of commercial uses, competition for Big box retail establishments, such uses is growing as substantial commercial development, including big box commercial uses like~~as Walmart, Home Depot and Factory Outlets ~~are being developed~~have located in West Ocean City. ~~If unabated, this trend could erode the Town's commercial base because of available land and fore~~lower land values and a greater year round market area. While these establishments do compete with retail businesses in Ocean City, they also provide shopping opportunities to our residents ~~into automobiles to meet their needs for a number of basic goods and services~~and visitors that are not available in town.

Both development of mixed use projects and ~~re-development~~redevelopment of commercial properties represent a major opportunity to enhance and improve Ocean City's image, while supporting residents' needs for goods and services. Improved landscaping, ~~and~~ signage and lighting as well as design standards for new commercial development and re-development would enhance the specific property as well as the visual character and qualities of the Town as a whole.

The Ocean Boardwalk is likely the Town's most unique man-made asset. Continued consideration of improvements along or adjacent to the boardwalk should evolve to assure a consistent design theme along the boardwalk to enhance its character and qualities to enhance the image of the Town.

A ~~Bayfront Boardwalk~~bay front boardwalk along specific reaches of the Town's ~~bayfront~~bayside should be developed together with subsequent street system and walkway improvements that improve and strengthen ~~to the~~ vehicular and pedestrian connections between the Ocean and ~~Bayfront~~Bay front boardwalks. Easements should be obtained from any property being redeveloped for this purpose. Such connecting improvements along selected streets in the downtown area can promote greater pedestrian traffic to support a broader mix of commercial uses within the downtown area.

Figure 3-3 illustrates the percentage and number of commercial use types

### Insert Figure 3-3

## Parks and Open Space

~~Ocean City~~ Maryland's 10 mile long public Atlantic Ocean beach remains the number one attraction and recreational open space for Ocean City. Most public open spaces are carefully managed and programmed for multiple uses and special events. The beach is no exception with room for sunbathing, jogging, shell hunting, fishing, surfing, volleyball, soccer, movies, laser shows, concerts, sand sculpture contests, jeep parades, and skateboard competitions.

Ocean City also operates many parks which provide a wide range of active and passive recreation opportunities. These parks are described in detail in the Community Facilities and Public Services Chapter (Chapter 5). ~~Although~~ Northside Park is ~~only one~~ the premier community park facility out of some 15 locations used for recreation purposes, and its 58 acres of land represent ~~over 80% of all land in park use~~ the second largest area after the 300+ acre ocean beach.

~~Vast expanses~~

Expansive views across the beach, ocean, and bays provide Ocean City with the feeling of openness and space. However, land—based open space is rather limited due to the nearly complete development of the town and the modest building setbacks. Design standards should be developed that assure ~~commercial~~ that the development and re-development of sites maintains or creates a greater number of pockets of more landscaped open space to ~~serve as oasis's for residents and visitors and~~ contribute to the “greening” of Ocean City over time.

Although not within the town limits, two major open space resources ~~are available~~, Assateague Island and the Isle of Wight. ~~Both~~ are large also available to the public ~~acres in near pristine condition.~~

Figure 3-4 illustrates the number of parks and open space areas.

### Insert Figure 3-4

## Industry ~~and~~ Utilities, and Municipal Services

~~One major industrial use and several utility installations are located in Ocean City. The industrial use, a concrete plant, is located on the bay just north of the Kelley Bridge.~~

The last major industrial use in Ocean City, a concrete plant, was closed in 2011 and the property was rezoned in 2015 for mixed use development. Limited manufacturing of unique products for the tourist industry still continues including salt water taffy, ~~earmel~~ caramel corn, and crab cakes, etc that are marketed ~~ing~~ and shipped from Ocean City. New craft breweries and the Seacrets Distillery have been established by conditional use permit to address any potential industrial use impacts to surrounding properties. Electric

transformer stations, telephone switching buildings, and Ocean City public works facilities comprise ~~thea range of~~ utility/municipal service uses- and area requirements.

Information in Chapters 4 and 5 provides additional detail regarding transportation and community facilities.

Due to Ocean City’s resort and residential nature, ~~additional heavy~~many industrial ~~or manufacturing~~ uses are inappropriate. Smoke, noise, and major truck traffic would have an adverse effect on year-round and vacationer populations. ~~Without~~ With limited land area for new development, opportunities for buffering ~~are limited and,~~ such industry would be detrimental to surrounding properties. The town’s limited street capacity would be adversely impacted by heavy truck traffic.

Investment in municipal facilities and public land ownership has been a slow and steady process to meet the needs of the community. As new properties are converted to public use facilities, the land use map and zoning maps for the Town will be updated. Many of these areas are also designated as critical facilities in the Hazard Mitigation Plan which applies a higher design and development standard for future construction.

Streets

Streets occupy nearly ~~600~~460 acres, which is about ~~25~~20 percent of the Town’s land area. This ~~relatively large amount~~ is a result of the short blocks of the original subdivisions and the eight lanes of Coastal Highway.

Although summer traffic volumes constantly challenge the Town to move both people and goods, land constraints preclude meaningful expansion of the ~~Street~~street system, and therefore continually require improvements to transit facilities and redevelopment forms that promote pedestrian movement.

Vacant and Redevelopmentable Land

In general, widely dispersed small parcels make up most of the ~~town’s~~Town’s vacant land. In addition to vacant land, a ~~growing~~ number of parcels in town are subject to redevelopment. They generally contain wood frame construction and are not held in condominium ownership, as condominium ownership can make parcel assembly difficult. The greatest concentration of possible redevelopment sites is in the Downtown; north of 33rd Street redevelopment sites are more dispersed.

Several of the larger parcels offer special opportunities. When located near the entrances to the city, their development has aesthetic as well as traffic consequences. Special consideration should be given to these sites so they are developed in harmony with the community’s development strategy.

## Temporary Land Use (Special Events / OC at Night)

In addition to conventional land uses which are typically more permanent in nature, Ocean City also accommodates temporary uses which that often occupy municipal or large private properties. Uses such as Concerts on the Beach, Summer Nights on the Boardwalk, Car Shows and Parades, Sunfest at the Inlet Lot, Lunasea at Seacrets, and the White Marlin Tournament cause large gatherings of the population in specific locations which must be organized and managed. These special events and tourist activities are equally important for land use planning because they are location specific, involve activities which must be coordinated with other compatible land uses, and are a vital part of the local economy.

Ocean City at Night is a unique combination of bright lights, entertainment, boardwalk activities, dining and celebration which could be the subject of its own Comprehensive Plan. With this Plan update, it is enough to explore the potential land use differences and service demands of the 24 hour resort and to identify potential study topics for the next Comprehensive Plan in 2022.

## Summary

Ocean City's land use development pattern is well established. Consistency in land use management is important to maintain family traditions, property values, and encourage continued investment in maintenance and redevelopment.

The ocean side contains a diverse mix of residential types and intensities. The town's southern end is a conglomerate of residential and commercial uses, many of which are related to the Boardwalk or have a marine orientation. The bayside further north is also a mixture, but in a more defined districting of residential and commercial uses. Development covers 9795 percent of developable land, so redevelopment will be a major component of any future development.

Commercial establishments are sufficiently dispersed to provide convenient access for consumable goods. Major commercial centers have clustered in the north end of town. Future commercial growth on the island will come through the expansion and/or more intensive use of existing facilities. Opportunity for construction of larger retail or big box uses will be limited by available land and land cost on the Island and will likely continue to developmentdevelop in West Ocean City over time.

Substantial pressure for condominium residential development has, in manysome cases, prompted redevelopment which has displaced a number of commercial uses including restaurants, office uses and shops. Evaluation of opportunities to maintain or encourage development of commercial uses and/or to promote mixed use development are presently beingshould be explored to maintain such uses as an important component of the Town's tax base, and to assure they continue to meet residentsresidents' needs for goods and services.

### Marine-commercial

Commercial-marine uses require bayside access, but ~~manysome~~ of these sites have been developed in other uses. Zoning should continue to favor these working waterfront activities, as they support the identity of Ocean City as the White Marlin Capital of the World and provide a vital service to boating, fishing, and tourism interests.

Industrial land uses are limited in number and scope. An increase would be detrimental to the town's resort character.

Existing land use policies help to maintain the course set by previous Comprehensive Plans, with minor changes in direction to enhance value and meet new challenges. Coordination of current objectives with economic development can strengthen the 'brand' or 'sense of place' of the community.

Growth and change occurring outside of the Town boundary may require changes in the future land use plan as well as an active participation with West Ocean City, Worcester County, State and Federal land management programs.

## FUTURE LAND USE PLAN

Future development, ~~like-as~~ in the past will be dominated by resort accommodations and services. The demand for land for future development is affected by several factors including the national and regional economies, financing capabilities, the supply of developable land, and the attractiveness of Ocean City as an investment opportunity. A proven approach which continues valued traditions and the established land use pattern, while encouraging incremental redevelopment to present new experiences each year is recommended.

As discussed earlier, the majority of Ocean City's visitors and property owners reside in the Washington—Baltimore regions and south—~~central~~Central Pennsylvania. Growth and income levels in those areas ~~will-behave traditionally been~~ the primary determinants of growth in Ocean City. Growth in the number of households ~~will-may continue to~~ be greater than the rate of population growth as average household size continues to decrease. ~~This should-encourage~~In the past, this has encouraged an even higher demand for accommodations.

### Map 3-x Property Owner Zip Code Map

Looking to the past for indications of future trends, land use plans should also consider that:

- Families who first visit by day trip, will likely make extended stays in the future;
- Families who vacation in Ocean City are likely to begin a tradition that their children will want to continue when they grow up;

- Many small business owners in Ocean City have become property owners, full time residents and community leaders within one generation, and pass on the legacy to the next generation;
- Special events introduce new visitors to Ocean City and quickly become an annual tradition that is maintained by public/private partnerships;
- The natural environment surrounding Ocean City is resilient, and with proper management ~~and it can withstand challenging the weather can be predictably stormy conditions; and~~
- Elements of municipal infrastructure are adequately sized for current land use with limited incremental growth, and may have reached a sustainable balance; and ;
- Certain streets, blocks, neighborhoods or districts will have unique characteristics which should be considered when redevelopment, ~~or~~ infill or change of use is evaluated for compatibility with surrounding land uses.

Based on these indicators, Ocean City should plan for a more international and diverse population, a ‘next generation’ that values old traditions and seeks to make new ones, a resilient and adaptable economy, a strong local government, and a built environment that sustains many uses and functions over time.

As developable sites in Ocean City continue to diminish, nearby mainland unincorporated sites are coming under more intensive development pressures. E~~With the sewer expansion of sewer and water service in~~ West Ocean City and advancement of spray irrigation techniques will cause; substantial new development may~~will~~ occur. Presently over 3,000~~Incremental growth on~~ buildable lots are in nearby Berlin and Ocean Pines will continue and ~~with~~ substantial acreage is unplatted and slated for future development in Sussex County, DE. ~~West Ocean City contains about 2100 vacant buildable lots. The potential exists~~ Comprehensive Plan for an additional 40,000 seasonal residents in northern Worcester County; intends to limit growth in the Berlin and Showell areas to 9,114 people over the planning period. The Sussex County and Fenwick Island Delaware Comprehensive Plans are currently under review in 2016.

Projected commercial development in the Route 50 corridor and a potential regional sports complex will have an undetermined impact on Ocean City’s local economy and accessibility.

Mainland development will place many demands on Ocean City’s facilities and services. Police protection, sanitation, water and sewer service and public transportation all must be available for nonresident visitors and ~~day trippers.~~ day trip visitors. The costs of providing these services should be borne by all users.

~~An important caution is in order about the preceding analysis. Historically, demand for resort accommodations has far exceeded growth in households in the prime market area. This may be accounted for by pent up demand and/or the growth in incomes expanding the market for second homes. For this reason, production rates should be monitored and projections adjusted as conditions change. (Given present market conditions and tax regulations, it appears the projected modest production rates are reasonable in the near term. and housing affordability is not a critical issue.)~~

The land use plan recognizes Ocean City's existing development pattern which is well established since 97.95 percent of the buildable land is now developed. The opportunities for major change are limited. ~~However, the plan attempts to direct future development and foster patterns of re-development to the town's best advantage, based on undeveloped land area.~~ Zoning districts are generally consistent with the planned land use, however the characteristics of 'pyramidal zoning' which allows a range of residential densities and commercial uses by-right, are still subject to non-compatible changes of land use in response to market forces and new property investment strategies.

In general, major changes in permitted land uses and densities are not recommended by the plan. ~~Current Revisions to zoning regulations are so entrenched that sweeping changes could unfairly burden necessary to implement updated priorities of the Comprehensive Plan should be phased in over time to avoid unreasonable financial burdens to existing property owners.~~ However, when ~~When~~ feasible, the following concepts should guide future development.

## Residential

For the most part, the highest density residential uses should be located on the ocean block for two reasons:

\*✓ ~~!~~ Vacationers desire the convenience to the beach.

\*✓ ~~!~~ Major bayside development often produces substantial traffic and parking demands on the oceanfront.

New residential development on the bayside should be of moderate to low density, and building height. Again, this recognizes bayside dwellers' use of automobiles to reach the beach. Once there, an on—street parking space is needed. Lower density on the bayside will help reduce the ultimate number of pedestrians who must cross Coastal Highway. In addition to the traffic impacts, more moderate densities, reduced height, and some careful project design will help preserve bayside vistas.

The plan recommends limited higher density and taller buildings (maximum of eight stories) on larger bayside parcels through the establishment of special, carefully crafted regulations. The plan also recommends that only parcels greater than 5 acres on the bayside may apply for the Planned Overlay designation. Where existing zoning districts allow for hotel use on the bayside, special consideration should be given to encouraging private shuttle service to the beach along east west cross streets, and providing enhanced pedestrian access and crossings at key signalized intersections with Coastal Highway.

~~The Plan does accommodate limited high density bayside development through the use of planned overlay district. This development concept is typically only appropriate on the largest parcels of land.~~

The Plan proposes the provision of additional public bayside access. Such access points would be public ~~miniparks~~mini-parks, piers, and docks. Public and private marinas would be desirable.

Established residential neighborhoods on the bayside, and areas zoned R-1 single family provide for a different quality of life and retreat from the noise and activity along Coastal Highway and the Ocean blocks. Protecting this lower density housing type from non-compatible commercial impacts is beneficial and necessary to promote year round residency and long term rental housing.

Additional control over short term residential rental use should be considered in established residential neighborhoods and R-1 zoning districts due to its non-compatible commercial use activities and impacts. Improved code definitions for long, short and transient term rental housing, modifications to the rental license program, and the adoption of an optional R-1A zoning district are solutions that require further consideration.

## Commercial

The Plan encourages the retention of existing commercial areas. Both regulations and incentives should be designed to maintain commercial uses that have been threatened by conversion to condominium development. Future ~~need~~needs for commercial services will be met through more intensive use of existing shops, redevelopment of existing commercial uses and off-island centers. ~~Additional community scale shopping centers are not encouraged, especially in the north end of town because they are major traffic generators.~~

As ~~noted~~noted earlier, virtually the entire island is within convenient distance of an existing food or convenience store. Mixed-use development or redevelopment forms that contain some component of commercial use along with residential uses can increase the diversity of commercial uses in the Town, support their broader distribution throughout the community, reinforce the scale and character of structures within specific neighborhoods, and minimize demand for automobile use to preserve transportation system capacity. Small, neighborhood serving commercial uses should be permitted to operate in selected locations on both sides of Coastal Highway to better serve the residential population in all areas.

## Industrial / Office / Manufacturing

The plan ~~provides for~~recommends limiting industrial and manufacturing uses. For the most part, moderate and heavy industrial uses, and their by-products, are incompatible with the Town's resort nature and have traditionally located on the mainland. Ample, more suitable, land exists in Worcester County- for this purpose. Light food processing and craft industries

are provided for in the commercial areas. These uses have located in town for convenience and are, in the case of ~~crafts~~craft manufacturing, more of a commercial than industrial character.

Although not an industrial use, the Ocean City Convention Center is a key component to support and promotion of tourism as the essential industry of the community. Opportunities to expand this facility should be ~~protected~~supported to assure it can function over time in a manner that continues to support growth of tourism as the major industry of the community.

Office use is an important component of the commercial zoning districts and is encouraged where it supports other complimentary business and residential use.

Marinas, boat repair, and fueling are suitable in locations with deep water access and working waterfronts. Close proximity to the inlet is desirable. Designated areas would incorporate marine—related retailing and services.

New impacts to Ocean City may need to be addressed in the future as ‘big utility’ plans are proposed with offshore wind energy and offshore oil/natural gas exploration. Preliminary studies have indicated that new coastal electric power networks will be required to support wind energy generation with connections to the existing power grid. Construction activities and support facilities may be proposed in existing coastal communities.

## Downtown

The Downtown area (south of 15th Street) retains much of Ocean City’s early character. A mixture of hotels, cottages, rooming houses, apartments, commercial uses, restaurants, and entertainment attractions combine to make the area an exciting part of town. The buildings share a fairly uniform scale and architecture, ~~although much of that has been lost over recent years.~~ that serves as a model for complementary design details in new construction.

The plan recommends continued hotel development along the Boardwalk and around the inlet to South Division Street. This would locate development in a prime destination area. Interior blocks should remain at moderate residential density and scale, and marine uses and waterfront restaurants should continue to be encouraged in the lower bayside area. Protection of the seaside cottage character of development and management of the scale and bulk of structures is a major consideration in the downtown area.

The OCDC has successfully administered architectural design guidelines and a façade improvement grant program in the Upper and Lower Downtown Overlay Districts extending from the Inlet to 17<sup>th</sup> Street. Extension of this program north to 33<sup>rd</sup> Street is proposed along with the designated Maryland Sustainable Communities area.

Interim use of vacant land in the downtown area for paid parking lots is expected to continue in the near term as private property owners, OCDC and the Town of Ocean City all meet the prime

destination demand of day trip visitors and special event participants. The future land use plan for downtown revitalization is described in more detail in Chapter 8.

~~Refer to Chapter 8 for a more in-depth discussion of Downtown Revitalization.~~

## Master Planned Areas

A number of key parcels with ~~unusual~~unique development opportunities should be given special consideration. Designating these areas for planned development would be appropriate to ensure their proper development. Generally, these properties are large vacant or redevelopmentable parcels held in single ownership. Mixed use developments integrating special attractions would be desirable. Combining lots is a viable way to create larger building lots.

As a result of the Comprehensive Plan update, neighborhoods or districts may be identified which complete a small area plan process to explore potential redevelopment concepts in greater detail. Participation by area stakeholders to accomplish a mutually beneficial development strategy would be necessary.

## Conservation and Protection of Sensitive Areas

The plan calls for conservation zoning of the beach dune systems and remaining bayside wetlands. These areas, while generally designated on the future land use map, must be field verified to locate the exact conservation zone boundary. The beach ~~should~~must be preserved ~~in its natural state~~ for its recreational and flood protection benefits and wildlife habitat. Wetlands are necessary to preserve the finfish and shellfish habitat so important to sport and commercial fishing. Wetlands are also a key habitat for waterfowl.

Chapter 7 includes a more in—depth discussion of Sensitive Areas and underscores the importance of the Town’s ongoing participation in the Coastal Bays Program in future years as a means to garner support for resource conservation and protection measures. The regulation of conservation and sensitive areas should continue to follow State and Federal regulations where applicable.

~~Future~~Ocean City will advocate for active natural system management and partner with the USACE to complete projects for beach renourishment, inlet dredging, and sediment management/sand bypass to Assateague Island. Ocean City will partner with the Maryland Coastal Bays Program and Worcester County to protect coastal bays water quality and provide shared recreational use of the natural resources.

## Temporary Land Use (Special Events / OC at Night)

Temporary uses such as special events, or large gathering areas such as the downtown Boardwalk, have not traditionally been mapped or identified by Plan

goals, strategies and objectives. In preparation for the next comprehensive plan update, this land use type is highlighted with recommendations to collect data and formulate land use policies which assist in managing temporary uses and the areas where they take place.

## Future Land Use Plan Map

The Future Land Use Plan is depicted graphically at the end of this chapter on Map 3-2. For the purpose of this Plan update, the 2006 adopted Future Land Use Plan will remain in effect to promote consistency in land use planning decisions. Map 3-2A will be developed as a transition to the 2022 Comprehensive Plan which simplifies tThe Land Use categories to align with the Existing Land Use Plan ~~have been simplified~~ as follows:

RESIDENTIAL

MULTI-FAMILY

MIXED USE

BUSINESS

PUBLIC/GOVERNMENTAL

RECREATION

VACANT PROPERTY

OTHER

- Non-Buildable (Beach and Bayside Wetlands)
- Street Right-of-Way
- Temporary (not mapped)

This plan is based on the following assumptions.

No prolonged disruption of national peace or economy occurs.

The demand for ocean- and bay-related recreation remains strong, with Ocean City’s market share remaining at least constant.

Infrastructure and public services are provided to meet needs, and new physical or environmental constraints do not develop.

The beach and seawall are maintained and continue to provide 100-year storm protection.

Existing commercial development areas can accommodate ~~more intense commercial usage~~future commercial growth and redevelopment.

~~\*———No prolonged disruption of national peace or economy occurs.~~

- ~~\* The demand for ocean-related recreation remains strong, with Ocean City's market share remaining at least constant.~~
- ~~\* Infrastructure and public services are provided to meet needs, and new physical or environmental constraints do not develop.~~
- ~~\* The beach and seawall are maintained and continue to provide 100-year storm protection.~~
- ~~\* Existing commercial development can accommodate more intense usage.~~
- \* Ocean City's land area remains relatively constant without additions through dredge and fill operations or reductions due to erosion or sea level rise.

### Residential Land Use Designations

- ~~\* Single Family — Includes single family uses with densities less of about 7,500 square feet of land per unit; building heights of three or less stories; yard requirements provide relatively large open spaces.~~
- ~~\* Low Density Multifamily — Includes areas of mixed residential types with generally low density; densities of about 4,000 square feet of land per multifamily unit and 2,000 for hotel units, and heights of five stories or less are permitted.~~
- ~~\* Medium Residential — Includes medium density development including a variety of single family, duplexes, townhouses, motels/hotels, and apartments; density of about 2,000 square feet per multifamily unit and 1,000 for hotels, and building heights of five or less stories; open space would be used to break long expanses of buildings; bayside marina facilities would be encouraged.~~
- ~~\* Downtown — Includes the oldest portion of Ocean City developed with mixed commercial and residential uses at relatively high densities and generally low rise in character. These existing use, density, and height characteristics (1,000 square feet per multifamily units and 500 for hotels, with a 4 story height limit) are encouraged to continue.~~
- ~~\* Moderate Residence — Includes areas of generally mid and low rise construction appropriate for moderate levels of density; the areas of this designation are either oceanblock areas east of substantial bayside development or serve as an intervening area between the oceanblock and Coastal Highway; permitted densities are for hotels, 1,000 square feet per unit and 1,450 square feet per unit for multi-family development; building height of five or less stories.~~
- \* General Residence — Includes areas suitable for Oceanfront or near Oceanfront

development of higher density residential uses; new development of buildings over five stories in height would be appropriate; density would be about 1,000 square feet per multifamily unit and 500 for hotels. This area includes “High Rise Row”.

- ✖ ~~Mobile Homes — Includes areas of existing mobile home parks; permitted densities would be 4,800 square feet per unit; building heights of one story would be permitted. Additional landscaping and screening is recommended especially along Coastal Highway. Intermingling of other residential types are not encouraged.~~

### ~~Commercial Land Use Designations~~

- ✖ ~~Local — Includes individual businesses and neighborhood shopping centers offering services and retail goods which conveniently meet the daily needs of residents and vacationers. Residential development should be at the density of the General Residence District.~~
- ✖ ~~Boardwalk Commercial — Includes the area south of 12th Street fronting on the Boardwalk consisting mainly of retail and amusement uses whose clientele is almost exclusively pedestrians. A uniform commercial frontage (no interior sideyards) on the first floor should be encouraged to eliminate small, dark vacant spaces. These spaces tend to accumulate trash and are a safety and security hazard. Residential uses and hotel development would be appropriate at the intensity of the General Residence district.~~
- ✖ ~~Shopping Center District — Includes major existing community scale shopping center. Such areas have major traffic concentration impacts and should be located with sufficient buffers from residential areas. New community shopping centers are not encouraged.~~
- ✖ ~~Bayside Marine — Includes locations most suitable for marinas and marine support facilities. Marinas, minor boat repair, and service along with related commercial activities are encouraged. Uses not related to deep water should be permitted only as part of a mixed use development with marine emphasis. Building height should be five or less stories and residential densities should be at the intensity permitted by the General Residence District.~~
- ✖ ~~Downtown Bayside Marine — Includes the area of the Downtown which has developed with a bayside water orientation. Similar to the rest of the Downtown, this area’s existing character contains a variety of uses of relatively high intensity. This character is encouraged to continue. Permitted density should be similar to the Downtown District and building height of five stories would be permitted.~~

### ~~Overlay Districts~~

~~Several overlay districts are proposed in an effort to address special needs and to add flexibility to the zoning regulations. Each overlay district will have its own unique standards which will be contained in the Zoning Ordinance. While the locations of several overlay districts are shown on the Future Land Use Plan, other properties will be eligible to apply for an overlay designation.~~

The function of an overlay district is an offering of certain incentives to developers of unique properties in exchange for the recognition of public needs in the development of those properties. Incentives could be in the form of increased density, increased height, or parking bonuses. For example, it is envisioned that a “planned overlay” on a property whose underlying zoning would permit medium density residential development would entitle that property to increase its density to that of the General Residential District in exchange for concessions such as increased landscaping, a design review process, or other items of public benefit.

Three overlay districts are proposed by the Plan:

- ✖ ~~Commercial Marine~~ — The Commercial Marine areas will be overlay districts using incentive zoning to encourage the development of new public marinas or expansion of existing ones. Incentives could involve density, height or parking bonuses. Standards will be developed to define qualifications for this overlay and the incentives to be given. A ratio should exist between the size of the marina provided and the incentives. Appropriate sites could apply for Commercial Marine designation.
- ✖ ~~Amusement~~ — This overlay designation would implement the policy of encouraging existing amusement parks to continue operation and provide the flexibility necessary for their efficient evolution in response to changing market conditions. Amusement areas other than those identified on the land use plan may apply for this designation. Standards for buffering of residential development and protecting residential neighborhoods from noise and glare would be part of the review process. Consideration of traffic and compatibility with existing development would also be part of the review process for new amusement areas.
- ✖ ~~Planned~~ — This overlay district would apply to designated areas which presents special development opportunities and are important to the orderly development of Ocean City. Special development review procedures would be established to add design flexibility and increased public input into site and architectural design. Sites other than those identified on the land use plan could apply for the Planned designation.

### Other Uses

- ✖ ~~Public Buildings/Parks~~ — Both existing and future proposed public buildings and parks should be designed and maintained to provide a positive image of the Town and set an example for private property owners. The city should take the lead in landscaping and property maintenance as this will help instill pride in the town of its appearance.
- ✖ ~~Sensitive Areas~~ — Wetland and beach areas which should be preserved in their natural states. These areas act as buffers protecting property from natural hazards and are critical to the tourism industry (beaches) and the sportfishing industry (wetlands). Maintaining these areas in their natural state is, therefore, very important to the public’s safety and

~~general welfare.~~

- ~~\* Pier — The amusement and fishing pier which is located east of the Boardwalk at Wicomico Street is identified on the Future Land Use Plan. Its use and operation is regulated by the “Pier Franchise” (Chapter A112 of the Code of the Town of Ocean City) which supersedes any conflicting ordinances, including the Zoning Ordinance.~~
- ~~\* Industrial designation — An industrial designation is used on the property immediately north of North Division Street on the Bay which is currently a concrete plant. The plan intends that the only “industrial” use permitted will be a concrete plant.~~

## Recommendations, ~~Proposals and Special Projects~~

The following is a summary of the future land use plan’s major proposals and projects. Featured are those items of significance or those not addressed elsewhere in the Comprehensive Plan.

- 1) Future development should be monitored for its impact on Ocean City’s quality of life. Specifically, changes in congestion levels (traffic, overcrowding, transit, etc.) and vacationers’ and residents’ attitudes towards the resort should be monitored. Future adjustments to land use regulation may be required.
- 2) Land use implementation measures (zoning, subdivision regulations and capital improvements programming) should be revised to reflect the proposals of this plan. Flexible zoning techniques regulating the intensity of development should be instituted whenever possible when appropriate.
- 3) Future development should be directed to create a quality image for Ocean City. As vacationers’ expectations increase, Ocean City ~~must keep pace~~ will continue to encourage compatible redevelopment, opportunities for new experiences along with -celebration of traditional landmarks and activities.
- 4) Nonconforming uses, when redeveloped, should be ~~encouraged~~ required to reduce their level of nonconformity. ~~Incentives~~ Modified standards for compliance with existing codes may be appropriate. New code requirements for determining a change of use and applicability of current design criteria are needed.
- 5) Large parcel developments should be encouraged to use planned development or clustering techniques to promote design flexibility, gain open space and retain natural features. ~~Planned developments should be located on substantial parcels and contain a mix of residential types along with supporting commercial development and marinas when appropriate.~~

- 6) Tall buildings should have special minimum lot sizes and additional landscaped setbacks to prevent overcrowding of the land. Buildings above five stories should be designed and located on their parcel so that their shadow does not exceed that of a five story building. This will prevent excessive shading of neighboring buildings and the beach. Additional open space and landscaping should be provided.
- 7) Wetlands and the beach should be designated as sensitive conservation areas to be preserved ~~in their natural state.~~ The beachesbeach should be replenished and maintained to provide flood protection and recreational benefits. Public ownership of the beach and wetlands ~~would be~~ is desirable.
- 8) Hotel/motel needs should be monitored to ~~determine suitable production target~~evaluate current market conditions as well as current room inventory and at what point a reexamination of the density requirements would be appropriate. Experience indicates the density differential for hotels has stimulated their development. Enforcement of the ~~bonafide~~-hotel non-conversion requirements should be rigorous. This is especially important with the increasing popularity of suite hotels and the possibility of converting them to “lock out” units with insufficient parking.
- 9) A design review process should be established to ensure compatibility of new and redevelopment projects. Design Advisory design guidelines should be ~~prepared~~incorporated into site plan and building permit reviews reflecting the desired character of each section or district within the Town. An incentive program may be required to encourage participation. As a resort, the town’s appearance has a major impact on its economic mainstay, tourism. For this reason it is in the community’s interest to oversee the visual quality of development. (See Appendices D and E)
- 10) In concert with the design guidelines, a townwide beautification plan encouraging the use of native plants, should be prepared. This staged effort would identify priorities, costs, and an implementation plan. The purpose of this plan would be to unify and coordinate beautification efforts as well as program them.
- 11) The baywalk should be extended northward to the Chicago Avenue Park and be connected to the oceanside boardwalk in the 4th Street area.
- 12) The ocean boardwalk should incorporate sitting areas and gazebos for the added comfort of our visitors. The special boardwalk setback north of Third Street should not be violated, unless, as a part of a planned overlay district, a reduced setback from the Boardwalk facilitates an improved development project. The special boardwalk setback should be enhanced with landscaping and not covered with concrete or outdoor displays.
- 13) Setbacks should be ~~provided~~enforced on water frontage to improve the aesthetics of waterfront areas, prevent buildings from interfering with bulkhead replacement, provide protection from flood damage, and enhance water quality improvement opportunities.

- ~~▪ Coordinate with Worcester County so development of the mainland is complimentary and compatible with Ocean City's long term objectives. This is especially important along the Route 50 and 90 corridors. This should include efforts to control strip development and manage access to development through the use of shared entrances and service roads.~~

~~14) Existing single family neighborhoods should be protected from development influences, and changing short term residential rental techniques that could degrade their quality of life.~~

~~▪~~

#### ~~Develop regulations~~

- ~~▪15) Regulations should be developed which control the amount of land covered by structures and impervious surfaces. A greater area should be implemented/landscaped.~~

#### ~~Revise the~~

~~16) The zoning ordinance to eliminate the should be revised to promote mixed use development of larger parcels within planned overlay districts. The current pyramidal zoning framework. The framework is permitting permits conversion of commercial uses in areas zoned commercial to condominium residential development, and is threatening to limit the mix and range of commercial uses needed to support neighborhoods in Ocean City.~~

- ~~▪ Revisions to the ordinance should limit first floor uses in commercial districts to those that are commercial but may permit residential development at appropriate densities above office or retail uses. -Parking standards for residential uses should meet minimum requirements to encourage visitors to 'park where you stay and then ride the bus'.~~

- ~~▪ Evaluate design standards for buildings and structures, parking areas, height and yard requirements, screening and landscaping and provision of open space or public amenities and modify standards where appropriate.~~

#### ~~Establish standards~~

- ~~▪17) Standards should be established for public amenities to be provided as part of any larger mixed-use development or re-development project. This may include requiring each project to provide a minimum of one of the following:~~

- ~~▪● public art~~
- ~~▪● clock tower~~
- ~~▪● outdoor seating or outdoor furniture~~
- ~~▪● courtyard or plaza~~
- ~~▪● water feature/fountain/or sculpture~~

#### ~~Establish standards~~

- 18) Standards should be established for larger structures to incorporate wall plane projections, changes in roof configuration, building modulation and fenestration that complement the established proportions and mass of adjacent structures and avoid featureless massing and design.
  
- 19) Residentially zoned areas in the interior of the Upper Downtown area (generally 3<sup>rd</sup> Street to 17<sup>th</sup> Street between Baltimore Avenue and St. Louis Avenue) should be developed at a medium or low density with height limited to three stories.
  
- 20) Pockets of Local Commercial land uses should be evaluated by conditional use permit or zoning map amendment in appropriate locations, based on adopted performance and separation criteria, on the Oceanside of Coastal Highway and Philadelphia Avenue. The preparation of a small area land use plan is recommended prior to any significant land use change.
  
- 21) Integration of land use policies with other long range planning documents such as the Town Strategic Plan, Hazard Mitigation Plan, Tourism Master Plan, Capital Improvement Plan, and plans from allied agencies.
  
- 22) Data collection and study of regional information sources regarding best practices for climate adaptation and community resilience. Monitor and analyze the frequency and duration of high tides and local flooding based on the Ocean City Inlet tide gauge data.
  
- 23) Characterize Special Event schedules as a temporary land use in the next Comprehensive Plan update in order to evaluate and plan for the multiple uses of public spaces, and the entire Town as a venue for event-specific permitted uses.

## Summary

Ocean City faces important future challenges. The economy, even more than in the past, will rely on the tourism resort emphasis as its economic generator. In the past, land development shared this role to some extent. As the town approaches Town stabilizes at build—out, levels, encouraging continued re-investment in renovating older structures and re-development’s role in expanding the tax base will be less prominent. more important than ever.

~~For this reason, the town should concentrate on keeping pace with trends in the tourism industry. Well-heeled and better educated, the vacationer of the 21st Century will have higher expectations. Therefore, aesthetic improvements, along with strides to accommodate our guests, will position Ocean City to compete in this changing environment. The town has an obligation to its~~

~~citizens to achieve and maintain success.~~

~~The guidelines and proposals contained in the plan are designed to anticipate and address these issues. Elected and appointed officials must continue to interpret this plan as circumstances change and will need to adjust the specifics as time passes.~~

~~As noted in the 2004 fiscal report for the town:~~

~~“During the 2004 fiscal year, the Town of Ocean City (the Town) again experienced soaring real estate sales and increasing property values. The significant amount of new development prompted public over development concerns, building moratorium proposals and a review of the Town’s Comprehensive Plan that is currently underway. A recent population trend study shows moderate population increases during the spring, summer and fall seasons with the most surprising and significant increases during the winter months. More property owners are opting to utilize their investment throughout the year rather than rent while a growing number are deciding to stay year round. The Town’s goal is to anticipate and accommodate development needs that will balance competing land use objectives and coordinate local with regional interests. The Town is becoming more than a resort community, and we embrace this change and challenge”.~~

~~Ocean City is also working to expand year-round job opportunities and cultural activities that will help to retain or expand the resident population. Recommendations in this chapter seek to balance the need for protecting established neighborhoods, successful business districts and favorite landmarks with the goal of redevelopment to provide continued investment and new recreational opportunities for our seasonal visitors.~~

~~Based on an extended period of strong but stable demographic and economic performance over the last 10 years, along with strategic investments in municipal infrastructure and tourism marketing, no significant changes to the land use policies are proposed with this update.~~

### **Map 3-1 Existing Land Use**

### **Map 3-2 Future Land Use**

# CHAPTER 4: Transportation (text only)

Ocean City's transportation system has evolved over many years into a true multi-modal system. The transportation system is still dominated by the automobile. Automobile movement via highways and streets will continue to have capacity limits, will be seasonally stressed, and congestion will continue to be evident in future years. Given the linear form of the community and its condition as largely developed, opportunities to construct or widen existing highways and streets to accommodate vehicular traffic and build additional parking lots to store vehicles will be quite limited.

Therefore, the communities' growing use of alternative modes of public transportation including bus, trolley, bike and pedestrian means of transport will continue to demand attention and be required to augment the capacity of the Town to accommodate automobile transport via highways and street systems. Successfully moving both people and goods will be among the Town's greatest future challenges and will call on the community to continue to explore more cost-effective and efficient modes of transport. The following goal and objectives are designed to support efforts to meet expected ongoing transportation system needs and demands.

**Goal:**        **To maintain and improve the transportation system to accommodate the movement of people and goods as efficiently as possible, with minimum congestion and maximum safety.**

**Objectives:**        In order to achieve the transportation goal for a balance of auto, transit, bicycle and pedestrian mobility, the following objectives are adopted.

- 4.1.    Identify and implement opportunities for short and long-term improvements to the thoroughfare system.
- 4.2.    Continue to develop public transportation system alternatives to and on the island to its maximum potential to minimize automobile congestion and ~~damage-impact~~ to air quality.
- 4.3.    ~~Utilize off-island~~Identify lands-property in key locations to accommodate parking, park and ride and public transportation facilities where possible to augment ~~Island-existing~~ facilities.
- 4.4.    ~~Determine the feasibility of developing~~Continue to implement a bikeway system using alleys, secondary streets, the Boardwalk, bayfront and the beachfront connections.

- 4.5. Develop additional bike storage (racks) and lockers to encourage additional bike use.
- 4.6. Decrease reliance on automobile use by continuing to increase transit ridership.
- 4.7. Encourage walking activity by enhancing the pedestrian environment through the use of pedestrian signals, pedestrian pushbuttons, and location of crosswalks in appropriate location.
- 4.7.4.8. Support completion by SHA of future phases for the dune-style median fence down the center of Coastal Highway to improve pedestrian safety and use of crosswalks and continue the Walk Smart Bike Smart public information campaign
- ~~4.8.4.9. Explore use of trolleys to augment transit system on St. Louis Avenue to reduce transit congestion on Philadelphia Avenue in the downtown area. Coordinate with Worcester County and Sussex County to improve transit connections between Ocean City and new growth areas along the Route 50 and 54 corridors.~~
- 4.9.4.10. Facilitate use of Tram by improvements to ticketing and reduce pedestrian/tram conflicts along the boardwalk.
- 4.10.4.11. Explore opportunities to establish a bay-side ferry service or encourage use of bayside water-taxis as an alternate mode of transportation.
- 4.11.4.12. Continue to upgrade and improve the Ocean City airport to meet future demand for air transportation.
- 4.12.4.13. Continue to cooperate with Wicomico County in the operation and improvement of the Wicomico/Ocean City Regional Airport.
- 4.13.4.14. Ensure adequate off-street parking for new and existing land uses.
- 4.14.4.15. Utilize traffic system management (TSM) techniques to preserve street capacity, promote smooth traffic flow, and maximize safety.
- 4.15.4.16. ~~Identify feasible~~ Coordinate with State and Federal agencies to maintain and improve long-range local and regional transit options along with demand and financing requirements.
- 4.16.4.17. Continue to i Improve pedestrian safety and accommodate pedestrian circulation throughout town.
- 4.17.4.18. Enhance pedestrian and bicycle connections between the Oceanfront and bayfront to foster greater pedestrian activity, particularly within the downtown.

- 4.19. Incorporate the SHA Route 50 Bridge Replacement project – Alternate 5A into long range planning and evaluate potential impacts to the local street system.
- 4.20. Identify preliminary design criteria for improving Baltimore Avenue between North Division Street and 15<sup>th</sup> Street to complete the streetscape improvement project with wider sidewalks, relocated utilities, etc.
- 4.21. Study the location of the southern terminus of the bus system to identify a possible relocation of the transit station north of Route 50 in order to reduce downtown traffic congestion and periodic flooding impacts to operations.
- 4.22. Investigate improvements to the Route 90-Coastal Highway intersection to increase traffic flow through the intersection.
- 4.18.4.23. Continue to advocate for the Dualization of Route 90 in long term State Transportation Plan priorities to improve long term access and emergency route capacity.
- 4.19.4.24. ~~Continue to work toward~~Coordinate with Sussex County and Delaware state agencies to maintain and improve a viable-a-third point of access to Ocean City from Route 54 to the north. ~~in the northern section of the city.~~
- 4.20.4.25. Identify areas with acute parking deficiencies and develop financing mechanisms to provide necessary parking. Parking districts, fee in lieu of parking, and other methods of development and financing should be considered.
- 4.21.4.26. Evaluate costs and benefits of design and construction of parking decks or garages to augment parking in the downtown and to enhance or reinforce downtown streetscapes.
- 4.22.4.27. Encourage and work with the State of Maryland and Worcester County to improve the flow of traffic on the Rt. 50 corridor gateway into Ocean City.

## Ocean City's Transportation System

Ocean City's transportation system has developed locally into a true multi-modal system, made up of highways, streets, and public transportation, ~~and air travel~~. The system is still dominated by the automobile, especially during the summer season, which serves as the most viable means of access from major population centers to the resort community.- Traditional rail access, Greyhound Bus service and regional airline flights no longer provide direct connections to Ocean City and are located at least a 30 minute drive away. For the near term, a coordinated transportation strategy will continue to emphasize convenient access by private automobile with adequate parking provided 'where you stay', and recognize the need for day-trip parking

facilities. Each of the components of the transportation system is described below.

## Town Street System

Ocean City's local street system is simple in layout. One major median divided 6-lane arterial, Coastal Highway (MD Rt. 52850), accommodates the bulk of north-south movement. North-south movement in the Downtown area is also accommodated on Baltimore Avenue and St. Louis Avenue. Short east-west streets provide property access and provide connections between the Ocean and Bayfront. The modified grid system is simple but is called on to work hard to meet seasonal demand.

Arterial roads such as Coastal Highway, portions of Baltimore Avenue (S. 1<sup>st</sup> Street to 15<sup>th</sup> Street), and several cross streets (1<sup>st</sup>, 9<sup>th</sup>, 15<sup>th</sup>) are owned and maintained by the Maryland State Highway Administration (SHA). 63 miles of local streets, 38 miles of storm drains, and 15 miles of alley are owned and maintained by the Town of Ocean City with approximately \$2-3 million annually budgeted for repaving and repairs. In recent years, local revenue sharing received from the Ocean Downs Casino in Worcester County has been directed to public streets and utilities.

Primary access to the island is provided by two bridges, one near the town's southern tip, the Harry W. Kelley Bridge (Route 50), and the other at Ocean City's midpoint, the Route 90 Bridge. Both serve the primary east-west highway, Route 50. The Route 90 Bridge also provides access from Route 50 and Route 113, a major north-south highway.

Two secondary access roads feed in from Delaware. Route 54 links Coastal Highway to Route 113 via Selbyville. A two lane secondary highway, Route 54 meanders through several communities before reaching Route 113. Often during storms this route is flooded. The other secondary access is Route 1 which is the extension of Coastal Highway northward along the Delaware beaches and merging in Milford, Delaware with Route 113. Often during storms these routes are flooded.

### Coastal Highway

Coastal Highway (MD 528) serves as the main arterial running from 33rd Street to the Delaware line. Due to the narrowness of the island, it is the only continuous north—south route in Ocean City. Coastal Highway consists of three 11 foot wide travel lanes northbound and southbound, a 14 foot wide bus/bike lane in each direction, a 14 foot median and left turn lane, and a five foot sidewalk on each side.

Parking is not permitted on Coastal Highway and curb cuts for new development are discouraged or carefully located. Over the past 10 years, several improvements have been made to Coastal Highway. The signal system is fully computerized to ensure the smoothest and most efficient

traffic flow possible and additional turning lanes from northbound Coastal Highway have improved traffic flow onto Route 90.

~~Annual average daily traffic volumes (AADT) along Coastal Highway have remained rather constant in recent years and have actually shown some decline.~~ Table 4-1 identifies AADT volumes ~~for the past five years over 5 year periods from 1980 to 2015., at Several locations are identified on Coastal Highway at the DE line, above and below the Route 90 bridge intersection and near the north end of Philadelphia Avenue at 14<sup>th</sup> Street, as well as the Route 50 bridge.~~

Traffic flow along Coastal Highway varies dramatically with the season. Off-season flow is unimpeded; summer brings heavy volumes. In-season traffic has both weekly and daily peaks. Weekly peaks occur on Saturdays, and are partially due to “check-in and out” of vacationers. At this time, thousands of visitors are all leaving and arriving at about the same time. During such periods traffic volumes can range from between 32,000 and 38,000 vehicles per day. Congestion along the corridor during such periods can make access to the route difficult causing backups along the Route 90 and Route 50 corridors.

In-season daily peaks on Coastal Highway occur in the early evening for southbound traffic and several hours later northbound. During the earlier period vacationers head to the Boardwalk amusement centers, restaurants, and other night spots. Later, as everyone migrates back, traffic peaks heading north. Also, rainy weather causes a peak in traffic conditions. As a rainy day alternative to the beach, many go shopping, thereby causing congestion.

A major safety, stormwater management and beautification project was completed by the State Highway Administration from 9th Street to the Delaware state line during the 1990's. This involved the installation of landscaped medians in Coastal Highway with signalized breaks about every three blocks. This restriction and control of turning movements has greatly improved traffic flow, reduced the number of accidents and has also improved pedestrian safety. SHA is currently proceeding with a phase one dune-style median fence down the center of Coastal Highway from Route 90 to Convention Center Drive to improve pedestrian safety and use of crosswalks.

~~In 2004, the Town completed renovation of the 94<sup>th</sup> Street corridor and 142<sup>nd</sup> Street. These projects included replacement of metal storm drains, horizontal alignment changes, and landscape improvements.~~

## Philadelphia Avenue

Philadelphia Avenue is a continuation of Coastal Highway (MD 528) from 33rd Street to South 1st Street. It is one way southbound from 9th Street to South 1st Street. Philadelphia Avenue's configuration varies. Generally it has three southbound lanes with parking on both sides. It flares to four lanes at the intersection with Route 50 at North Division Street. In October, 2002, the Town initiated a two-year project to improve an eight-block corridor of Philadelphia Avenue,

from North 1<sup>st</sup> Street to South 1<sup>st</sup> Street. Improvements included new sidewalks, concrete pavers, street lighting, landscaping, and patterned pedestrian crosswalks.

Average Annual Daily Traffic counts for 2015~~03~~ in the vicinity of 20th Street indicate an annual average daily traffic flow of ~~22,250~~29,571-vehicles per day. As in the case of State maintained portions of the route, in-season traffic volumes along the route can exceed 35,000 vehicles daily.

## Baltimore Avenue

Baltimore Avenue extends from South 2nd Street to 33<sup>rd</sup> Street between the Boardwalk and Philadelphia Avenue. From South 2nd Street, north to 33<sup>rd</sup> Street it is MD 378. Baltimore Avenue serves as the “Main Street” of “Downtown” Ocean City, and also serves as the secondary north-south traffic mover in the southern part of town. Baltimore Avenue does not have a dedicated bus lane to support transit service. Therefore when peak season congestion occurs on this route, bus traffic is caught in the traffic. Transit system alternatives for the downtown are currently being explored to determine how to alleviate this condition.

In 1993, the southern portion of Baltimore Avenue, from Caroline Street to South 2nd Street, was completely renovated with upgraded underground utilities, landscaping, decorative paving and street furniture. Similar improvements were subsequently made through the 1990's from 15th to 33rd Streets. These projects have improved both the function and appearance along the corridor and have served to spur private investment in the area.

The remaining portion of Baltimore Avenue from Caroline Street to 15<sup>th</sup> Street has been identified as a priority for streetscape improvements including wider sidewalks, underground utilities and pavement reconstruction. Existing right of way along the east side of the existing roadway is owned by the Town of Ocean City, while the roadway is maintained by SHA, which will require a coordinated project design.

## Other Road Improvements

In 2004, the Town completed renovation of the 94<sup>th</sup> Street corridor and 142<sup>nd</sup> Street. These projects included replacement of metal storm drains, horizontal alignment changes, and landscape improvements.

In 2014, St. Louis Avenue improvements were completed from 1<sup>st</sup> Street to 17<sup>th</sup> Street to rebuild the road pavement, install new water and sewer mains, replace sidewalks and provide bike lane pavement markings in both directions.

Other street reconstruction is underway in the Little Salisbury neighborhood that will also replace storm drains, sidewalks and underground utilities. Each street improvement includes more than just repaving to upgrade all of the infrastructure located in the public right of way whenever possible.

# Intercity Roads

## Route 50

Route 50 is the main east-west route from the Washington and Baltimore area to the Eastern Shore and Ocean City. Over the past several decades it has been improved by the construction of bypasses and new bridges and lane improvements to the point that there are now at least four lanes for the entire length of the corridor. Turning lane improvements and upgrade to six lanes in selected reaches of the Route 50 corridor have further ameliorated congestion along the corridor. The completion of the Salisbury bypass in 1999 was among the most significant improvements to improve traffic flow to Ocean City in the lower Eastern Shore region in recent years. Average annual traffic volumes on Route 50 entering Ocean City range from approximately ~~2321,000~~ to ~~24,500-32,000~~ depending on the location of the station count over the last 5 years (see figure 4-1). However, in-season traffic volumes during the summer range from 43,000 to 52,000 vehicles daily.

The 71-year-old, 1.5-mile-long US 50 Crossing (Harry W. Kelley Memorial Bridge) includes a 140-foot-long draw span. To provide access to and from the commercial center of Ocean City, a safe and efficient crossing of US 50 is essential. The bridge, which is eligible for listing on the National Register of Historic Places, is in fair condition. SHA completed its most recent repairs in January 2013. Long term maintenance and replacement of the Route 50 Bridge into Ocean City was studied in 2013 with location and design plans approved for a north parallel bridge replacement (Alt. 5A). Funding for the bridge replacement may not be available for at least 20 years, however the potential impact on peak season access during construction is a significant concern.

Substantial development along Route 50 in Worcester County west of Ocean City has caused increased congestion in recent years and will likely limit the highway capacity for beach access in the future. Every effort should be made by the State to manage access and highway capacity and by the City and County to monitor and manage growth to address this growing problem.

A vital part of the Route 50 access to Ocean City is the Chesapeake Bay Bridge. ~~In 2004 a number of structural problems with bridge components have required repairs prompting periodic congestion. Improvements and repairs are currently underway.~~ Given growth trends in traffic volume crossing this span (approximately 3% annually), it is important that the capacity of current spans to accommodate traffic flows be evaluated to assure continued access to the Eastern Shore of Maryland and the Town of Ocean City. In 2015, State funding was approved by the Governor to complete a 4 year study of a third Chesapeake Bay crossing.

~~Substantial development along Route 50 in Worcester County west of Ocean City has also caused increased congestion in recent years. Every effort should be made by the State to manage~~

~~access and highway capacity and by the City and County to monitor and manage growth to address this growing problem.~~

## Route 90

Route 90 is a limited access two lane road linking Route 50 to Ocean City at 62nd Street. This twelve mile expressway is the primary access to the northern part of Ocean City. As shown in figure 4-1, the average annual daily traffic volume on the Expressway entering Ocean City was ~~17,225~~16,402 in 2015. Peak volumes during the summer months are lower than those on Route 50, since the route provides only 2 lanes, and range from 28,000 to 32,000 daily.

The safety of Route 90 has been questioned due to the number of serious accidents over the years. Various improvements to Route 90 have been studied, and several safety improvements have been made over the years by the State Highway Administration. Larger scale improvements, including dualization and the construction of a new road and bridge entering Ocean City somewhere north of 100th Street, have been considered, ~~but at this time no funding is available nor anticipated.~~

The City ~~should continue~~has placed a priority on pursuing ~~this the~~ Route 90 dualization project because of its many advantages: ~~reducing traffic~~increasing capacity on Route 90 and enhancing its safety; creating ~~another entrance~~improved emergency access into and out of Ocean City in the event of an accident, thus reducing traffic congestion at the existing entrancesproviding a viable means of access when Route 50 is limited by bridge construction or future development; and providing an ~~additional~~expanded hurricane evacuation route.

## Route 113/13

Route 113 links the coastal areas of the Eastern Shore with Route 13, the main north-south interstate travel route on the Shore. Diverging from Route 13 at Dover, Delaware, it swings east serving Milford. Georgetown. Selbyville, Berlin, Snow Hill and reconnects to Route 13 at Pocomoke City where it continues south through Virginia to the Chesapeake Bay Bridge Tunnel and Norfolk, VA. In conjunction with Route 13, Route 113 expands Ocean City's market area for vacationers within a three hour drive, and improves both emergency and supply access.~~to the north links Ocean City to Pennsylvania and the other Middle Atlantic States. To the south, it links Delmarva with Virginia and points south.~~

Like Route 90, Route 113 has experienced many serious accidents over the past several years and safety improvements ~~are needed~~ are being completed as the top regional priority for State

Source: Maryland Department of Transportation, State Highway Administration, Traffic Volume Map, Revised 5-21-2004  
funding. In order to handle the present and future traffic volumes safely, the existing two lane sections of Route 113, Route 90 and Route 589 should be widened to four lanes.

## Parking

An important component of the transportation system is parking. Parking has been a problem in Ocean City for many years, especially in the Downtown area. Use of street parking by daytrippers and boardwalk-oriented traffic, downtown employees, and the limited off-street parking provided by early-historic development patterns all combine to create difficult conditions. Double parking by delivery trucks using parking area for off-street loading functions further complicates the situation.

Public parking has changed over the past several years with removal of street parking from Coastal Highway and Baltimore Avenue south of 15th Street, and the addition of new public parking lots. The metering of street parking changes occasionally in location and numbers. With few exceptions, metered parking is limited to locations in the downtown area. Table 4-2 provides an inventory of public parking lots including over 3,000 spaces which are located throughout the Town. In addition, private vacant properties are often used for temporary parking lots during peak season periods.

Recent Prior study of Downtown Parking conditions indicates that conflicts between parking and traffic movement are apparent at the Inlet Parking lot. Often the lot is full and unaware drivers become stuck in traffic seeking access to parking and constrain traffic flow. Advance notification to drivers by remote sign panel indicating the lot is full or has only a limited number of spaces hasould improved this condition. Additional real time information for availability of parking in all public lots has been proposed.

It continues to be the practice of the Mayor and City Council to purchase property and develop public parking lots when the need and opportunity exist. In conjunction with the 100th Street lot, the city's first residential parking district was created in the Caine Keys II subdivision on the bayside across from high rise row. This district reserves street parking for the residents of the neighborhood, and the 100th Street lot provides the needed visitor parking spaces in the area.

The parking district concept and use of existing parking lots for parking decks or garages should be studied to determine their cost-effectiveness for use in Ocean City, particularly in the downtown area. It is very possible that reductions in the parking requirements of the zoning code coupled with the establishment of a parking district, fee in lieu of parking, and provision of more public parking could improve the parking situation downtown and support ongoing redevelopment.

In 2015 Ocean City implemented a trial program for EV charging stations at two public parking lots (Convention Center and 4<sup>th</sup> Street). A third location is proposed at Northside Park. Many special events in Ocean City are organized around car shows and clubs including a recent gathering of Tesla electric vehicles which highlighted a demand for this enhanced service.

## Public Transportation

Investments in public transportation services in Ocean City have proved to be among the most effective means of improving the overall quality of the transportation system. Such improvements have proved an effective means of moving a greater number of people throughout the community in spite of limited land for highway system improvements. Such investments have permitted connection between the Island and greater use of off-Island lands to meet parking demand in satellite locations and have increased system ridership. The primary transit systems include the Municipal Bus System and Boardwalk Tram.

### Municipal Bus System

Ocean City operates a municipal bus system comprised of fixed routes and a dial-a-ride program for the elderly and handicapped. From a total of 1358 vehicles in 1996~~the early 1980's~~, the continually expanding bus fleet in 2015~~will include~~ includes 6769 vehicles. The fleet includes 4864 forty foot Thomas buses, ~~8 thirty-five foot buses, 8 new rubber tired trolleys scheduled to be online in late 2005,~~ 2 sixty foot articulating buses, and 3 para-transit vans. The bus system operates year-round, twenty four hours per day. In the height of the summer season the buses operate on Coastal Highway at 7 minute headways/intervals. During the less congested hours and times of year the fleet is smaller and intervals between buses longer; however, there is always service provided.

~~In 1991, the fare system changed from 75 cents per ride to a \$1.00 all day fare.~~ As shown in Table 4-3, ridership more than doubled in the first year (from 1.1million to 2.8 million annually), and with some exceptions continued to increase each year through 2001. The current (2015) all day fare of \$32.00 was instituted in 2012~~02~~ and has not appeared to deter ridership, ~~although ridership as dropped modestly over the past several years.~~ Efforts to improve the bus experience, reliability and customer service included increased bus deployment by 24 percent in 2015 resulting in a 4% increase in passenger count. On July 4<sup>th</sup> alone the bus carried 41,000 passengers and during the two-day Air Show in June, the numbers reached over 70,000 passengers. (Source: article from www.delmarvanow.com 7/29/15, E. Chappell)

Future opportunities to expand and improve the municipal bus system include

- Increased cooperation with neighboring transit systems including Shore Transit in Worcester County and the Delaware Area Rapid Transit system in Sussex County
- Additional service to new hotel and commercial development in West Ocean City to reduce the parking demand of 'day-trip' visitors
- Continued coordination of private shuttle services from expanding campground facilities in the County
- Evaluate potential relocation of the downtown transit center to reduce traffic congestion delays south of Route 50, and implementation of a downtown shuttle circuit

- route  
Potential conversion of bus fleet to CNG fuel to improve efficiency and provide environmental benefits

## Boardwalk Tram

An important part of the Ocean City public transportation system is the train (or tram) service that traverses the length of the boardwalk. While serving an important transportation system function moving over 400,000 people during the summer season, the tram also provides important entertainment value to the Town. The trams are also used during Winterfest at Northside Park to provide a musical tour of holiday light displays.

~~Recent~~ Ongoing evaluation of the Downtown Area Transportation system indicates that current Tram operations can result in pedestrian/tram conflicts over the entire length of the boardwalk. Since stops are in response to the interest of passengers, the frequency of un-regulated stops delays operation and schedule/headways. The Town should consider establishing designated scheduled stops every two or three blocks, integrated with street intersections that are subject to heavier pedestrian traffic to improve this condition. Future relocation of Tram operational facilities may create the need for additional boardwalk improvements to support access and circulation changes.

## Additional Transit System Considerations

A “Technical Transit Study” was prepared by Craine and Associates in 1996 which provided a number of recommendations for improvements to transit service. Many of these improvements have been implemented since that time and others have proved not feasible over time. The following provides an overview of the ridership profile and those recommended measures in the 1996 study which have been implemented since that time. It also identifies current recommendations provided as part of the ongoing Downtown Transportation System study being prepared by Kimley-Horn and Associates, Inc. as well as recommendations based on discussion with Transportation Department staff in 2005. These recommendations are provided by specific transit system topic areas which include:

- Ridership profile
- Funding
- Bus operations
- Maintenance
- Service Extensions and Coordination

### Fares

- Analysis of the shared bus/bicycle lane
- ADA Paratransit The potential for automation

## Ridership Profile

Based on the ~~1996 study~~prior studies, the typical Ocean City transit rider:

- Is a vacationer (67%).
- Travels either to or from the area between Inlet and 33rd Street (69%)
- Travels either to the boardwalk (25%) or to return to their hotel, condo, or home (31%).
- Makes a single round trip (43%).
- Has an extremely positive (43%) or somewhat positive (38%) attitude toward the bus.
- Would use the bus more often if it was: less crowded (51%), had more frequent service (50%), was faster (33%), or had fewer stops (31%). (Multiple responses were permitted to this question.)
- Would have driven (42%) or walked (32%) if they had not used transit.

Transit ridership is heavy throughout the day, with high levels of activity from about 9:00 a.m. through midnight. Patronage per vehicle hour during these hours (over 50 passengers per vehicle hour) is typical of that found on the most productive bus routes of major cities. Ridership remains significant throughout the night and early morning hours. In fact, peak ridership occurs between the hours of 6:00 p.m. and 1:00 a.m.

- In order to determine how transit can be combined with the road system and parking to serve the Town most effectively, it would be desirable to update this survey to determine the travel patterns of ~~parkers-day trip visitors~~ and tourists in the beach areas. Such information could help determine what impact changes in parking opportunities or fees would have, whether services aimed at employees would have an impact, and where improved transit services or remote parking lots would prove to be most cost-effective.
- Recent management actions have added increased security during peak night hours, and expanded recruiting for drivers in order to maintain high levels of service.

## Funding

- As the Ocean City transit system has grown, federal and state funding has remained relatively flatconstant. As a result, Ocean City contributes a larger share of the operating cost of its transit system than any other local government in Maryland.
- Ocean City's transit system is classified as a rural system, and thus does not receive the amount of funding that an urban system would receive. This classification should be changed to reflect the true nature of the system.
- ~~Convention Center provision of "free transportation" as a marketing device results in a net loss in transit system revenue derived from ridership. While this marketing device may be beneficial to the overall economy of the Town and businesses, some record of non-paying~~

~~ridership attributable to convention trade or other promotions should be kept to provide a clearer picture of the cost to the community and to improve accountability.~~

- State and Federal support of the Ocean City transit system includes the addition of new articulated buses capable of carrying 100 passengers
- A campus master plan for the public works facilities supporting the transportation program is underway which will upgrade support and maintenance facilities

## Bus Operations

- The attractiveness of bus service to riders ~~is has been~~ significantly ~~reduced~~ improved by ~~very crowded conditions~~ additional buses and drivers, ~~slow~~ regular service due to frequent scheduled stops, and ~~long~~ shorter waits due to ~~irregular~~ regular spacing between buses. ~~Conditions have improved in recent years with greater bus system capacity, but many of these issues~~ Continued evaluation will remain a consideration in planning future service improvements.
- ~~There is a continuing need to decrease~~ Decreased reliance on private vehicles while visiting Ocean City is accomplished by continuing to increase transit ridership. More widespread dissemination of transit routing, schedule, and fare information at visitor centers, in visitor guidebooks, through motels and hotels, and other means ~~could~~ will improve this condition meet this objective.
- Within the downtown area, parked vehicles and service vehicles periodically block bus lanes. Greater use of enforcement, pavement markings and education of businesses and delivery drivers could improve this condition.
- ~~Within the downtown area there are difficulties in maintaining consistent headways and providing adequate bus system capacity. The Town should explore demand-based bus dispatching versus headway dispatching in this area during peak use periods, as well as turn-back operations for Coastal Highway at 60<sup>th</sup> Street.~~
- ~~Recent study by Kimley-Horn indicates there is some difficulty getting buses out of the South Division Transit Station onto Baltimore Avenue and for buses, southbound on Philadelphia turning left into the transit station. Trimming back the median on south Division to accommodate a larger turning radius is recommended to solve the latter problem. Coordination with the State Highway Administration is suggested to have vehicle detectors checked for proper operation to improve bus movement from the Station to Baltimore Avenue.~~
- A greatly increased level of supervision to maximize adherence to planned schedules using trained street supervisors and/or an automatic vehicle location system could also

improve overall service. The Town is currently working toward development of a vehicle location system.

- ~~Eliminating the practice of bringing buses into the public works compound at 64th Street while still in revenue service to make driver reliefs was recommended in the study conducted by Craine and Associates in 1996. Action has since been taken to implement this recommendation and discontinue this practice.~~
- ~~Given the seasonal demands posed by the transit system the Town will need to continue to enhance driver recruitment efforts to ensure a reliable work force during the summer months.~~

### Maintenance

- Maintenance is performed by permanent employees of the Town fleet service center. ~~The Town has taken a number of steps in recent years to address past deficiencies at the maintenance center.~~ The maintenance center was expanded in 1998 to add additional maintenance bays and to add an automatic bus washer. A long range master plan to optimize the public works campus will be completed in 2016 leading to potential construction of improved operational and maintenance facilities within a 3 year period.
- As was recommended in the 1996 Craine study, the appearance of the bus fleet would benefit from an investment in a strong eye-catching paint scheme or theme for the buses which would promote ridership and add to the Town's overall image. ~~The current use of "wrap advertising" is unsightly and should be re-considered. Although it is expected to generate \$123,000 in advertising in 2006 it costs the Town some \$20,000 or more in damages to buses each year. Wrap advertising is reducing window visibility for passengers and creates security problems since visibility into and out of the bus is limited. Moreover, display ads create user confusion since they are misinterpreted by prospective passengers as bus destinations.~~
- ~~As the Town proceeds with the planned replacement of the fleet with newer buses, it should protect its investment by improving its comprehensive maintenance record keeping system.~~

### Service Extensions and Coordination with Other Systems

- ~~Possible service extensions to the west in 1996 were considered at which time it was determined such extensions would probably have poor patronage and would require a substantial subsidy from the Town. As development continues to occur in West Ocean City, opportunities for such service extension should be re-evaluated. Ato connect with a growing number of commercial services and retailers in West Ocean City suggests the~~

need and demand for linking residents to these shopping opportunities ~~may be in the offering.~~ The ~~location of the~~ West Ocean City Park and Ride was developed in 2002 and ~~recent County~~ system service to the nearby factory outlet stores has ~~already demonstrated an increase in ridership~~ been met recently with Shore Transit service connections.

- Partnership with Shore Transit (a service provided by the County) should be enhanced to improve service system connections and scheduling.
- The benefits of an additional Park & Ride facility location along Route 90 west of Ocean City should also be explored. Such a facility might attract day trippers, thereby increasing highway system capacity. Since land costs may be high in near Ocean City locations, areas near the Whaleyville Campground located west of the junction of the Route 90 expressway and Route 50 should also be considered as a candidate location for such a facility.
- The most effective improvement for attracting additional bus riders from Delaware would be developing a park and ride lot near the northern end of the bus route. A North End Transit Center ~~is currently being designed~~ has been constructed by the Town and may serve as the first step toward developing such a facility with the addition of parking.
- As noted in the section titled “ridership” it would be desirable to conduct a survey to determine the travel patterns of parkers and tourists in the beach areas. Such information could help determine what impact changes in parking opportunities or fees would have, whether services aimed at employees would have an impact, and where improved transit services or remote parking lots would prove to be most cost-effective.

### Transit Fares

- The all-day pass has proved simple, easy to understand, has good marketing value, and has reduced delays due to fare payment on the bus, since it was instituted in 1990's. The current cost of \$~~32~~.00 does not appear to have greatly deterred use of the system since 20~~12~~02.
- ~~The 1996 Craine study recommended Town implementation of a pre-purchased pass option, selling passes at kiosks on the boardwalk, through merchants, and through hotels and motels. Such a program was recommended to further reduce delays on the bus, allow for lower fares for service industry workers, provide a channel for hotels and motels to offer a subsidy, and reduce operational problems that stem from the need to reconcile on-board pass sales. The use of Coupon Books was established in 2002 and experience to date is mixed. While it reduces delays on the bus and provides a channel for hotels and motels to offer a subsidy, it has also reduced system revenues. For these reasons the use of coupon books should be re-examined.~~

- ~~As noted under the section titled “funding”, Convention Center provision of “free transportation” as a marketing device results in a net loss in revenue derived from ridership. Convention Center journal entry would provide a clearer picture of revenue that would otherwise be derived and improve system accountability.~~
- ~~The Town currently estimates there are 180 active ADA clients using the bus system with only 5 paying for the service. Seniors use of coupon books provide a ‘good will’ benefit also reduces with minimal reduction in system revenues. The town should re-consider whether or not to continue to accord these riders preferred status or at least recognize continue to provide this valuable service to the public. the demand they place on the system with little or no offsetting revenue.~~

## Bicycle Movement

Presently, Coastal Highway provides north and southbound bicycle lanes which are shared with buses and which also serve as turn lanes for all other traffic. Because of the high volumes of traffic on Coastal Highway, the multiple uses of these lanes has been an ongoing safety problem.

Consultants have conducted studies of the use of the bus/bike lanes in the summers of 1990 and 1995. Vehicle counts were made at various locations and time periods. Kellerco, the consultant that performed the 1995 study, also has summarized the many conflicts which are present on Coastal Highway. The safety problems caused by the multiple uses of the bike/bus lanes should continue to be addressed. The establishment of bikeways servicing various parts of the city Town has been discussed, as well as widening the Boardwalk to accommodate bicycles. These past studies should continue to provide the basis for future improvements to accommodate bike movement.

2004 study of bike transportation issues within the downtown area by Kimley-Horn indicates a need to make it easier and safer for people to store their bikes in order to encourage additional bike ridership. The study recommends installation of additional bike racks in the downtown area and installation of bike lockers.

The study further recommends improving bicycle service on the US Route 50 bridge that permits concurrent use of the bridge for Eastbound and Westbound bikes by providing a ramp on the north side of the bridge for westbound bikes. ~~Finally R~~ recommendations also include installation of a shared bike and pedestrian path on the west side of St. Louis Avenue, south of 1<sup>st</sup> Street to Somerset that utilizes the existing cross section north of 1<sup>st</sup> Street. The report prepared by Kimley-Horn should be consulted for any additional “location specific” recommendations it provides concerning enhancement of bike movement in the downtown area.

[The Ocean City Transportation Committee began a project in 2014 to define a system of bicycle](#)

routes which help to connect points throughout the community and provide an alternative to the shared use of bus lanes on Coastal Highway. A mapping effort was completed to capture the typical riding patterns of both local cyclists and the seasonal workforce who use a network of alleys, parking lots and secondary streets in order to avoid high speed or high traffic volume arterial roads. Signage and pavement marking projects have been identified and completed in several 'pods', private easement agreements and minor curb reconstruction is proposed to complete several gap connections, and improved cross street safety improvements will be completed as other street reconstruction projects are funded. Long term connectivity is projected to be 20 years out, with continued incremental progress.

## Pedestrian Movement

The Ocean City Boardwalk provides a traditional and favorite destination for walking, shopping, dining, and beach recreation where you can leave your car behind. Activities such as bicycling and riding on the boardwalk tram are carefully managed to limit potential conflicts with the large volume of individuals, families and groups who enjoy walking on the boardwalk. In 1991, the concrete tram lane was added from the amusement pier to 3<sup>rd</sup> Street to accommodate this busy area and provide storm protection.

Sidewalks along the Town's public street system also provide important pedestrian connections from bayside and ocean block housing to the ocean, and from bus stops to commercial destinations. As sidewalks are replaced and where new development occurs, a minimum 5 foot wide sidewalk meeting minimum design standards is required with an additional 3 feet of pervious paving to meet existing City Council policy for heavy use corridors.

Pedestrian movement is a key mode of transportation in Ocean City that brings on a range of issues. Pedestrians get frustrated when they see gaps in traffic and often don't wait for pedestrian signal indications. In some locations in the downtown area, there is a lack of pedestrian signal locations and/or pushbuttons on east and west approaches to Baltimore and Philadelphia Avenues. In other cases there is discontinuity between where a majority of pedestrians want to cross and where the crosswalks are located, particularly on Baltimore Avenue.

A number of specific locations where these conflicts occur were identified by Kimley-Horn as part of the downtown transportation study conducted in 2004 which should be consulted to identify specific improvements by location that are proposed for improving downtown area pedestrian movement. Their recommendations include shortening signal cycle lengths, installation of additional pedestrian signal heads, installation of additional pedestrian pushbuttons, and improvements in crosswalk continuity to match needs. The choice regarding these optional solutions is often location specific depending on the particular conflict between vehicular and pedestrian traffic.

Key pedestrian improvements in the downtown area that can improve the pedestrian environment and enhance the Town include continued development of the “Bayfront Boardwalk” over time and improvement of east-west pedestrian connections between the Ocean boardwalk and the Bay Area to provide better pedestrian safety across Baltimore and Philadelphia Avenues. Such improvements should include consideration of one-way pair street segments to accommodate vehicle circulation while narrowing pavement widths to permit wider sidewalks to assure vehicular traffic is less dominant in the Downtown area. Wider sidewalk areas could also be used to add shade trees, accommodate outdoor cafes and generally support a festive atmosphere that would provide benefits to Downtown businesses. The location of such one-way street pairings would need to be coordinated with potential transit station locations to minimize conflicts with automobile movement.

## Waterways

The Ocean City inlet serves as critical infrastructure for Ocean City, Worcester County and the National Park Service at the north end of Assateague Island. Continued operations by the US Army Corps of Engineers to maintain adequate channel depth for commercial ships is an important element of supporting the local economy and maintaining ocean access for the US Coast Guard Station.

Boat traffic, like automobile traffic, peaks during the summer. In season, the bays and open ocean provide recreational opportunities for pleasure boating and sportfishing enthusiasts. Commercial shipping is limited to local and some transient fisherman and their catch. Basic waterway needs will require ongoing maintenance of channels and channel markers. In keeping with the image of an Ocean resort community, every opportunity to increase the availability of and access to marina facilities and boat launching facilities should be explored.

The waterways will continue to provide recreational benefits and possibly a limited amount of transit. A bayside “water taxi” ferrying tourists from the north to a location near the inlet could serve a useful dual purpose. This service would provide relatively rapid transit and a guided tour of the bayside at the same time. The water taxi concept could also be used from Ocean City to the mainland (possibly Ocean Pines). The water taxi’s impact on the overall transportation situation may be small, but it would provide an interesting addition to Ocean City’s recreational opportunities and could become its own attraction. Opportunities to promote such a water taxi service and link such services to land-based transit alternatives should be explored. Any private sector interest in developing a water taxi service should be encouraged.

A new public boat launch facility is scheduled to be completed in 2017. Located at the bayside end of 64<sup>th</sup> Street, facilities will include construction of a two-lane boat ramp, channel dredging for ramp access, a 50-space trailer parking area and a small comfort station.

# Airport

~~The Ocean City Municipal Airport is located on Route 611 about 5 miles from downtown. It began operation in 1958 after the initial land acquisition and the construction of a 2,300-foot turf-aggregate runway.~~

Ocean City Municipal Airport (OXB) is a publicly owned, public use general aviation airport owned by the Town of Ocean City. The airport is located in Worcester County approximately 2 miles southwest of the Town of Ocean City. The airport maintains two asphalt/concrete runways, a 4,074-foot long by 75-foot wide runway (Runway 14/32) and a 3,204-foot long by 75-foot wide runway (Runway 2/20), both with a full parallel taxiway and non-precision approach capability.

The airport is included in the FAA's National Plan of Integrated Airport Systems (NPIAS), making it eligible to receive federal funds. Its role, identified within the 2008 Maryland Aviation System Plan, is a General Airport, which accommodates the basic needs of general aviation aircraft and pilots. General aviation operations typically include light multi-engine and single-engine aircraft used for business, pleasure, and training.

Airport users can obtain aircraft fueling services for 100LL and Jet A, major airframe service, and major power plant service. Aircraft parking and storage is available on paved tie downs and in T-hangars. The airport supports all types of general aviation activity including flight instruction, aircraft rental/sales, and charter flights. The 25 based aircraft at Ocean City Municipal are primarily single-engine aircraft, several multi-engine aircraft, two turboprops, and a helicopter.

The airport serves the business, recreational, and flight training needs of the community through the services and employment opportunities provided by numerous successful on-airport businesses. Cloud Dancer provides airplane sightseeing tours; Ocean City Aerographic is an aerial photography company; and Ocean Aviation is a full service FBO and professional FAA Part 141-approved flight academy providing a wide variety of aviation services, including: flight training, aircraft rental, pilot supplies, aircraft sales, acquisition consulting, sightseeing flights, aircraft maintenance, heated hangar space, and catering (www.flyoceanaviation.com). Other on-airport activities and businesses include OC Skydiving.

~~A master plan for the airport was completed in 1979 and updated in 1987. Many improvements have been made since 1977, resulting in a facility that is a valuable part of the area's transportation system.~~

The Ocean City Airport offers the following services:

- Fuel sales (104OLL and Jet A)

- Major and minor power plant ~~service~~repair
- Major and minor airframe ~~repair~~service
- Aircraft rental
- Charter service
- Sightseeing packages
- Flight and sky-diving instruction
- Community and T-hangers
- Paved tie-downs
- Bus transportation available in summer

Aircraft activity (201504):

Based aircraft

Single engine	<u>1537</u>	
Multi-engine	7	
<u>TurboProp</u>	<u>2</u>	
<del>Ultra lights</del> Helicopter		<u>1</u>
	<u>2545</u>	

Annual aircraft activity (201504):

Local <u>GA</u>	7,400	
<del>Itinerant</del> Transient GA		<u>29,600000</u>
Military	<u>3600</u>	
<u>Air Taxi</u>	<u>150</u>	
	<u>37,450000</u>	

~~Runways: Primary 14/32 4,070 feet~~

~~Crosswind 02/20 3,200 feet~~

~~Navigational Aids:~~

~~V.A.S.I. runway 14/32~~

~~Localizer approach runway 14/32~~

~~N.D.B. approach off of Salisbury VOR~~

~~(Source: Maryland Economic Impacts of Public Use Airports, July 2015)~~

The airport handles approximately 50% of its annual traffic during the months of June thru August; 70% during the period from May to September. The bulk of the traffic is from the Baltimore/Washington area, but there are indications that more and more traffic is originating from the Philadelphia and New York areas.

~~The Ocean City Airport is an uncontrolled field; airport personnel are issuing advisories over the Unicorn. These advisories consist of wind speed and direction, altimeter settings and the~~

~~“recommended” runway. The pilot in command is responsible for the safe operation of his/her aircraft.~~

~~A master plan for the airport was completed in 1979 and updated in 1987. Many improvements have been made since 1977, resulting in a facility that is a valuable part of the area’s transportation system. In 1995, a new terminal was constructed which replaced the farmhouse that had previously served as the terminal. The new terminal building is a two story, 3,200 square foot structure. There is office space for the skydiving center along with rental cars on the field. Airport operations are also conducted from the terminal. Catering and a conference room are available upon request. Three new hangars are scheduled to be built in 2005-2006 and will house between twenty and thirty additional aircraft and are 100% occupied.~~

~~The Airport is now served by public water and sewer service from Worcester County. The Airport Manager has identified the extension of the existing State Priority Funding Area (PFA) from the northern Airport boundary to include the Airport property as an objective to assist with future funding and economic development opportunities. Flight service information can be obtained from Leesburg or Pautuxent River as well as weather briefs from the National Weather Service. Runway lights are controlled by the pilot from the aircraft.~~

The most recent ~~(2002)~~ updates ~~to of~~ the Airport Master Plan ~~in 2012~~ ~~suggests~~ identify several improvements that are needed at the airport, including:

- ~~Completion of Environmental Impact Assessment update~~
- ~~Acquisition of clear zone and obstruction easements.~~
- ~~Installation of several safety enhancements.~~
- ~~Extension of Rehabilitate Runway 14/32 by 500 feet.~~
- ~~Construction of T-hangers. 3-bay extension of Hanger K~~
- ~~Construction and improvement of taxiways. Reconstruction of Taxiway A~~
- ~~Construction of a combination aircraft hangar and commercial office space building at the ‘long term parking lot’~~
- ~~Construction of Apron Expansion to larger aircraft~~
- ~~Relocation of the localizer antenna array for the LOC14 instrument approach~~

The airport can be a valuable alternative to the automobile for many vacationers. As ~~airplane ownership grows~~ ~~air travel alternatives grow~~, so will the Ocean City Airport’s role in the transportation system. The airport could also be an important factor in the growth of conventions in Ocean City. The ~~continued~~ expansion of the Convention Center ~~in 1996~~ is expected to attract larger groups to the resort, and many of the participants may want to fly to the area if the airport facility is adequate. Thus, for both vacationers and conventions, the airport has an important role in transportation and economic development.

~~The Ocean City Airport has recently attracted a regularly scheduled commuter service. Simmons Air will begin service between Ocean City and B.W.I. Airport in May, 2005, four times a day for~~

~~\$45.00 per trip. This now presents the option of flying to the Ocean City area to those who do not own a private plane or have the means to charter a plane. Commuter service will also enhance the status of Ocean City as a convention destination.~~

## Recommendations

Ocean City's transportation system moves goods and people on land, sea, and in the air. By far, the ~~bulk of transit occurs on land~~ primary transportation access is by private vehicles via the well-developed roadway system. Pleasure and sport-fishing boats ~~ply~~ have public access to the bays and open ocean along with the commercial fishing fleet at sea. The airport provides rapid access for visitors from the Middle Atlantic States ~~and historic rail access may be viable again from Delaware to nearby Berlin, Maryland~~. Like much of the town's other infrastructure the transportation system is strongly influenced by Ocean City's long and narrow shape.

The ~~thoroughfare system~~ main arterial road corridors carry ~~ies its~~ seasonal burden adequately most of the time. However, at peak periods ~~it is~~ roadway capacity is stretched to the limit. Future improvements will be needed to keep pace with the town's growth. Opportunities for improvement are limited, but should be pursued. Below are recommendations for action to improve Ocean City's transportation system:

### Highways and Street Systems

- × Continue to work with the State Highway Administration to improve the efficiency and safety of Route 90 including Dualization from Ocean City to Route 50.
- × Continue working to improve the stormwater management system on Coastal Highway.
- × ~~Provide a third access to the island at the north end of town.~~ Encourage Delaware to continue improvements to Route 54 which would improve the third means of access to the north end of Ocean City.
- × Keep the remaining alley system open; only close alleys that have no present or potential benefit to the public.
- × Minimize curb cuts on Coastal Highway to maintain capacity.
- × Continue to monitor the structural integrity of the Route 50 Kelly Harry W. Kelley Memorial Bridge and Route 90 Bridges to ensure their safety and serviceability.
- × Continue to cooperate with the state to improve the safety and capacity of Coastal

## Highway.

- × Continue to implement the street system improvements identified in the 10-year capital plan for improvement of 7875 miles of town streets and alley~~over the next 9 years~~.
- × Initiate the design of a streetscape project to complete Baltimore Avenue improvements between N. Division Street and 15<sup>th</sup> Street for consideration in the next capital improvement plan update.
- × Coordinate special event use of the public streets for car shows, parades and short term controlled access. Evaluate maximum carrying capacity of roadway system during peak periods and multiple event schedules.

## Parking

- × Provide additional public parking in the downtown area ~~in the form of a parking garage or decks~~. If feasible, plan for long term parking districts and distributed parking structures which incorporate retail stores at the ground level of the garage to enhance commercial activities at the pedestrian street level~~downtown~~. The architectural design of the garage should be attractive and compatible with the ~~old town atmosphere~~character of the neighborhood and should be constructed in a manner that reinforces or enhances the ~~downtown~~ streetscape.
- × Continue to provide or permit public parking lots and street parking where needed throughout the town.
- × Monitor Adjust off-street parking requirements in the Zoning Code to ~~ensure consistency with demand~~establish minimum criteria for change of use or redevelopment in order to phase out non-conformity with current parking standards.
- × Identify areas with parking deficiencies and establish parking districts or a fee in lieu of parking program to finance the provision of public parking in these areas.
- × Require compact car only parking, at corners in need of greater improved sight distance.
- × Continue to monitor the functions and flow of traffic into and out of parking lots and institute measures to improve their function or minimize disruption to traffic flow where possible (e.g. inlet lot).
- × Incorporate electric vehicle (EV) charging stations at selected public parking lots to meet the demand of seasonal visitors.

## Transit/Bus System

- × Provide more widespread dissemination of transit routing, schedule, and fare information at visitor centers, in visitor guidebooks, through motels and hotels, and other means (social media, smart phone apps, website) in order to increase ridership.
- × Plan and design a dedicated bus lane extension southbound along Philadelphia Avenue from 17<sup>th</sup> Street to 9<sup>th</sup> Street. Explore demand based bus dispatching versus headway dispatching in the downtown area to improve service during peak use periods, as well as turn-back operations for Coastal Highway at 60<sup>th</sup> Street.
- × Evaluate the feasibility of express bus service to supplement current service recognizing limitations posed by available bus lanes to accommodate both.
- ~~× Re-consider the use of wrap advertising due to reduction in window visibility for passengers, security problems posed by limited visibility into and out of the buses, and confusion caused to prospective passengers.~~
- × Identify express buses with a different paint scheme or markings from local buses.
- × Install an Automated Vehicle Locator (AVL) system to permit monitoring and adjustments to intervals between buses along the length of Coastal Highway and allow waiting passengers to find the anticipated time of the next bus.
- × Study potential relocation of the southern terminus of the transit system north of the Route 50 Bridge as a means of solving traffic congestion and impacts of coastal flooding. Until the implementation of an Automated Vehicle Locator system is completed, the town continue to improve street supervision and dispatcher control over bus operations and intervals between buses.
- × Investigate a potential design for Route 90 Dualization which incorporates multimodal access and/or express lane connection to an additional park and ride facility in Worcester County. The benefits of an additional Park & Ride facility location along Route 90 west of Ocean City should also be explored. Such a facility might attract day trippers, thereby increasing highway system capacity. Since land costs may be high in near Ocean City locations, areas near the Whaleyville Campground located west of the junction of the Route 90 expressway and Route 50 should also be considered as a candidate location for such a facility.

- × Evaluate the benefits and costs of developing a park and ride lot near the northern end of the bus route. The North End Transit Center is currently being designed by the Town and may serve as the first step toward developing such a facility with the addition of parking in the future.

## Pedestrian and Bike Movement

- × Develop recreational and destination bike routes minimizing the use of Coastal Highway.
- × Consider development of Pedestrian overpasses over Coastal Highway at locations where they may support the needs of key concentrations of bayside population.
- × Continue to develop the “Bayside Boardwalk” to invite pedestrian activity to the bayside and distribute greater pedestrian activity in the Downtown area.
- × ~~Shorten-Monitor~~ pedestrian signal cycle lengths, install additional pedestrian signal heads and additional pedestrian pushbuttons in key locations as needed identified by Kimley Horn in the 2005 Downtown Area Transportation Study.
- × Locate or re-locate crosswalks in appropriate locations to provide continuity and match pedestrian needs.
- × Provide several one-way pair street segments to improve traffic flow and pedestrian safety.
- × Improve east-west pedestrian connections within the Downtown area between the Ocean boardwalk and the Bay Area to provide better pedestrian safety across Baltimore and Philadelphia Avenues. Such improvements should include consideration of one-way pair street segments to accommodate vehicle circulation while narrowing pavement widths to permit wider sidewalks to assure vehicular traffic is less dominant in the Downtown area.
- × Utilize wider sidewalk areas where possible in the Downtown area to add shade trees, accommodate outdoor cafes and generally support pedestrian activity and a festive atmosphere to provide benefits to Downtown businesses.
- × Coordinate the location of such one-way street pairings with potential transit station locations to minimize conflicts with automobile movement.

## Waterways

- × Continue to conduct channel maintenance dredging. Study the possibility of using channel dredge spoil for beach replenishment or other secondary beneficial use.
- × Continue to improve channel markings ~~to improve~~ for inlet and bayside navigation
- × Explore opportunities to increase the availability of and access to marina facilities and boat launching facilities. Encourage the provision of private marina facilities and examine potential sites for public marinas.
- × Explore opportunities to develop a Town or privately owned bayside “water taxi” or series of taxi services to ferry tourists from the north to a location or locations near the inlet. Such a service could provide relatively rapid transit and become its own attraction providing a guided tour of the bayside at the same time thereby providing both transit and recreational benefits.
- × Explore use of the water taxi concept for use between the Town and the mainland (possibly Ocean Pines).
- × Link any water-based taxi or ferry services to land-based transit systems.
- × Augment boat access under the Kelley Memorial Bridge with a second access point for small boats. This would reduce the use of the draw span, thereby increasing boating safety and decreasing automobile traffic problems.
- × Coordinate with SHA on the future design and replacement of the Route 50 Bridge to allow improved small boat access separate from the main channel, pedestrian/bayside boardwalk connection underneath, maintaining the S. Division Street to S. St. Louis Avenue local street connection, providing adequate pedestrian and bicycle access to West Ocean City, possible adaptive reuse of the existing bridge as a fishing pier.

## Airport

- × Continue to improve the safety ~~aspects and operational elements~~ of the airport.
- × ~~Extend~~ Maintain and improve the runways for use by critical aircraft.
- × Increase hangar capacity to meet demand.
- × Improve taxiways.

- ✘ Work with Worcester County to ensure compatible land uses in the vicinity of the airport.
- ✘ Request Worcester County to extend the existing priority funding area (PFA) boundary south to include the Airport and adjoining developable property.
- ✘ Improve navigational aides to include G.P.S., lighting, and signage to improve the safety and utility of airport.
- ✘ Support and encourage scheduled commuter services to the airport.

# CHAPTER 5: Community Facilities & Public Safety Services (text only)

Ocean City's public services and utilities are of vital importance to ~~the continued health, safety and well being of present and future Town residents and visitors alike~~ all aspects of daily life. The provision of water supplies, wastewater treatment facilities, solid waste disposal services, libraries, parks and recreation areas as well as police, fire, ~~and~~ medical and emergency management services ~~and facilities~~ are essential to the health, safety and welfare of the community. ~~Expansion of certain basic economic activities can be more readily accomplished provided that public and private utility and services systems are adequate for the existing and projected Town population~~ Other functions of local government such as planning, zoning, engineering, building permit review, construction inspection, licensing, hazard mitigation and floodplain management support property investment and growth of the local economy. Adequate maintenance and expansion of ~~such public~~ community facilities is ~~therefore~~ necessary to ~~the physical, economic and social well being of the Town~~ meet peak seasonal demands while allowing for incremental growth and redevelopment. ~~Therefore, the major goal of the Town is:~~

## Goal:

To provide for the continued maintenance, operation and expansion of community facilities along with ~~and~~ a complete and efficient system of public services necessary to ensure the health, safety, and welfare of residents and visitors and the economic prosperity of the community.

## Objectives

In order to achieve the community facilities and public services goal, the following objectives are adopted.

- 5.1 A full range of services will be provided to meet the needs of year-round residents and seasonal visitors.
- 5.2 City-wide water, sewer, and solid waste systems will be expanded and improved when necessary to provide cost efficient service for planned growth.
- 5.3 Public safety services will meet the year round needs of the resident population, and ensure the health and safety of residents and vacationers expand to meet peak seasonal demand.
- 5.4 Provide a high quality public beach, boardwalk, parks, water access boat launch, and other sport facilities will be provided to meet the recreational needs of year-round residents and vacationers.

5.5 A variety of recreational outlets will be provided to meet the needs of all age groups, including special events and free programs to promote family oriented activities.

5.6 Ocean City will cooperate with the Worcester County school district to provide high quality education that is able to prepare students for a rewarding and productive future.

5.7 Ocean City will ~~cooperate~~ coordinate with Worcester County to maintain and enhance the    library system.

5.8 Sufficient resources will be allocated to plan for and implement necessary    emergency management measures. Community resilience in post storm/disaster recovery will be developed to quickly restore community facilities and infrastructure.

5.9 Ocean City will cooperate with state and county officials to ensure a complete    range of social and human services.

5.10 Developer-constructed infrastructure will be constructed to appropriate City    and State standards. Adequate performance bonds will be required from developers as needed.

5.11 Use of community facilities to support special events will be coordinated with    public services to actively manage and minimize impacts to the    community. ~~Adequate performance bonds will be required from developers as needed.~~

## Water System

The following section provides an overview of present conditions and current plans regarding various aspects of the Town Water System including discussion of current and planned water system demand and supply, water treatment and water supply storage facilities and capacity.

### Water Demand ~~and Supply.~~

A review of the Comprehensive Water Supply Study was made by Whitman Requardt & Associates (WR&A) in 2014 in order to update the plan for implementing improvements that will enable the Town's water system to meet the following primary objectives:

- Meeting the projected water system demands at least to the Year 2025
- Compliance with current and proposed regulatory requirements
- Continuing to provide a safe and affordable drinking water for its customers
- Extension of the useful life of the facilities
- Conceptual planning for possible future desalination

The Town's water system must have adequate capacity to serve the seasonal peak weekend population. The Year 2025 Peak Summer Seasonal Population, as projected in Chapter 1 is 381,114. Based on an average usage rate of 44 gallons per capita per day (gpcd), the corresponding maximum day system demand for the Year 2025 is projected to be 16.8 million gallons per day (MGD).

## Figure 5-1 Water Use

### Water Supply

The existing raw water supply for Ocean City, MD consists of 17 groundwater wells in the Ocean City Aquifer and 9 wells in the Manokin Aquifer. The location of the wells have been spread out to the extent possible to reduce the effects of seasonal draw down and to minimize the potential for increased salt water intrusion by up-coning in specific areas. The current available raw water supply safely exceeds the treatment capacity of each associated treatment plant. The ongoing well testing and rehabilitation program should be maintained in order to ensure that the current well capacities will continue to be available. The current permitted allocation (8 MGD annual average/17.6 MGD daily average in the month of maximum use) is more than adequate to meet the projected water demands to the Year 2025.

Table 5-1 identifies water supplies pumped monthly to serve the Town for the years ~~1999 through 2003~~2000, 2005, 2010 and 2015.

#### Table 5-1

Figures shown reflect the great seasonal variability of demand for water supplies in a single year. Through the five year periods shown, annual pumpage has ~~ranged~~remained relatively constant from just over **1.7** billion gallons to **1.97** billion gallons.

#### Table 5-1

The reduced levels of water consumption in 2003 likely reflects a number of factors including levels of seasonal visitation, use of more efficient fixtures in new construction and redevelopment in recent years, and a growing use of water conservation measures.

~~Evaluation of the Town's water demand and supply was conducted in 1997 and is currently being updated concurrent with this Comprehensive Plan update. Much of the description of the water supply system which follows is extracted from the "Comprehensive Water Supply Study—1997 Update", prepared by Whitman, Reardon and Associates, consulting engineers. This study should be consulted for more information or greater detail.~~

~~The Ocean City water system must have adequate capacity to serve the peak seasonal population. The 1997 Water Supply Study based its projections for future demand for water on the projected seasonal peak weekend population of **277,499** residents and visitors contained in the Ocean City Comprehensive Plan (1997).~~

The maximum day per capita demand for water in 1997 was approximately 60 gallons per day based on review of historical data and an anticipated 3 percent increase in future consumption due to a greater number of plumbing fixtures in modern units and the requirements established in the Town's Landscaping Ordinance which applies to all new construction. The corresponding maximum day system demand at build-out was projected in 1997 to be 16.6 million gallons per day (MGD). Hence, future water system requirements were evaluated in 1997 on the projected Year 2020, 16.6 MGD maximum day demand. Recent evaluation of demand by Whitman Requardt indicates that adding allowance for additional development at year 2005 may place demand in the year 2020 somewhat higher at 17.12 MGD.

The projected year 2020 demand of 17.12 mgd is currently planned to be distributed along the length of Ocean City corresponding to the distribution of existing housing units and hotel/motel units by census tracts in the Town combined with anticipated demand in key areas identified in 1997 where redevelopment could be expected due to the construction of new hotels and renovation of older hotels/motels. Table 5-2 illustrates the distribution of demand for water supply by census tracts for the 1994 maximum day demand of 14.41 MGD as well as the projected year 2020 maximum day demand of 17.12 MGD.

The existing water supply is provided by a total of 23 production wells. These include 14 wells in the Ocean City Aquifer and 9 wells in the Manokin Aquifer.

The water supply sources are illustrated in Figure 5-1. It shows the location of the 23 production wells currently in operation; 13 in the Ocean City aquifer and 9 in the Manokin aquifer. Two of these wells have been constructed since 1997. The 1997 Water Supply Study called for 4 additional wells over the next 25 years.

Ocean City appears to have more than ample quantities of groundwater resources available in the Ocean City and Manokin aquifers for its projected growth and development. This is substantiated by extensive water level monitoring by the Town and other agencies. Despite withdrawal of approximately 55 billion gallons of water from the Ocean City and Manokin aquifers since 1955, with continued annual increased pumping, water levels still recover to nearly original levels when water demand diminishes in the winter.

### **Figure 5-2 Well Map**

### **Figure 5-34 MGS monitoring**

Evaluation of the Town's water demand and supply is described in the "Comprehensive Water Supply Study", prepared by Whitman, Requardt and Associates, consulting engineers, and the Town of Ocean City "Water and Wastewater Comprehensive Rate Study", dated February 24, 2015. Improvements to the water system will likely include the addition of a new well to meet future increased demand. An analysis of water system demand and supply is currently being updated by Whitman Requardt & Associates. Since the forthcoming update of the Town's water supply study will be based on recommendations contained in this 201605 Comprehensive Plan,

information concerning current plans and water supply requirements may change as part of the systems re-evaluation.

## Water Treatment

Ocean City's water supply system includes 3 water treatment plants which treat raw water to remove iron, manganese, and chlorinate the water. The Town of Ocean City's water treatment and distribution system has several unique physical and operational characteristics as follows:

- Three separate water treatment facilities that supply water to south, central and north portions of the system with only one facility typically operating during the low water demand months
- Relatively long (10 miles) and narrow (0.2 to 1.0 miles wide) configuration
- Six elevated water storage facilities spaced along its length at same overflow elevation of approximately 118'
- Dramatic seasonal water demand fluctuations due to differences in population served (7,000 full-time residents and over 300,000 visitors during a peak summer weekend)

The 15th Street plant was constructed in the mid-1990's and replaced two old plants. It has a treatment capacity of 6 mgd. The plant at 44th Street has a 4 mgd capacity, and the Gorman Avenue plant has a capacity of 8 mgd. The total treatment capacity of 18 mgd is adequate to meet the maximum day capacity. The 44th Street plant was upgraded in 2000/2001 and the Gorman Avenue plant is scheduled for upgrade in FY2020. There are three ground water treatment facilities owned and operated by the Town of Ocean City Department of Public Works. They include the 15th Street Water Treatment Plant, 44th Street Water Treatment Plant and the Gorman Avenue Water Treatment Plant. These facilities receive ground water pumped from the various wells, treat the water to comply with USEPA drinking water regulations and convey the finished water to the water distribution system. The treatment primarily consists of the oxidation and removal of dissolved iron, adjustment of pH and disinfection.

The current treatment capacity is based upon the following:

<u>15th Street WTP</u>	<u>6 MGD*</u>
<u>44th Street WTP</u>	<u>4 MGD</u>
<u>Gorman Avenue WTP</u>	<u>8 MGD</u>
<u>Total</u>	<u>18 MGD</u>

\*Current treatment capacity is down-rated based upon Town's concerns regarding performance at higher rates (Actual design filtering capacity for 15th Street WTP = 8 MGD)

The existing water treatment facilities are producing an excellent quality potable water meeting all regulatory requirements. Improvements completed at the plants over the past several years have improved operations, improved reliability and extended the useful life of the facilities. Each of the facilities was inspected and no significant concerns or issues were observed.

## Figure 5-4 Water Use and Capacity

The current design treatment capacity of 18 MGD is based upon 6 MGD from the 15th Street WTP, 4 MGD from the 44th Street WTP and 8 MGD from the Gorman Avenue WTP. That capacity is more than adequate to meet the projected 2025 maximum day demand of 16.8 MGD.

Allowing for an estimated 4% waste as typically required for filter backwashing of the iron removal filters, the current 18 million gallons per day (MGD) treatment capacity will support a maximum water demand of approximately 17.3 MGD (18.0/1.04).

The 17.3 MGD maximum available treatment capacity that may be delivered to the water system is slightly less than the 18 MGD projected maximum day water demand for the Year 2030. However, since the projected 18 MGD maximum day water demand (at Year 2030) includes a 20% allowance for planning purposes, there is no immediate concern that there is a 0.7 MGD deficit (18.0 – 17.3) between projected water demand and deliverable treatment capacity.

This projected water delivery deficit can be addressed by the continued periodic review of actual and projected populations and water demands to confirm future water supply needs; conceptual planning for future expansion or enhancement of the water treatment capacity; along with the subsequent implementation of necessary treatment expansion or enhancements when required. In addition, the potential need for desalination facilities in the future to address salt water intrusion must also be factored into water treatment facility planning since desalination facilities typically involve an additional waste component that would further reduce the delivery capacity of the water treatment facilities.

The Town's Capital Improvement Plan (CIP) continues to include allowance projects for planned infrastructure upgrades such as the replacement of aging and obsolete equipment in order to maintain its current high level of operational reliability.

## Water Storage and Distribution System

The water distribution system includes 8 water storage tanks; 7 elevated tanks and 1 ground level tank. There is a total useable storage capacity of 6.3 million gallons. The present storage tanks have adequate capacity to support a maximum day demand of over 16 mgd. ~~The estimated maximum day demand at build-out of 18.1 mgd is projected to occur in the year 2015.~~ The new west elevated storage tanks, constructed at 66<sup>th</sup> Street and 1<sup>st</sup> Street have increased storage capacity to satisfy demand for the next 10 years. Needs for additional storage capacity beyond that period will need to be assessed as part of the 201705 water system plan update. The location and capacity of both existing water storage and treatment facilities are shown in Figure 5-5. The chart illustrates size and length of the distribution system which totals over 96 miles

2of water pipe.

## Figure 5-5 Water Storage and Distribution2

### Saltwater Intrusion

An area of concern to Ocean City's water supply is saltwater intrusion, which is the horizontal movement of saltwater into the freshwater aquifer from under the ocean or the bay. It could also occur from a vertical movement by downward leakage from the ocean or bay, or upward leakage from lower aquifers.

Testing in the past had shown a rise in chloride levels in the 44th Street area. This is caused by heavy year round water use in the area and leakage between the Ocean City aquifer and the saltier Manokin aquifer in this area. The upconing of salt water at the 44<sup>th</sup> street plant stabilized after much of the pumpage was shifted to the Gorman Avenue Plan in 1989 and 1990, indicating a state of equilibrium may have been reached. Salt water intrusion is occurring in localized parts of the unconfined Columbia Aquifer, but it is not considered a major threat. ~~However, it is still possible that a salt front is moving in from the oceanside or bayside near 44th Street.~~

The "Comprehensive Water Supply Study", prepared by ~~Whitman, R. & Reardon and Associates,~~ recommends spacing future wells to distribute drawdown from the aquifers and relieve the salt intrusion in any particular area. The study also notes that any future water supply production wells should probably be located in the northern part of the Town where the hydrogeologic conditions are more favorable with respect to available drawdown and salt water intrusion. The Study also states that future planning must recognize the possibility of saltwater intrusion, and flexibility in design of the water supply system must be provided so that the problem may be addressed if and when intrusion occurs. ~~An increasingly attractive solution to salt intrusion is the dequate area has been allocated at the WTPs to install rapidly developing technology treatment systems for the and operating methods of desalination of brackish water if needed in the future. Desalination could be accomplished as needed by converting existing water treatment plans. By employing desalination, the salt water intrusion could be contained at the coastline indefinitely.~~

### Water System Improvement Needs

The "Comprehensive Water Supply Study ~~1997 Update~~", ~~prepared by Whitman, Reardon and Associates,~~ contains an extensive list of planned system improvements. Many of these improvements have been implemented by the Town through the Water Fund. The study is currently being updated and will be based on pertinent growth policies and projections in this Comprehensive Plan. Future monitoring and system evaluation should include annual and long groundwater recharge rates relative to other Comprehensive Plan goals for year round tourism marketing and growth of the permanent resident population.

## Wastewater Treatment

In 1994, the Town of Ocean City assumed control of the Ocean City wastewater system from the Worcester County Sanitary Commission. The system has collection, treatment and disposal capabilities. The treatment plant at 64th Street was constructed in 1969, with expansions and secondary treatment upgrades completed in 1974, 1981, 1990 and 1992, and 1998 at regular intervals.

The Ocean City Wastewater Treatment Plant (WWTP) currently has a rated capacity of 14 MGD based on average daily flow. The WWTP service area includes the entire Town of Ocean City as well as a portion of wastewater flow (1 MGD) from West Ocean City, conveyed to the Town by a Worcester County pump station located in West Ocean City.

The wastewater collection and conveyance system consists of sewers ranging in size from 6 inch to 48 inch diameter which convey wastewater from the north and south along Coastal Highway to the wastewater treatment plant located at 64th Street. The conveyance system includes eleven pumping stations which lift wastewater flows into the interceptor in areas where gravity flow is not possible.

Sewer lines and manholes that are worn and failing require repair or replacement in order to avoid blockages, structural collapse, sanitary sewer overflows, etc. The current inventory of sanitary sewer pipes known to need repair or replacement that are beneath the streets that have recently been paved is approximately 10,000 linear feet. Sewers north of 26th St are 40 to 45 years old. Sewer lines south of 26th Street are older including sections of old asbestos concrete pipes underground which need to be lined or replaced.

Treated wastewater is discharged to the Atlantic Ocean via an ocean outfall discharge. The Ocean outfall for treated effluent was constructed in 1968 and is regularly inspected for any needed repairs or maintenance. The portion of the pipe that lies to the ocean side of the air release valve (ARV) at the east end of 64<sup>th</sup> street consists of approximately 4,200 linear feet of 30 inch pre-stressed concrete cylinder pipe (PCCP). The current ocean outfall capacity will continue to create an ultimate limit on future growth and development along with determining required treatment technologies.

The WWTP produces Class A biosolids which are disposed of by Enviro-organic Technologies or at the county landfill. In addition, biosolids that do not meet Class A requirements (i.e. "off spec" biosolids that meet Class B requirements) are also disposed of at the landfill. Pending regulations may restrict the ability of the plant to dispose of biosolids at the current locations, resulting in increased cost for disposal of all biosolids in a landfill. Based on these significant potential cost increases, it is recommended that a thorough survey of other available disposal options be conducted including other viable disposal locations, or improvements to the biosolids process which would allow for wider distribution of the end product.

Because of the seasonal nature of the influent flows, the plant's treatment capacity is based on maximum monthly flows, which occur only during the summer months.

~~The plant's Wastewater treatment design capacity is currently 14 million gallons per day (gpd). Additional sludge handling capabilities constructed in 1998 increased the capacity from 12 to 14 mgd.~~

Figure 5-6~~3~~ shows the actual maximum month wastewater flows for the period from 1990 through ~~2003-2015~~ and provides projections for maximum month flows to the year 2020.

### Figure 5-6 Historic Wastewater Flows

~~Maximum month wastewater treated has ranged from 10.4 to 11.6 MGD for the period 1990 through 2003. The available, or unused treatment capacity has fluctuated between 2.4 MGD (17% of the total capacity) in 1994 and approximately 3.59 MGD (25% of the total) in 2003. The average flow treated during the maximum month through the period was 11.2 MGD representing roughly 80 percent of total capacity.~~

Year 20~~32~~0 maximum wastewater treatment flows are projected to increase to approximately **12.14** MGD for the Town of Ocean City and West Ocean City combined. Work is currently being conducted by the City to evaluate needs for future wastewater treatment plant improvements to meet future peak demand, new technology and water quality standards. Additional information is available in the 2015 Water & Wastewater Comprehensive Rate Study.

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## Storm Water Management

Three approaches are used in Ocean City to remove stormwater from City streets. Sheet flow is used on the ocean block and essentially it uses the street to conduct the water west to Coastal Highway and eventually to the bay. On Coastal Highway and the bayside, both a traditional stormwater ~~drainage~~ system and sheet flow with sediment basins are used.

The pipe and catch basin system suffers from the island's lack of ~~relief~~elevation change. Without the required ~~fall~~fall, water can back up. Several streets on the bayside are simply sloped toward the bay and canals. At the end of the street, a sediment or infiltration basin typically removes pollutants and debris.

Use of sheet flow on the ocean block results in regular ~~and severe~~shallow flooding of Coastal Highway. It is not uncommon for the eight lane road to be reduced to two slow moving lanes during a heavy rainfall.

Private and public development is required to meet all State and local stormwater management regulations. Typically asAs more development covers the land with concrete and black top, stormwater problems will increase. With redevelopment, Ocean City requires use of sSeveral

alternatives ~~\_exist~~ for controlling stormwater on site, including infiltration beds and trenches, pervious black top and open cored pavers. These items as well as “low impact” development techniques ~~should beare~~ used to the extent possible to attenuate stormwater flows, reduce sedimentation and improve the overall quality of stormwater discharges.

The environmental aspect of stormwater is further discussed in the “Sensitive Areas and the Environment” Chapter of this plan. Ongoing efforts to improve the Town’s stormwater management system include:

- Continue stormwater system improvements on Coastal Highway to reduce flooding.
- Continued improvements to the downtown’s storm sewer system including a demonstration project to install tide gate backflow preventers at the bayside outfalls.-
- ~~Reduction in volumes of stormwater generated through on-site controls.~~
- Requirements for on-site control measures when re-paving and landscaping installations present opportunities.
- Continuing evaluation of standards and requirements for open space and landscaping in Town ordinances and regulations.
- Measurement and management of water quality controls to meet adopted nutrient contributions to the coastal bays.
- Drainage system maintenance including street sweeping, catch basin inserts, and sediment basin clean outs.

Ocean City has 205,655 linear feet (over 40 miles) of pipes to channel the gravity flow of storm water. 82,974 linear feet (about 15 miles) of this pipe is corrugated metal pipe which is known to deteriorate in a salt-water environment. The stormwater system at risk was generally installed in the 1970’s and is overdue for replacement with an estimated cost of \$6.14 million (Source: EFC Feasibility Study for Stormwater Management, 2011). The system also includes approximately 318 outfalls, 1,794 inlet/catch basins and 86 manholes.

The EFC study identified approximately \$12 million in needed stormwater system improvements by 2020 in order to address an aging conveyance system (corrugated metal pipes), flooding, water pollution from urban runoff, and annual system maintenance. A dedicated funding solution was proposed but not adopted by the City. Incremental improvements are made as streets are reconstructed and paved and with individual site redevelopment.

Ocean City’s stormwater management program seeks to retrofit the system and use best management practices to improve natural drainage, reduce flooding and improve water quality

with new development or redevelopment.

## Solid Waste Management ~~& Recycling~~

The Town of Ocean City Solid Waste Department is responsible for collection of solid waste and the Town Recycling Program. Housed on 65<sup>th</sup> Street, the department currently establishes Winter and Summer waste collection schedules. Twice weekly residential collections are currently scheduled for Monday and Thursdays from 75<sup>th</sup> street to the Delaware line (Oceanside) and 75<sup>th</sup> to 135<sup>th</sup> street bayside and Tuesday and Friday from the Inlet to 74<sup>th</sup> street (ocean and bayside), and 136<sup>th</sup> to 146<sup>th</sup> street (bayside). Commercial collections (Front-end, 300 gallon containers, and containers with compactors) are provided throughout the Town five days a week.

~~The Town has operated the 65<sup>th</sup>-street Recycling Center since 1991. Recycling containers are made available on request for curbside residential pick-up at scheduled times in eight locations currently including Montego Bay, Caine Woods, Caine Keys, 94<sup>th</sup> street, Little Salisbury, 28<sup>th</sup> street, Mallard Island and downtown.~~

~~Recycling drop-off stations are also currently provided in a number of locations including:~~

- ~~■ Worcester Street Municipal Lot (under the water tower)~~
- ~~■ 2<sup>nd</sup>-street Trailways Bus Terminal~~
- ~~■ 28<sup>th</sup> street bayside,~~
- ~~■ the Convention Center satellite parking lot at 39<sup>th</sup> street,~~
- ~~■ 66<sup>th</sup> street (under the water tower)~~
- ~~■ 94<sup>th</sup> street parking lot (southwest side)~~
- ~~■ 130<sup>th</sup> street (behind Montego Bay Shopping Center), and~~
- ~~■ 137<sup>th</sup> street next to the water plant.~~

A new pilot program for Condo-side recycling has also recently been initiated. Ocean City has converted its former recycling program to an ‘energy from waste’ process. By contract with Covanta 4Recovery, a leader in the field of solid waste management ‘energy from waste’ facilities, municipal solid waste is transported by truck and repurposed. Residents and visitors generate roughly 34,000 tons of solid waste per year. Rather than send this to a landfill, the trash is utilized as an alternate fuel source to generate heat and produce steam. On average, 670 kilowatts of electricity are produced for every one ton of trash that is incinerated, or enough to power 75,000 homes annually. The ‘energy from waste’ process also includes post incineration metals separation to complete the recycling process.

Current initiatives by the Town Engineering department and partner organizations have focused on several clean-up programs to reduce litter on the beach, public streets, downtown areas and

the boardwalk. The Town's 'Green Team' members have also identified a goal to reduce the use of plastic and Styrofoam containers through cooperative purchasing of environment friendly products by the restaurant industry.

## Recreation and Parks

Ocean City offers a variety of recreational opportunities and services to its year-round residents and visitors. In addition to the opportunities provided by a 10 mile long public beach, recreational pPrograms offered include camps, classes, clinics, sports, events and tournaments. Lessons in exercise, fitness, dance, and gymnastics, creative arts, swimming, first aid and CPR, boating and seamanship to name a few, are given. Programs are structured to support the needs and interests of adults, seniors, and youth of all ages. Special events and outings round out the spectrum of recreational program offerings.

A wide range in the nature and type of park and recreation facilities ~~provided~~managed by the Town support the broad range of program offerings. These facilities include:

**Ocean City Beach** – The number one attraction for Ocean City is the ocean beach. Extending from the Inlet north to the state line, the beach is the largest public use area (331 —acres) providing recreational open space within short walk from every resident and visitor in Ocean City. Beach use is being expanded to include special events, sport tournaments, and recreational structures such as Wally the Whale and a new playground at Somerset Street. Construction of a new public restroom at Caroline Street includes a performance stage facing the beach that supports a free summer concert series.

\* ~~————~~**Inlet Park** - A small recreation facility, Inlet Park is located at the ~~Southernmost~~southernmost end of Ocean City. The facility provides a boardwalk complete with viewing binoculars and information signs overlooking Assateague Island. The park is approximately 1/5th acre in size and serves as the first link of a future bayside boardwalk. The park is marked by the presence of a large Native American ~~sculpture~~structure and is home to Ocean City's marble topped time capsule.

~~————~~**Entry Park -** -Another small park and open space located on North Division Street directly at the foot of the Harry Kelley Bridge (Route 50 entry to the Town). Entry Park is just under one acre in size and is home to the Marlin Sculpture and is in an excellent location to inform visitors and promote awareness of seasonal Town sponsored events and activities like Winterfest.

\* **Sunset Park** -- Located on South Division Street west of South Philadelphia Avenue, Downtown. Amenities include restrooms, stage, exhibits, crabbing & fishing. Ocean City's newest park is a promenade with native shore planting areas with a panoramic

view of the Atlantic Ocean, Assateague Island, the Sinepuxent Bay and Ocean City Commercial Harbor. The stage at Sunset Park is home to concerts and gatherings in the summer and early fall.

\* ~~————Dorchester Beach~~ **Beach Volleyball Courts Park** - :- Located just off the boardwalk between ~~Dorchester and Talbot~~ **Third and Fourth** Streets this facility provides ~~10 public courts for summer use.~~ 4 public courts available for pick up play during summer daylight hours.

\* ~~————~~ **Third Street Park** - :- Located in the Downtown Recreation Complex, this 2 acre park facility includes basketball courts, a small ballfield for softball play, as well as playground facilities. The facility includes the Ocean Bowl Skate Park, with facilities for skateboarders and in-line skaters, and includes a pool bowl, vert ramp, mini ramp, and concrete street area. Across the street two hard tennis courts have been constructed. Lighting is provided for evening use at this facility.

\* ~~————~~ **Fourth Street/Chicago Avenue Park** - :- Located in the Downtown Recreation Complex this 2 acre park facility hosts a multipurpose lighted ball field and accommodates bay-front fishing and crabbing on Chicago Avenue's Victorian themed "Promenade" area.

\* ~~————~~ **Ninth Street Fishing Pier** - :- This fishing access location includes maintained pier facilities and fish cleaning tables with hoses for cleaning.

\* ~~————~~ **Robin Park** - :- A small neighborhood park, located on Robin Drive, which is approximately 1/4 acre in size. Park improvements include Picnic tables, landscaped open spaceing, and playground facilities for younger ages.

\* ~~————~~ **Convention Center Park** - :- Located on 41<sup>st</sup> Street and Bayside, Convention Center Park provides a pier along the bay offering fishing and crabbing opportunities.

\* ~~————~~ **Ocean City Tennis Center** - :- Located on 61<sup>st</sup> street bayside, the Ocean City Tennis Center is the Town's largest and most actively used tennis facility. The site consists of approximately 2.5 acres. The facility features six premier courts and three Lee Fast Dry Clay courts. Leagues, junior tennis, and clinic play are centered in this location.

\* ~~————~~ **Little Salisbury Park** - :- Located on 94<sup>th</sup> Street and Bayside, this Park facility is home to the Ocean City Art League. Approximately 1.36 acres in size, improvements include two hard tennis courts, one playground, and a basketball court.

Ocean City's first 'dog park' has been added in an adjacent area of open space.

\* ~~————~~ **Jamestown Park** ~~- :-~~—Located at Jamestown Road is the Town's newest landscaped promenade.

\* ~~————~~ **Northside Park** ~~- :-~~—Northside Park is Ocean City's largest and most popular park facility, located on 125<sup>th</sup> Street and the Bay. The facility is headquarters to the Park's Department's administrative offices and is 58 acres in size. Improvements include three lighted softball/baseball fields, a lighted soccer field, multipurpose field, a fishing lagoon, a foot bridge, concession stands, playgrounds, picnic shelter, two piers, a gazebo, and walking/jogging paths. Indoor facilities include a large building with a 14,200 square foot gymnasium, kitchen, community room, conference room, patio, sitting areas and a sports center annex with a 21,000 square foot multi-sport arena. The park is home to Winterfest, Sundaes in the Park and Arts Alive special events, and supports year round team sports competition.

\* ~~————~~ **Gorman Park** ~~- :-~~—Located at 136<sup>th</sup> Street and Bayside, just off Derrickson Avenue, Gorman Park is improved with one tennis court, one three wall racquetball court, and playground. The park is approximately 1.8 acres in size.

\*

\* ~~————~~ **Fiesta Park** ~~- :-~~—A wooded, neighborhood park facility Fiesta Park is located on 141<sup>st</sup> Street and Bayside. 2.96 acres in size, improvements include nature trails and picnic area.

\* ~~————~~ **North Surf Park** ~~- :-~~—This neighborhood park is approximately 1.96 acres in size. Located adjacent to North Surf Road (left off 142<sup>nd</sup> Street), this park facility includes a playground and facilities to support picnicking. Rolling turf and scattered trees make this one of the more attractive park facilities in the community.

~~All told, these many and varied park facilities are located on approximately 80 acres of public lands dedicated to park and recreation use.~~

The location and distribution of these park facilities is shown on Map 5-1. Park facilities are located on approximately 80 acres of public lands dedicated to park and recreation and park use in addition to the Ocean Beach. DGenerally speaking they are well distributioned throughout the community means that at least 50% of all residents are within a 5-to-10 minute walk (1/4 mile radius) from parks and recreation and parkna facilities and everyone is. People are linked to other facilities in the community by the transit bus system and a network of sidewalks and bike routes.-

~~Because of the unique nature of Ocean City, with a smaller year-round population as well~~

~~as a much larger seasonal population, State guidelines, typically used to assess the adequacy of existing park land and facilities to serve community population needs, cannot be strictly applied. Maryland guidelines for the provision of park and open space lands are 30 acres per 1,000 residents. Although a strict application of these State guidelines indicates a shortfall in available land and recreational improvements, this is, in part, due to a large percentage of the seasonal population that increases seasonal demand for recreation improvements. It should be noted that the beach, ocean and bays as well as a number of privately owned recreational areas, provide recreational opportunities that are not counted in this inventory. Facilities are however nearly adequate to support the needs of the year-round population. For these reasons, any shortfall of recreational land and improvements evident in the inventory is not as extreme as it may appear.~~

~~It is the Town's policy to meet the recreational needs of the seasonal and year-round population. Demand is monitored and, as facilities approach capacity, new ones are planned and constructed.~~

~~It is important to note that given the high land costs in a Oceanfront community, utilization of existing parkland more efficiently is often more cost effective than public acquisition of additional parkland to satisfy demand for recreation facilities. Nevertheless, land acquisition for parks should remain a planning objective and existing parks should not be converted to non-recreational uses.~~

~~Several potential additions to recreational facilities present opportunities for increasing and diversifying Ocean City's recreational offering. Golfing has become a major draw for the area with construction of a number of new courses over the past 15 years.~~

~~Construction of several quality courses in the area, including the city owned and operated Eagle's Landing Golf Course, and aggressive marketing have transformed the Ocean City area into a regional golf destination. These facilities have also contributed substantially to increased shoulder season visitation and spending in the community. The continued growth of golf in the area should be encouraged.~~

~~Ocean City is a water-oriented community. Unfortunately, when cold weather arrives there is no indoor swimming facility available to the general public. An indoor facility in or near Ocean City should be developed to meet this need.~~

#### Map 5-1

One of Ocean City's strategic plan priorities is to prepare a Recreation and Parks Master Plan which will inventory existing facilities, identify recreational needs and new opportunities, and propose management actions for the future. This Plan will be completed in 2017.

Ocean City has also joined with nearby communities to promote a sports marketing partnership which will encourage economic development and a regional approach to meeting demand for land intensive recreational facilities such as ball fields, indoor pools, etc.

Recommended improvements to the recreational opportunities in Ocean City include:

- ~~\* Continued Improvement's to Northside Park such as rest rooms, nature walks, athletic fields, basketball courts and event venues.~~
- ~~\* Expansion of the Beach Patrol facilities.~~
- ~~\* Development of Sunset Park in the Downtown.~~
- ~~\* Additional playgrounds to serve local neighborhoods and replacement of older existing equipment.~~
- ~~\* Development of Recreation amenities on the Beachfront or Bayside.~~
- ~~\* Construction of an additional indoor recreational facility for soccer, lacrosse, tennis, etc.~~
- ~~\* Re-design and Reconstruction of the Skate Park downtown.~~
- ~~\* Additional biking/hiking/jogging trails that permit user interaction with natural wetland environments that can be used to augment fishing/crabbing opportunities or to develop natural environmental interpretive facilities to increase appreciation of the region's environmental resources.~~

## ~~Other~~ Public Safety Services

The Town of Ocean City government provides a full array of public safety services to meet the needs of its residents and visitors. Due to the resort nature of the Town and the swings in seasonal population and demand for services, the government is challenged to scale the level of service to meet seasonally dynamic needs and provide 24 hour staffing. As with other community facilities, the physical location and support facilities for public safety services are sized for peak demand, and co-located where possible with other uses. .

Public safety services are described below. More detailed on each is available in specific departmental plans, mission statements, and budgets.

### Ocean City Police Department

The Ocean City Police Department (OCPD), as part of and empowered by the community, is committed to a safe and peaceful environment, rendering aid to those in need and protecting the lives, property and rights of residents and visitors.

~~enforces the criminal and traffic portions of the Code of Ocean City. The OCPD's enforces the criminal and traffic portions of the Code of Ocean City within its jurisdiction including the corporate limits of Ocean City to three miles off-shore. The bays and ocean are not regularly patrolled, but the department has jurisdiction to continue pursuit in these areas.~~

The OCPD is located in the ~~state-of-the-art~~ Public Safety Building on 65th Street adjacent to the District Courthouse. Also located in the Public Safety Building are the Communications Center, ~~the~~ Emergency Medical Services, and Emergency Management. The OCPD enforces the criminal and traffic portions of the Code of Ocean City within its jurisdiction including the corporate limits of Ocean City to three miles off-shore. The bays and ocean are not regularly patrolled, but the department has jurisdiction to continue pursuit in these areas.

~~Staffing of the Department varies with the season. The OCPD provides 24-hour service with 132 full-time employees augmented by 154 temporary employees during the summer season. full-time, year-round force includes 10598 full-time sworn officers and 270 civilian personnel. During the visitor season, approximately 158120 seasonal police officers and fifty non-sworn members of the department augment the core year-round staff. The Office of the Chief is supported by three divisions: Support Services, Criminal Investigation, and Patrol. A seasonal substation is located on Worcester Street on the boardwalk. In addition to regular patrol assignments, police support units function for training; records; detention/ K-9; traffic; equestrian unit; animal control; a quick response team, and narcotics enforcement. The department staff~~ figures includes public safety aides, who are responsible for processing and transporting prisoners, enforcing parking laws, directing traffic and generally assisting visitors.

In 1996 the OCPD ~~received~~ responded to 18,690 calls for service. By 2001 calls for service more than doubled growing to 52,110. Calls for service in 2003 totaled 54,198 reflecting more moderate increases in number of calls during the past three years. By 2015, total calls for service reached 76,750. A call for service is generated for nearly anything that an officer does while on duty including traffic stops, residential security checks, lost child, or major criminal event just to name a few. Figure 5-74 illustrates a peak in calls for service in 2013 and a steady reduction in recent years.

### **Figure 5-74**

Table 5-~~83~~ provides a profile of the serious crimes experienced in Ocean City as identified in the OCPD's "Uniform Crime Report" for ~~1996-2015~~ as well as the more recent ~~three-five~~ year period (20~~1004~~ through 20~~1403~~). Uniform Crime Report / Part 1 crimes in Ocean City are reduced 11% from the previous year and hit the lowest mark in 25 years. Other crime statistics are available in the Police Department Annual Report.

### **Table 5-83**

Overall, Ocean City experienced a 3.39% increase in serious crime from 2002 to 2003. For the same period crimes against persons decreased by 12.14% while crimes against property increased by 7.31% in 2003.

Community policing is at the core of the Department's commitment to provide quality police services and assistance to the community. ~~Several current~~ ~~ome noteworthy~~ initiatives by the OCPD include:

- Flex Patrol – Officers on a specialized shift focused on addressing neighborhood issues held flexible hours that allowed them to effectively prevent or enforce incidents such as bicycle theft and burglary.
- Special Enforcement – Plain-clothes officers with specialized training concentrate on enhancing the overall safety on the Boardwalk and throughout downtown areas.
- Auxiliary Officer Program – Civilian volunteers receive training and provide valuable service in support various administrative and community relations functions of the department.
- ~~R.A.A.M. (Reducing the Availability of Alcohol to Minors), which is a community policing initiative addressing underage drinking and its related unacceptable behavior.~~
- ~~R.A.D. (Rape aggression Defense) System, which is a program of realistic self-defense tactics and techniques for women with focus on awareness, prevention, risk reduction and risk avoidance.~~
- ~~radKIDS, which provides children with skills to recognize, avoid, resist and, when necessary, escape physical violence and/or harm.~~
- ~~Neighborhood Watch~~
- ~~Citizen's Police Academy which enables citizens to learn more about the OCPD.~~
  - ~~Reserve Officer Unit. This unit, established in 1999, is trained to support the Police Department by providing volunteer services to supplement regular law enforcement personnel. Reserve Officers are typically tasked with civilian and/or administrative functions and are also vested with the authority to issue parking and municipal citations. Members of the Reserve Unit have volunteered over 19,115 hours of service to the Town since 1999.~~
- ~~Computer Aided Dispatch (CAD) and Mobile Data Terminals (MDT), which are be shared with the Volunteer Fire Department, Fire Marshal's Office, Communications and Management Information Systems.~~

## Emergency Management and Communications

The Office of Emergency Management and the Emergency Communications Center is located in the Public Safety Building on 65th Street. The Communications Center answers calls and dispatches for the Ocean City Police Department, Emergency Medical Services, and the Volunteer Fire Department.

In addition to traditional civil defense activities, the Office of Emergency Management (OEM) provides preplanning and coordination for localized emergencies and large special events. This work requires assessing potential hazards, determining appropriate responses, and providing for recovery.

The OEM Director is responsible for the Town's compliance with Federal Emergency Management Agency (FEMA) disaster guidelines. This four phase approach contains elements of:

- Preparedness: anticipating problems and their severity.
- Mitigation: pre-emergency actions to reduce hazard impacts.
- Response: planned procedures and actions during the emergency.
- Recovery: post disaster rebuilding and re-establishment of keys services.

These functions are detailed in the Hazard Mitigation Plan and the Emergency Operations Plan. The plan covers hurricanes, storms, floods, fire, building collapse, chemical incidents, accidents, plane crash, rip tides and oil spills.

The Town's OEM Director, in cooperation with FEMA, has prepared a Hurricane Evacuation Plan. This plan provides estimated damages and flood elevations for a variety of storm paths and intensities. This work also makes recommendations for emergency evacuation procedures.

~~A third all-weather access in the northern end of Town would greatly improve the capacity to evacuate the island during an emergency. Delaware Route 54 is in a good location, but it floods easily. Improving this road may be the most cost-effective approach. Increased capacity for evacuation would decrease the lead-time for the decision to evacuate.~~

A "Post-Disaster Recovery Plan" prepared in conjunction with the Department of Planning and Community Development should be periodically updated to accomplish the following:

- Expedite community recovery by outlining procedures and requirement for repairs and reconstruction before damages occur.
- Establish procedures for putting hazard reduction measures into effect after disaster strikes while buildings and utilities are being repaired and rebuilt.
- Gather and analyze information about the potential location and extent of damages.

- Assess the vulnerability to damage and guide reconstruction to reduce future damages.

### Wireless Communication

~~During the past year (2004), the Town upgraded its existing frame-relay/ISDN network with a converged network that provides voice, data and video services over wireless connections. The phone and data network equipment was replaced with wireless equipment at 17 Ocean City local government sites, providing a private, consistent phone system with centralized phone directory and call accounting.~~

~~For a cost of \$1.5 million, the new system provides enough bandwidth for a geographical information system, video and future projects such as an automatic vehicle locator system, and cost savings for general maintenance that can now be administered by Town staff. This system of design, equipment, and service was chosen to provide a solid means of communication that will enable optimal performance between all general administrative and public safety departments.~~

## Beach Patrol

The Beach Patrol provides emergency ocean rescue and beach safety services from the Inlet to the Delaware Line, seven days a week from Memorial Day to late September. The seasonal staff of about 200~~over 150~~ man are stationed at lifeguard stands -distributed along the beach. These stations are typically located based on the intensity of beach use.

Beach Patrol Headquarters was reconstructed in 2015 as a downtown landmark building on Talbot Street and also supports the OCPD bike patrol. The Patrol

is equipped with four-wheel drive trucks, ATVs, personal watercraft, 800 mhz radios, and the familiar semaphore flags. It is estimated that in a typical season, the Patrol goes to the rescue of about 2,500 bathers, handles 1,000 lost children, and is called on for first aid about 500 times. The most common occurrences requiring assistance are swimmers near rock groins and individuals caught in rip currents. Drownings or serious injuries are very rare. In addition to rescue work, guards are responsible for enforcing beach rules. These rules regulate alcohol, noise, ball playing, pets, and glass containers. Recent efforts to educate the public about beach and ocean dynamics have proven very popular.

While it is the policy of the Town to provide the highest quality beach safety services, it should be recognized by those who bathe in the ocean that risk is associated with such activity. Individuals should take care to assess the surf conditions and their ability to deal with conditions.

## Emergency Medical Services

The Town of Ocean City Emergency Medical Division provides pre-hospital emergency medical services to residents and visitors. Personnel provide emergency medical services and fire suppression/rescue services in conjunction with the Ocean City Volunteer Fire Company. The Fire/EMS division is staffed with 34 full-time and 27-63 part-time filed personnel. The full-time staff consists of 3233 Nationally registered Paramedics/Firefighters and 2one Maryland Cardiac Rescue Technician-Intermediate/Firefighter. The part-time staff are certified as Emergency Medical Technician-Basic/Firefighters and Nationally Registered Paramedic/Firefighters.

A number of the staff have specialized training in rescue diving and hazardous materials management. In addition to field personnel, the Fire/EMS Division is supported by the Department of Emergency Services Administrative Office Associate.

Ocean City EMS personnel cover an area from the inlet north to the Delaware line and all, of West Ocean City. EMS units will also travel into southern Delaware and other portions of Worcester County if requested.

During the summer, certified EMS crews staff all fire department stations 24 hours a day. Stations are located downtown at Dorchester Street, 15th Street, 74th Street and 130th Street.

~~During the winter months the~~ Dorchester Street station is not staffed during the period from November to March each year.

Ocean City Fire/EMS has nine mobile medic units, three command vehicles and a special operations trailer. All ambulances are equipped to provide life-support medical services and are ready to respond year-round.

In 2015~~04~~, the Ocean City Fire/EMS division responded to 5,0566,327 calls, a 2520% increase from 1996 when the department responded to 4,212 calls. The average response time per call is approximately four minutes. This is the amount of time between when the 911 call is received to when the ambulance arrives on the scene.

### Fire Marshal

The Office of the Fire Marshal is responsible for enforcing local and state fire codes and investigating hazardous materials emergencies, bomb threats, and fires. Building plans are reviewed and structures are inspected to ensure code compliance. Seven full-time employees are included in this division and are located in City Hall. -

### Fire Department

The Ocean City Volunteer Fire Department consist of 200 + volunteer members along with 100+career employees (including the Office of the Fire Marshall) and who provides fire protection to Ocean City and West Ocean City from 5 (five) stations. In addition to the volunteers, The town's emergency medical personal are stationed at each of the fire houses in the town limits. The fire stations and their equipment are inventoried below:

#### Stations

#### Equipment

Headquarters (15<sup>th</sup> Street)

1 – 95' Tower Truck  
1 – Rehab/Canteen Truck  
2 – Pumpers  
1 – Heavy Rescue Truck  
1 – Utility Truck  
1 – Brush Truck  
1 – Special Hazards Truck  
1 – Utility Van  
1 – 20' Rescue Boat

Station #2 (Dorchester Street)

1 – Pumper  
1 – Special Hazards Trailer

Station #3 (74<sup>th</sup> Street)

1 – 105' Tower Truck

1 – Pumper

1 – Rescue Truck

Station #4 (130<sup>th</sup> Street)

1 – Pumper

Station #5 (Keyser Point Road)

2 – Pumpers  
1 – 85’ Snorkel Truck  
2 – Tankers  
1 – Air Cadet Truck  
1 – Utility Van  
1 – Pumper  
1 – Pumper Foam Unit

~~In 2004, the OCVFC responded to 1390 calls for service (fires, silent alarms, medic assist and rescues). In partnership with the Fire/EMS division, the OCVFC responded to 1,400 calls for service in 2015.~~

Ocean City maintains an ISO fire rating of 3.8, a rating of one is excellent with ten being the bottom scale. Only one other city in Maryland has a higher ISO rating. There are four basic factors affecting a municipality’s ISO rating: 1) water supply, 2) the fire company capabilities, 3) emergency communication system, and 4) the extent of the town’s fire safety/prevention programs.

~~Replacement of Station 4 in 2014, renovation of the Fire Department Headquarters in 2016, and a planned capital improvement to relocate and replace Station 3 at 65<sup>th</sup> Street will complete the final phase of the improvements recommended in the 2002 Fire Station Location Study. Needs identified for OCVFC include:~~

- ~~▪ A training facility on the mainland.~~
- ~~▪ A computerized building data base identifying the configuration, construction characteristics, and location of power and gas shut-offs for all buildings in Ocean City.~~

## Recommendations

- Complete Public Works Campus Master Plan design, and begin phased implementation of facility improvements to consolidate and centralize municipal operations.
- ~~Establish an~~ Evaluate impact fee or excise tax to confirm its use to offset costs associated with provision of infrastructure and delivery of public services prompted by new development or more intense re-development over time.

- ~~Finalize-Complete~~ update of ~~2005~~-Water and Sewer ~~system-evaluation~~master plan to determine need or demand for upgrade of components of the Water supply and Waste treatment systems and how any needed improvements should be staged over time.
- Continue with improvements to Northside Park including renovation of facilities, rest rooms, nature walks, athletic fields, basketball courts and event venues.
- ~~Complete development of Sunset Park and assess potential to utilize site to support water taxi service functions.~~
- Re-design and re-construct Skate Park downtown.
- Establish additional biking/hiking/jogging trails that ~~permit user interaction with natural wetland environments that can be used to augment fishing/crabbing opportunities or to develop natural environmental interpretive facilities to~~ increase appreciation of the area's environmental resources and provide alternate routes to the busy Coastal Highway corridor.
- Construct an additional indoor recreational facility for soccer, lacrosse, or other activities.
- Develop additional playgrounds to serve local neighborhoods and replace older existing equipment where needed.
- ~~Work with Worcester County toward construction of new library facilities.~~Improve integration of planning documents such as the Capital Improvement Program, Hazard Mitigation Plan and Comprehensive Plan.
- Support the Ocean City Volunteer Fire Department to develop a training facility in the West Ocean City Area.

# CHAPTER 6: Housing (text only)

## Introduction

Ocean City has long been considered one of the Mid-Atlantic area's premier beach and resort communities. ~~In recent~~ As a result, many people choose to live, visit, vacation and own residential property in the community with years the Town ~~has experienc~~ inged an extraordinary amount of new development, in both number of housing units and value over the years. For 7,100 permanent residents, 30,000 residential property owners as well as guests staying at over 7,500 hotel rooms, the quality of housing is an important part of the Ocean City experience. To sustain this value over the long term and to plan for future needs, the Comprehensive Plan refers to information from the U.S. Census to identify housing trends.

As this statistical information is updated, it is clear that there has been a relatively stable housing mix and adequate housing supply capacity for the last 10 years in Ocean City. The national economic recession beginning in 2008 has generally had the effect of reducing rapid escalation of property values and increasing housing affordability. While larger trends in housing supply and demand continues to be influenced by areas outside of the City limits in West OC and Sussex County, DE, Ocean City is adapting existing housing to meet demand for larger family groups, seasonal and employee rentals. This 'change of use' in residential housing can create new impacts on established neighborhoods and often requires building renovation to meet current codes and standards. - These are all characteristics of a mature community with a significant seasonal housing market.

## Goal:

To protect and preserve the traditional character of Ocean City's housing stock while ensuring that a sufficient variety of housing densities, types, sizes and costs is ~~provided~~ available to meet the existing and future needs of all residents, and continues to meet the needs of the visitor population.

Objectives: In order to achieve the housing goal, the following objectives are adopted:

- 6.1 \_\_\_\_\_ Protect and enhance the quality of residential neighborhoods.
- 6.2 \_\_\_\_\_ ~~Provide~~ Encourage a balanced housing stock with housing opportunities for \_\_\_\_\_ all \_\_\_\_\_ residents.
- 6.3 \_\_\_\_\_ Increase housing inventory to provide affordable, adequate housing for \_\_\_\_\_ young, working families and the seasonal employee population.

6.4 Require site plan and planning review for all major developments to ensure a functional design, quality living environment, and compatibility with overall Town character.

6.5 Adapt to changing market demands for rental housing by minimizing the impacts of short term rentals on established neighborhoods, and encouraging adequate seasonal housing for the workforce.

~~In fiscal 2004, 1,245 permits were issued for new construction and alterations, with a total value of over \$133 million, 27 percent higher than in 2003. Permits for new construction alone in 2004 had a value of over \$125 million and included development on Sunset Island, a significant project consisting of 522 units valued at over \$400 million. In fiscal 2003, the total value of permits issued for new construction and alterations was \$105 million, 53% higher than in 2002.~~

~~The 2005 Worcester County Comprehensive Plan notes that lack of available land is constraining new development in Ocean City, and the number of older properties being redeveloped as residential properties is subsequently on the rise. This is evident in the number of out-dated buildings that are being replaced by modern, upscale residential units. The National Association of Realtors (NAR) also notes that residential real estate is now more valuable in Ocean City than commercial real estate, with some commercial properties being torn down and replaced by condominiums. Several large redevelopment projects were approved by the Town's Planning Commission in fiscal 2004-2005, including a hotel condominium at 45<sup>th</sup> Street with 106 hotel rooms and 203 two- and three-bedroom units, and the Gateway at 49<sup>th</sup> Street with 160 three-bedroom and 31 four-bedroom units. Luxury condominium projects totaling 552 units have been approved for construction in fiscal 2004-2005.~~

~~The recent boom in construction is being fueled by investors from nearby metropolitan areas, such as Baltimore, New York City, Philadelphia, and Washington, D.C., who build and occupy vacation homes during the off-season and rent them out during the summer. Ocean City is within a two- to three-hour drive from one-third of the country's population; the permanent population of Worcester County is around 43,000, less than 10,000 of which live in Ocean City. But during the summer season, the county's population peaks at between 300,000 and 350,000. Even the off-season is popular, with the population swelling to around 150,000 on weekends.~~

~~In 2003, Worcester County (which includes Ocean City, Berlin, and Ocean Pines) had the largest number of individual properties sold in the state. The County also saw a 17 percent increase in property values between 2001 and 2003, and a 25 percent increase in home prices between 2003 and 2004.~~

~~Yet even with those substantial increases, the NAR notes that Ocean City property values still are not as high as many other east coast resort communities. Vacation home prices are still low relative to where they are expected to be once the Baby Boom generation begins to retire in force. The number of boomers purchasing vacation homes in the coming years is expected to~~

~~climb dramatically, fueled by an increase in home equity, favorable tax laws, record-low mortgage rates, and changing lifestyles. Recent NAR statistics show that the vacation home market is a young, dynamic and growing market. That information, coupled with the projected rise in the year-round residential population discussed in Chapter One, supports the assertion that the housing market in Ocean City will continue to grow in the coming years.~~

## Housing Supply

Ocean City's housing inventory is comprised predominantly of multi-unit structures, the majority of which are residential condominiums. Single-family detached housing ~~(not including mobile homes or trailers)~~ is ~~uncommon-an important resource for year-round residents~~ in the Town and yet comprises only 10.9% of the total housing stock, compared to the County average of 40.39% (Table 6-1). The mobile home/trailer ~~population-housing type~~ is also significant, comprising 5.57% of the total number of units.

### Table 6-1

The overwhelming majority of multi-family units are in ~~larger buildings or building~~ those complexes with three to nineteen units per structure. A review of building permit data from 1985 to 2015 reveals further that permits for structures with 5 or more units make up the largest percent of the Town's recently constructed housing type (Table 6-2).

### Table 6-2

A significant spike in building permits for multi-family residential construction occurred from 1983 to 1987. In 1982, the total number of building permits issued for construction of multi-family housing units was 102. The following year the number was 2,013. In 1984 the number dropped slightly, to 1,972. In 1985 the number of building permits for multi-family units dropped by almost half to 1,022, and again by the same margin in 1986. By 1988 the annual number of permits being issued for multi-family housing units was down to 203. A significant downward trend in permits for multi-family housing units began a few years later, in 1990, when the total number of permits for housing units was only 88, 48 of which were for multi-family units. This downward trend continued to almost the end of the decade.

An upward trend in housing unit building permits began in 1999, when the total number of residential building permits nearly doubled from the previous year. Subsequent annual totals for residential building permits indicate a steady increase in residential construction within the Town through 2006. From 2000 to 2002 multi-family unit permits outnumbered single family permits increasingly each year, however in 2003 the percentage of single family unit permits doubled over the previous year. By 2006 housing permits had peaked at 571 and then dropped off significantly through the national recession to a low of 17 in 2011. Recently an equilibrium level has been reached of approximately 50 new housing units per year.

Hotel/Motel units are also considered as a residential unit component that meets the transient housing demand for seasonal visitors. Previously the number of new hotel units was not calculated in the housing supply, however with this Plan update the addition of over 1,000 new rooms has been noted. The increased use of individual housing units as transient housing to meet the needs of our resort community has also challenged the traditional view of housing.

Historical data for housing units, segregated by decade built, appears in Table 6-3, below. Re-investment and re-development have improved the available housing in areas such as 67<sup>th</sup> Street with the development of Sunset Island, and conversion of a trailer park to Broad Marsh townhomes. The steady replacement of mobile homes in several of the mobile home parks with permanent structures provides safe, code compliant housing options for future generations. As each cohort of housing passes into the next decade, regular maintenance, renovation and inspection demands increase.

Table 6-3

## Housing Units and Householders

In 20004, one-third of the Town's year-round occupied housing units were renter-occupied, compared to the county average of one in every four. (Table 6-4). By 2010, renter-occupied housing units in both the Town and the County were approximately one in every five units ;(Table 6-4). The average length of residence in the Town (11 years) is somewhat less than that of the County (13 years) according to US Census data.

Table 6-4

Table 6-5 illustrates the status of vacant housing units in the Town. As expected, the majority of vacancies are the result of units being used as second or vacation homes. This information, which is collected every 10 years in the month of April, does not adequately represent the dynamic and flexible way that housing in the resort community meet the needs of full time residents, second home owners, investors and workforce housing providers at different times of the year.

Table 6-5

As noted in the Introduction to this Chapter After many years of annual increases in housing values, the effects of the National Recession beginning in 2008 have impacted housing values have reportedly been appreciating steadily in recent years both Ocean City and Worcester County. In 2000 the period from 2010 to 20154, the median value of owner-occupied housing in Ocean City was estimated at \$150,750.00 was reduced from \$374,600 to \$283,600, twenty percent higher than and the median value of owner-occupied housing in Worcester County was reduced from \$289,100 to \$242,000. (Table 6-6). The U.S. Census in 2010 recorded very little housing priced above the \$5400,000.00 range in Ocean City, however it is anticipated that the

amount of higher priced housing will increase as the value of residential properties increases due to the limited land available for new residential development.

Table 6-6 ~~This will be true particularly for beach front properties.~~

~~Given recent dramatic increases~~fluctuation in the Town's assessable base, it is clear that the value of residential units today is appreciably higher than in the year 2000, although no recent data since the 2000 Census is available to confirm this.~~have still been able to hold substantial value based on their desirable location, and avoid sharp losses due the 3 year rotating re-assessment schedule in Worcester County.~~

Table 6-7 illustrates the value of owner occupied housing by number of units per structure.

One and two-person households make up 852 percent of the households in Ocean City, a significantly higher proportion than Worcester County (7064 percent). Ocean City has a smaller average household size than the Worcester County, as well. Both of these facts, combined with aging population statistics in Chapter 1, are indicative of the increasing number of retired persons moving to Ocean City as permanent residents.

Table 6-9 is ~~an analysis~~a comparison of Ocean City's housing units by the number of bedrooms in each, ~~including-~~Data for Worcester County is included for comparison purposes. In Ocean City, two-bedroom housing units outnumber all other units by a wide margin, ~~under~~seering reflecting the demand for ~~smaller units as a result of the increasing number of retirees and demand for one-family~~ seasonal use units in the Ocean City housing market at the time. In comparison, the largest number of ~~two bedroom~~ housing units in Worcester County ~~is close to the number of~~are three-bedroom units in the County, where the percentage of ~~families with children under the age of 18 full time residents~~ is far greater than Ocean City. Building permit activity over the last 10 years suggests that the Ocean City housing market will continue to adapt by increasing the size and number of bedrooms per unit to meet demand, and that

Table 6-9

Given recent fluctuation in the Town's real estate assessment base, it is clear that residential housing units have still been able to hold substantial value based on their desirable location, and avoid sharp losses due the 3 year rotating re-assessment schedule in Worcester County. It should be noted that many housing unit renovations in Ocean City often add additional bedrooms where possible in order to increase marketability for rental purposes. Recent trends in seasonal rental housing are expanding the demand for large single family homes that can support multiple family members and reduce rental cost per person.

## Housing for Seasonal Employees

In 1997 and again in 2009, the Ocean City Comprehensive Plan noted that the major housing problem facing the Town was “the availability of affordable, decent, temporary housing for

seasonal employees.” Seasonal workers are a key ingredient of Ocean City’s economy, as over 12,000 workers come to town to fill summer jobs. The resort industry must rely on nonresident seasonal employees to ~~man-staff~~ the resort’s attractions and restaurants. This demand often includes many seasonal and part time City employees.

With Ocean City’s accelerating rehabilitation of older properties and enforcement of maximum occupancy standards, the supply of lower cost housing options is dwindling. This has created a shortage of affordable housing for the summer labor force. Summer labor shortages have occurred in the past, and one of the contributing factors for these shortages is the lack of affordable housing.

Possible solutions to this ongoing problem have been studied for several years but with limited success. Government assisted housing is not an appropriate solution as the recipients of such subsidies are not ~~in the true sense~~ considered low or moderate income residents and would only occupy the housing for several months of the year. A second alternative considered was the establishment of a private non-profit Housing Authority to develop and operate affordable housing. This approach also had potential problems. A site which provides a buffer from surrounding areas would be needed, and such sites are limited in Ocean City. Finally, such an endeavor was deemed unfair competition for existing property owners who rent seasonally. ~~Another option considered was to let the private market handle the problem by increasing wages to offset housing costs and thus enable Ocean City employers to compete with jobs in the workers’ hometowns.~~

Some employers have developed or secured housing for their employees. Other potential methods to expand seasonal employee housing include mixed use commercial and seasonal housing, specific employee housing projects, and shared use of university dormitories. ~~H~~ Consideration should be given to housing seasonal employees in West Ocean City where land and housing costs are cheaper has increased in recent years. This creates additional demand on ; however, this would require transport transportation systems to connectg workersthem to job destinations on the island. The West Ocean City Park & Ride will continue to ~~might~~ facilitate this approach.

International student organizations coordinate live/work visa programs in Ocean City for at least 4,000 seasonal employees. Sponsor agencies have typically been responsible for leasing properties and providing safe and affordable housing units. Overcrowding of available workforce housing requires constant inspection and enforcement of Building Code occupancy limits.

Young and low income families moving to Ocean City must also compete for a limited amount of affordable housing. Statistics continue to indicate that an increasing number of retirees (and future retirees) are seeking to relocate in the Town and are purchasing properties as second or vacation homes. These homeowners typically are able to finance more expensive homes, therefore, developers have generally found it profitable to build for this market. Low and moderate income families and seasonal employees are not able to afford this type of housing and, as a result, do not have as many housing options.

In order to insure that housing needs are met for all segments of the Ocean City population, a coordinated effort must be made by the Town and the local business community to promote the availability of a variety of housing options in the appropriate locations. ~~Unless steps are taken to correct gaps and shortages in the existing housing market, many of the Town's young families, low and moderate income families, and seasonal employees will be forced to either remain in housing which is unsuitable for their needs or leave the Town to find suitable housing elsewhere.~~

## Transient Housing

~~Review of Hotel / Motel units as a transient housing type in this chapter has been added as a result of to highlight the rapid construction of new units within the last 5 years, and the important role they play in providing seasonal short term housing and event venues. the Increased demand for short term vacation housing and employee lodging in traditional single family housing units has also been included as a current housing trend. -~~

~~Internet based lodging/booking systems have encouraged property owners of all housing types to participate in the short term rental housing market. Demand for seasonal workforce housing has continued to increase with older housing units typically meeting the demand for dormitory style living. Inspection and enforcementManagement for maximum occupancy, safe housing, rental license and tax compliance has increased and forced new and creative solutions each year.~~

~~With the addition of new national franchise hotels to the existing market, it is anticipated that cConversion or redevelopment of older hotel/motels will follow as the next development trend. Conversion of use from one housing type to another, with new standards for living space, safety, parking, etc. will require updates to the City Code and close coordination with the building industry.~~

## Recommendations

- ~~Consider and adopt strategies for protecting neighborhood character in defined areas to encourage year round residential use, particularly in single family home areas.~~
- ~~Study housing market trends and the unique impacts of different rental arrangements such as yearly, seasonal, monthly, weekly, weekend, daily/sharing, and others. Propose strategies to mitigate impacts of short term commercial rental activity in single family neighborhoods or districts which do not permit commercial activity.~~
- Encourage the private sector to address the seasonal employee housing problem through wage adjustments, employer-provided housing, or a private nonprofit housing corporation.

- Explore additional incentives and or requirements related to the development approval processes that could be established to increase the supply and availability of affordable housing to meet current and future needs of low and moderate income families.
- Collect data and p~~Perform a detailed~~ analysis of seasonal housing demand by type.
- Continue to encourage a mix of housing types and accommodations able to meet the needs of the whole spectrum of residents and visitors to Ocean City while striving to improve the overall quality of the housing stock.
- Expand the municipal partnership with Ocean City Development Corporation to provide additional housing for seasonal and part time City employees working in the downtown area.
- Consider incentives to encourage utilization of upper floors of business uses to provide seasonal employee housing. Review standards for dormitory style housing to encourage new construction while meeting all applicable building codes.
- Examine opportunities to construct a seasonal housing community in West Ocean City. Such a facility could utilize the West Ocean City Park & Ride, and funding for such development could be supported by the business community.
- Monitor the age and building permit history of large multifamily condominium structures, particularly along the ocean front and bayside to identify recurring repairs or renovations that would indicate the need for additional inspections and enforcement of building maintenance code requirements.
- Implement CRS flood risk management outreach strategies for Repetitive Loss and Severe Repetitive Loss properties. Consider implications of building first floor elevation on accessibility and setbacks to accommodate steps/ramps
- Consider residential floor area ratio (FAR) standards and additional bulk regulations to address the observed increase in unit/home sizes as a result of redevelopment/renovations with associated increases in occupancy, parking, public service demands, and impacts to surrounding neighborhood character.
- Study recent redevelopment and infill projects to evaluate challenges and best practices for possible incorporation into code standards.

# CHAPTER 7: ~~Sensitive Areas and~~ ~~Environmental~~ ~~Protection~~Environment

(text only)

Ocean City ~~is~~ a ten-mile-long barrier island ~~is~~ bounded on the east ~~and west~~ by the Atlantic Ocean and on the west by the Isle of Wight and Assawoman coastal bays, ~~respectively~~. Since its beginnings, Ocean City has depended on the surrounding environment. Its vegetation provided convenient pastures for Worcester County's earliest farms. Tourism began in the early 1900s by touting the restful and hygienic benefits of sea air and the Atlantic's medicinal waters. Later, the "pound fisherman" harvested the bounty of the sea.

The Town's connection and inter-dependence with the natural environment is underscored by ~~its history~~significant storm events. In August, 1933, a major northeast storm, not a hurricane, cut the present inlet between Ocean City and Assateague Island. The storm destroyed fishing camps, but provided access from Sinepuxent Bay to the Atlantic, thereby helping create a new industry - sportfishing.

Today, Ocean City depends even more on a clean environment to sustain it. The high quality of adjacent bays and ocean and clean air continue to make Ocean City a desirable place to live and visit. The town's economic future in recreational tourism is directly linked to the quality of its environment. As a model of 'smart growth', the concentration of development within City limits has allowed for other areas nearby to remain undeveloped.

~~The~~For the purpose of this chapter, the environment is comprised of the natural elements of land, sea, air, ~~and as well as~~ the products of manbuilt environment. The following sections establish the goal and objectives for protection and management of sensitive areas and environmental features and inventory existing conditions and trends concerning various attributes of the environment. Finally, recommendations for maintaining and improving the quality of the Town environment are provided.

## Goal:

**To protect the quality of the air, water and land from the adverse effects of development and growth and, where feasible, to enhance the quality of the natural environment and sensitive areas. New priorities include adaptation to climate change and mitigation of hazards for a more resilient community.**

## Objectives:

In order to achieve this goal, the following objectives are adopted:

- 7.1 Continue to inventory and evaluate the town's natural and cultural resource base and establish policies to protect and preserve resources.
- 7.2 Continue to preserve and enhance the PublicTown Beach and maintain the Beach Replenishment Program.
- 7.3 Continue to monitor and maintain air quality at its present high level.
- 7.4 Monitor the Town's energy consumption patterns and identify opportunities for instituting energy conservation measures when appropriate.
- 7.5 Continue to enhance the Town recycling-waste-to-energy program where possible to increase the amount and types of materials captured in the recycling stream-reduce litter through the Adopt-a-beach, Adopt-a-street and Downtown Clean-up programs as well as other initiatives.
- 7.6 Encourage use of water conservation measures to reduce draw-down of the groundwater supplies and to prevent salt water intrusion.
- 7.7 Maintain and enhance the quality of the Coastal bays and the ocean. Continue to actively participate in and support the Maryland Coastal Bays Program.
- 7.8 Utilize development standards for the location and construction of structures to minimize the impacts of flooding and to mitigate major flood hazards.
- 7.9 Protect and preserve coastal marsh and wetlands as valuable spawning areas and to maintain the benefits they provide to water quality, shoreline stabilization, and wildlife habitat.
- 7.10 Utilize best management practices, low impact development techniques, flexible development regulations and innovative site design and mitigation measures to protect and improve environmental quality. Continue to implement locally determined Critical Area standards for setbacks and water quality measures.

7.11 Continue to participate in the Community Rating System (CRS), which provides reduced flood insurance premiums to reward stringent flood hazard protection regulations.

7.12 Require all forms of development and re-development to avoid sensitive areas or mitigate for impacts whenever possible.

7.13 Flexible development standards should be utilized to protect sensitive areas when they can be demonstrated to better protect sensitive environmental resources than would result from applying standard restrictions/regulations.

7.14 Investigate the benefits of natural and nature based management actions for storm protection.

## Sensitive Areas

One of the visions of the Maryland Economic Growth, Resource Protection and Planning Act of 1992 requires the Town's Comprehensive Plan to include a "Sensitive Areas element that contains goals, objectives, principles, policies and standards designed to protect, from the adverse effects of development, sensitive areas, including the following: 1) streams and their buffers; 2) 100-year floodplains; 3) habitats of threatened and endangered species; and 4) steep slopes.

Ocean City does not contain any streams. Steep slopes are generally defined as slopes greater than 25 percent, and development is usually prohibited or strictly regulated in these areas. There are no steep slopes in the Town.

Virtually all of Ocean City's land area is within the 100-year floodplain at risk from the effects of coastal flooding, storm surge and high winds. Based on a new FEMA coastal RiskMAP analysis, new flood insurance rate maps were adopted on July 16, 2015, which reduce the portion of Ocean City located within the special flood hazard area or 1% chance floodplain. Approximately 40% of the land area and 40% of the structures remain in the moderate or high risk flood hazard zones.

As a growth area which is already 97.5 percent developed, development in the 100-year floodplains special flood hazard area cannot be avoided. Ocean City's flood protection and stormwater management regulations take into account the problems inherent in developing in the floodplain, and enforcement of these regulations should continue to be stringent.

Habitats of threatened and endangered species. An inventory of threatened and endangered

~~species is provided in a later section of this Chapter of the plan.~~ Habitats of threatened and endangered species should be protected and State and Federal guidelines for their protection should continue to be adhered to. Ocean City's location adjacent to Assateague Island National Seashore and the Maryland Coastal Bays national estuary place high density urban built form in close proximity with natural habitats. Several habitat management projects over the years have provided beneficial use for both conditions and help to manage any conflicts through partnerships with the Maryland Coastal Bays Program, Department of Natural Resources, Department of the Environment, and the National Park Service.

The Town of Ocean City will continue to monitor the work of the Mid Atlantic Regional Council on the Ocean (MARCO) in developing an Ocean Action Plan for the Mid-Atlantic region. Issues related to ocean water quality, offshore energy development, management and management areas which may restrict the sport fishing industry, and federal control and allocation of sand resources are critical to local resource management.

## Geology and Land Form

Ocean City is located in the Coastal Plain, and occupies the southern end of a barrier island called Fenwick Island. Such land forms are dynamic in their development and continue to be active. Fenwick Island, like most barrier islands, was formed through wave, wind, and tidal action.

Due to its location on a barrier island, Ocean City is subject to some specialized forces of nature. A barrier island, in its natural state, is a constantly changing land form. Barrier islands serve two main functions. First, they protect the coastlines from severe storm damage. Second, they harbor several habitats that are refuges for wildlife. In fact, the salt marsh ecosystems of the islands and the coast help to purify stormwater runoffs from mainland streams and rivers. Figure 7-1 illustrates the features and structure of a typical natural barrier island.

### Figure 7-1

The structure of a typical barrier island consists of the following zones from the ocean side toward the bay:

- \* Beach - consists of sand deposited by the actions of waves
- \* Dunes - formed from sand carried and deposited by winds. Dunes are stabilized naturally by plants (sea oats, bitter panicum) and artificially by fences. The primary dune faces the ocean and may be followed by secondary and tertiary dunes inland.
- \* Barrier flat - (also called backdune, overwash or mud flat) formed by sediments that

\_\_\_\_\_ get pushed through the dune system by storms, such as hurricanes. Grasses grow and stabilize these areas. This is the primary area in Ocean City which has developed over the last 100 years and by its natural form drains to the bayside marsh areas.

\* \_\_\_\_\_ Salt marsh - a low-lying area on the sound-side of a barrier island. Salt marshes are generally divided into high and low marsh areas. High marsh areas may typically be flooded twice each month with the spring tides, while low marsh areas can be flooded twice daily with the high tides. Cord grasses stabilize the salt marsh area, which are one of the most ecologically productive areas (amount of vegetation per acre) on Earth.

Factors causing constant changes to Ocean City's land form include:

- \* \_\_\_\_\_ Waves which deposit and remove sediments from the ocean side of the island
- \* \_\_\_\_\_ Currents including long-shore currents that are caused by waves hitting the island at an angle which move the sand from one end of the island to another. The offshore currents along Ocean City's coastline tend to remove sand from the northern ends of the island and deposit it at the southern ends.
- \* \_\_\_\_\_ Tides which move sediments into the salt marshes and eventually fill them in. Thus, the bay sides of barrier islands tend to build up as the ocean sides erode.
- \* \_\_\_\_\_ Winds which blow sediments from the beaches to help form dunes and into the marshes, which contributes to their build-up.
- \* \_\_\_\_\_ Sea level change: rising sea levels tend to push barrier islands toward the mainland.
- \* \_\_\_\_\_ Storms which may have the most dramatic effects on barrier islands by creating overwash areas and eroding beaches as well as other portions of barrier islands.

The impact of these changes can be significant. Perhaps the best illustration of how substantial natural changes can be as a result of a single event is the major storm that opened the Ocean City Inlet in 1933 and now separates Fenwick Island from Assateague Island to the south. To keep the channel navigable to the mainland, the U.S. Army Corps of Engineers constructed two rock jetties. Although the jetties stabilized the inlet, they altered the normal north-to-south sand transport by the longshore currents. The result is that sand built up behind the north jetty and the sand below the south jetty was quickly eroded. In a very short time, natural forces combined with human intervention have permanently altered the barrier island profile.

Figure 7-2 illustrates changes to Assateague Island as a result of the accelerated erosion caused by the man-made rock jetties of Ocean City Inlet. The figure shows the configuration

of Assateague Island in 1980 and an outline of the position of the Island in 1849. ~~The accelerated erosion has shifted Assateague Island almost one half mile (.8 km) inland. Active management by the U.S. Army Corps of Engineers and the National Park Service has slowed and stabilized this process through inlet dredging and sand bypass to restore the natural long shore sediment movement that continues to nourish Assateague Island.~~

#### Figure 7-2

~~Much of the early development of Ocean City took little account of the natural processes and constraints of its location on a barrier island. This approach entailed obvious risks, and in hindsight early development could have been more environmentally sensitive. However, on the positive side, by developing Ocean City intensely the demand for development in other coastal areas was diminished. In fact, 75 percent of Maryland's coast has been preserved nearly in its natural state through establishment of the Assateague Island State and Natural Seashores.~~

### Threats to Beach Stability

The three major natural forces affecting the coastal shoreline are erosion, sea—level rise and storms. Each of these presents different but related threats to the beach and property in Ocean City.

#### Beach Erosion

Historical shoreline changes along Ocean City area prior to the Beach Replenishment Project are shown in Figure 7-3. The average rate of oceanside erosion over the 130 years of record has been 1.9 feet per year; some areas have shown accretion over various time periods.

#### Figure 7-3

Although the average rate of erosion of the beach during the past 130 years (1850-1980) has been 1.9 feet per year, inspection of shoreline movement over this period shows that the recession is not constant through time or space. Indeed, there were periods of very rapid shoreline retreat, which probably corresponded to the major storms of record -- 1902, 1933, ~~and~~ 1962 and more recently in 1998 and 1999. In addition, the erosional trend at any one point along the shore has tended to fluctuate through time.

While the historical trend of recession has been set at 1.9 feet per year, changes in shoreline position since 1961/62 have been less appreciable due to a decrease in hurricane activity. In other words, the historical rate of erosion has not been realized in the last several decades. This marked departure from the trend may be due to ~~human modifications of the shore~~ management strategies, notably groins, sand scraping, and ~~some beach fill~~ the USACE shore stabilization project since 1986. ~~However it is more likely that a lull in hurricane activity since 1960 is also a key factor.~~

Assateague Island to the south is one of the longest ‘natural shorelines’ on the East Coast and as such has become intensively studied, measured and observed. Many federal agencies have overlapping responsibilities for shoreline management including the Update with USACE report, USGS sediment management study, NPS, NASA and USFWS. It should be noted that long range plans have recently been prepared for Assateague Island by Department of Interior agencies which promote a new management strategy for the next 30 to 50 years to allow natural forces and sea level rise to create rapid environmental change and unstable barrier island conditions. report on Assateague

### Sea Level Rise

Ocean City, MD is vulnerable to elevated water levels from flooding, storm surge, and high tides due to its location on a developed barrier island along the mid-Atlantic coast. This sea level rise policy recognizes the importance of planning and preparing for the historic and future effect of changing sea level and how it may increase hazard risks to the community. Estimates of future conditions vary greatly depending on the source, the specific location and the period of time being examined. Ocean City relies primarily on the expertise of the U.S. Army Corps of Engineers (USACE) to identify the risk and adaptation measures necessary for this hazard mitigation element.

*Figure 7-2 (www.corpsclimate.us/ccaceslcurves.cfm)*

The USACE establishes three projections for future sea level change beginning with an extension of historic sea-level rise rates. The USACE Low Curve is based on a 24-year regional rate of 0.01453 feet per year (1 foot in 69 years) for Ocean City, Maryland. Based on tide gauge data from the Ocean City Inlet (#8570283), the USACE Sea Level Change Curve Calculator also estimates an intermediate rate scenario of 0.0267 feet per year (1 foot in 37 years), and a high rate scenario of 0.0658 feet per year (1 foot in 15 years) that may be used for planning and project design.

The Atlantic Coast of Ocean City, Maryland at Ocean City, is also undergoing subject to the same long term shoreline erosion/retreat forces as a result of sea level rise. Sea level rise, theoretically caused by long term global warming, has an effect on all coastal areas. During the period 1940-1980 data from the National Oceanic and Atmospheric Administration (NOAA) has documented the sea level rise at the following stations near Ocean City:

<del>*</del> <del>Atlantic City, New Jersey</del>	<del>.013</del>	<del>ft./yr.</del>
<del>*</del> <del>Lewes, Delaware</del>	<del>.006</del>	<del>ft./yr.</del>
<del>Norfolk, Virginia</del>	<del>.012</del>	<del>ft./yr.</del>
<del>*</del> <del>Ocean City Inlet</del>	<del>.014</del>	<del>ft./yr.</del>

From this data, it is estimated that the rate of historical sea level rise at Ocean City has been on the order of .010 feet per year | 1 foot per 100 years.

Conclusions drawn from a study conducted by EPA in 1985 indicate sea level rise could double the rate of erosion at Ocean City in the next forty years. If no additional erosion control measures are taken, the shore could erode 85-153 feet by 2025 assuming current sea level trends. An 11-inch global rise in sea level would increase expected erosion to between 180 and 238 feet, if no additional measures are taken; a 15-inch rise would increase expected erosion to between 216 and 273 feet. The study also offered the following summary conclusions:

- The projected rise in sea level would increase the quantity of sand necessary to maintain the current shoreline for the next forty years from 5-10 million cubic yards if current trends continue, to 11-15 million cubic yards for the two scenarios of accelerated sea level rise.
- Projected sea level rise would increase the priority of erosion control-measures under current policies of the Corps of Engineers. Current policies place a greater emphasis on flood protection than recreational benefits provided by proposed projects. Because of the substantial erosion that could occur from a rise in sea level, the need for flood protection will be greater if sea level rises.
- A significant rise in sea level would require the continuation of the beach replenishment program to offset the erosion.
- The cost of controlling erosion caused by sea level rise does not threaten the economic viability of Ocean City in the next forty years. Even the most pessimistic estimate of future erosion control implies a cost of less than fifty cents for every visitor that comes to Ocean City each year. Protecting the shore at Ocean City will continue to be economically justified.
- Understanding the likely impact of sea level rise on Ocean City in the next century will require identification of the most cost-effective and environmentally acceptable sources for up to fifty million cubic yards of sand to be placed on the beach.
- Better estimates of future sea level rise would enable decision makers to more adequately determine the most prudent strategy for controlling erosion at Ocean City.
- Although improved procedures for estimating erosion are desirable, current methods are sufficient to yield first-order estimates for use in long-term planning.

Existing barrier island profiles and the Ocean City Inlet have the effect of reducing storm surge and flooding impacts to the bayside shorelines of the community as evidenced by the Flood Insurance Rate Map (FIRM) mapping of 1% chance flood zones. Base flood elevations quickly change from 11 feet at the ocean beach to 5 feet near the US Coast Guard Station in downtown Ocean City.

### Figure 7-3

Relative SLR rates also appear to be lower at Ocean City's mid-point location between the Delaware Bay and Chesapeake Bay estuaries, with less effect from land subsidence and upstream watershed impacts (FEMA Region III Coastal Storm Surge Study 2013). Tide gauge readings, storm surge studies and sea level rise projections from Lewes, DE and Norfolk, VA are not an acceptable substitute for location specific data from the Ocean City Inlet or other coastal barrier island measurements.

To the extent that there is a local delay in observable SLR impacts in Ocean City, it will allow for the study of best practices in other communities, preparation of action plans tied to measured changes, and implementation of resiliency strategies for significant climate related events.

An updated sea level rise policy was adopted in 2016 and incorporated into the Town of Ocean City Hazard Mitigation Plan. This policy incorporates USACE estimates of future sea level rise that are specific to the Ocean City Inlet tidal data and describes current adaptation actions.

### Storms

Ocean City is subject to hurricanes and northeasters, which can cause severe damage to the beaches and property. These storms are different, and pose different threats to the town.

Hurricanes, which originate principally during August, September and October, are tropical cyclones with surface wind velocities of 75 miles per hour or more. ("Tropical storm" is the term used to describe such storms with winds less than 75 mph). Hurricanes are extremely violent, short-lived events. They pummel barrier islands with severe winds, heavy rains, and a storm surge, all of which can result in massive property damage and loss of life.

The U.S. Office of Coastal Zone Management estimates that in any year Ocean City has a one percent chance of being struck by a hurricane and less than a one percent chance of being struck by a Category 4 or 5 hurricane. This is one of the lowest probabilities on the East Coast, and is due to Ocean City being somewhat protected. Many hurricanes are deflected eastward by the projection of the Carolina capes. While this is fortunate, preparations must still be made for an evacuation.

Northeasters are typically; large in scope and long in duration, and can be a major threat to property while a moderate threat to life. These storms are large low pressure systems which linger for three or more days, occurring most often in the cooler half of the year. Northeasters bring heavy rains, gale force winds, and a steady pounding of mid to large size waves. They usually cause mild and temporary beach erosion. However, given the right combination of climatic and tidal factors, northeasters can deliver major flooding including over-washing the

island and major beach erosion.

### Beach Stabilization and Protection Efforts.

Over the years, a variety of beach stabilization efforts have been tried. Wood, stone and macadam groins have been constructed. Following the devastating storm of 1962, the beaches were replenished with sand. A program in which stone groins were constructed at prescribed intervals along the beach was abandoned due to its high cost relative to its effectiveness.

In 1991, the Atlantic Coast of Maryland Shoreline Protection Project was completed at a total cost of about \$45,000,000, which was shared by the federal government, the State of Maryland, Worcester County and the Town of Ocean City. The project consisted of a steel sheetpile seawall in front of the boardwalk from 4th Street to 27th Street, the construction of a wider (220 feet) beach, and the establishment of a protective dune which is 25 feet wide at its crest, and 85 feet wide at its base and vegetated with 65 acres of dune grass. It was designed to prevent damages associated with waves and erosion resulting from a 100-year storm event.

In the two months immediately following completion of the project, four powerful storms hit the Ocean City area. The project proved its value by absorbing the ocean's impact and protecting buildings and the boardwalk. The U.S. Army Corp of Engineers estimated the project prevented up to \$160 million in damages in the two month period, more than justifying its cost.

The project also provides for periodic beach renourishment and monitoring over the 50-year project life (until 2044). Renourishment and monitoring costs are shared by the Army Corps of Engineers (53 percent) and the state of Maryland (47 percent). On average, 800,000 cubic yards of sand is required to renourish the beach every four years. The last regularly occurring renourishment was completed in 2011. A state maintenance fund has been established which pays for periodic renourishment and repairs to the beach, dune and seawall. Thus, a long-term commitment has been made to this promising-successful solution to the beach erosion problem.

## Water Quality / Coastal Bays

Ocean City is located in the Coastal Bays Watershed. This 175 square mile basin includes all of Maryland's barrier islands and the portion of Worcester County draining to the coastal bays. The main surface water bodies are the salt bays and the Atlantic Ocean. The limited freshwater system is predominately local drainage or small creeks draining to the bay. No natural body of fresh water exists in Ocean City.

### Atlantic Ocean

In the Mid-Atlantic region, a Regional Planning Body (RPB) has been meeting since 2013 in order to design and carry out a regional ocean planning process in collaboration with the general public, stakeholders, and partners such as the Mid-Atlantic Regional Council on the Ocean (MARCO). The main product of this collaborative effort is the Mid-Atlantic Regional Ocean Action Plan (boem.gov/Ocean-Action-Plan).

The Mid Atlantic Regional Ocean Action Plan includes a description of the special relationship of the Mid-Atlantic region to the ocean waters off of its shores, the history and collaborative process of Mid-Atlantic regional ocean planning, further detail about the RPB and its membership and a summary of certain foundational documents developed with public input.

These foundational documents include the Mid-Atlantic Regional Ocean Planning Framework that established eleven overarching principles to guide ocean planning, two goals for the regional ocean planning process, and a series of objectives related to each goal. The goals are:

Healthy Ocean Ecosystems. “Promote ocean ecosystem health, functionality, and integrity through conservation, protection, enhancement, and restoration.”

Sustainable Ocean Uses. “Plan and provide for existing and emerging ocean uses in a sustainable manner that minimizes conflicts, improves effectiveness, increases regulatory predictability, and supports economic growth.”

The Plan also describes nine objectives and 33 inter-jurisdictional coordination actions that address the Sustainable Ocean Uses goal. These objectives address: National security, Ocean energy, Commercial and recreational fishing, Ocean aquaculture, Maritime commerce and navigation, Offshore sand management, Non-consumptive recreation, Tribal uses, and Critical undersea infrastructure.

### Surface Water and Coastal Bays

Surface waters in Ocean City are of two very different types. The Atlantic Ocean exhibits a hardiness and resistance to pollutants due to its currents, tides, and wind driven flushing. The Coastal Bays, on the other hand, have a modest flushing capability. This, combined with their shallowness and proximity to developed land areas, makes them very vulnerable to environmental stress. For this reason, the coastal bays require special care to preserve their viability. Figure 7-4 shows the extent of the Coastal Bays Watershed and its many creeks and bays.

The Maryland Coastal Bays Program exists under the umbrella of the EPA’s National Estuary Program, designed to protect the most economically and environmentally significant estuaries in the United States. The Coastal Bays behind Assateague Island and Ocean City make up one of only 29 estuaries nationwide that has received this special attention. In these regions,

the health of the economy is closely linked to the health of the environment. The Coastal Bays Program is a cooperative effort between Ocean City, Berlin, Worcester County, the state of Maryland, the United States Environmental Protection Agency (EPA), and a host of state and federal agencies which have brought together scientists and diverse groups, including the agriculture, golf, tourism, fishing and development industries, to produce a Comprehensive Conservation and Management Plan (CCMP) for the Coastal Bays.

~~The Coastal Bays Program exists under the umbrella of the EPA's National Estuary Program, designed to protect the most economically and environmentally significant estuaries in the United States. The Coastal Bays behind Assateague Island and Ocean City make up one of only 29 estuaries nationwide that has received this special attention. In these regions, the health of the economy is closely linked to the health of the environment.~~

Embarked upon in 1996 and completed in 1999, the MCB Program ~~has~~ recently ~~developed a report in 2004~~ updated a Comprehensive Conservation Management Plan in 2015 that provides the most recent indications regarding water quality, fish and wildlife habitat condition within the Coastal Bay and describes proposed management actions for the next 10 years. ~~The entitled, An annual report card on the health of the bays called~~ “The State of Maryland’s Coastal Bays”, also summarizes the environmental status of the bays and indicates the following:

#### Water Quality

Water quality shows many warning signs of ecosystem change, even though some areas currently still have good water quality. In general, water quality is degraded within and close to the tributary streams and much better in the more highly flushed regions of Assawoman, Isle of Wight, and Sinepuxent Bays. Excess nutrients (nitrogen and phosphorus) typically are the primary causes of degraded water conditions. Variation in water quality between regions is reflecting variation in nutrient concentrations. Excessive nutrients lead to hypoxia (low oxygen levels), limited fish survival, and phytoplankton (single-celled algae) blooms which limit sea grass growth in portions of the watershed including Newport Bay, St. Martin River, and the northern portions of Assawoman Bay.

The presence of sea grasses is an indicator of good water quality. Excess nutrients cause algal blooms which block sufficient sunlight from reaching grasses. Eelgrass and widgeon grass are the two species that occur in the Coastal Bays. Although almost 85 percent of the sea grasses within the watershed occur along the Assateague Island shoreline, sea grasses are also evident along the Ocean City Bay-front, with beds extending from 40<sup>th</sup> street to 85<sup>th</sup> street. The area extent of sea grasses ~~has been increasing in recent years. The 2002 acreage in the Coastal Bay represents a 320 percent increase since annual data began to be collected in 1986. has varied over the years as a result of environmental conditions and management actions. Based on a current evaluation through the 2015 Maryland Coastal Bays ‘report card’,~~ sea grasses are in a period of decline in the bays near Ocean City.

## Finfish and Shellfish

Finfish in the Coastal Bays are diverse. The shallow waters are ideal nursery and forage habitat for over 140 species of finfish. Most of the regions' most valuable commercial finfish are composed of estuarine dependent types like summer flounder, bluefish, weakfish, spot, tautog, and black sea bass among others. Since interstate management of summer flounder began in 1989, the stock has recently recovered to the level where no longer considered over fished.

The blue crab continues to be a valuable resource in the Coastal Bays, supporting a steady commercial and recreational fishery. Surveys suggest that abundance fluctuates without an apparent trend, yet there is still a successful annual harvest that even attracts crabbers from the Chesapeake Bay. Hard clams have declined over the past three decades compared to historical abundances, but have been relatively stable for the past 10 years.

Presently there are no viable natural oyster populations inhabiting the subtidal bars of the Coastal Bays. Episodic natural events, in particular the opening and stabilization of the Inlet, fundamentally changed the ecosystem, creating higher salinities in which oyster populations could no longer flourish. Small, relict populations still exist intertidally at a few locations with occasional spatfall on structures such as riprap, pilings and bridge supports. Bay scallops have also been found in most bay segments but are in low numbers.

## Groundwater

~~Four groundwater aquifers underlie Ocean City. The upper two, the Pleistocene and Pocomoke, suffer from vulnerability to salt intrusion. The lower aquifers, Ocean City and the Manokin, are used for water supply, although portions of the Manokin, between 28th Street and about 80th Street, contain brackish water.~~

~~The Ocean City and Manokin aquifers provide good quality water, but could be threatened by salt water intrusion. Intrusion can occur either vertically or horizontally. Vertically, brine could move from leaks in the upper aquifers or be drawn up from the salty St. Mary's aquifer. Studies performed in the past by the U.S. Geological Survey indicates that vertical intrusion will not be a problem. Above the water supply aquifers lies a confining layer which prevents inter-aquifer leakage. The St. Mary's formation below is very dense and requires a high pressure differential for leakage to occur which is not considered likely.~~

~~However, horizontal intrusion could come from the salt water being drawn in from the ocean. The probability of this occurring has not been scientifically determined, but if Ocean City is similar to other Atlantic Coast situations there is no imminent danger. In any case, the location of the offshore "salt wedge" should be determined so an accurate picture can be drawn for future policy decisions.~~

~~The water supply aquifers are recharged in the Manokin subcrop. This subcrop is a seven mile~~

~~wide band beginning northwest of Salisbury in the Hebron area and spreading northeast through Laurel, Georgetown, and ending at the coast at Broadkill Beach in Delaware.~~

## Stormwater and Flooding

Ocean City's annual rainfall averages forty nine inches, which translates to approximately 200,000 gallons per acre or 23,000 gallons on a 5,000 square foot lot. Depending on the land cover, it either percolates into the soil or becomes runoff. The more land covered by impervious surface, the more runoff results.

Stormwater is both a water quality and a flooding problem. In terms of water quality, stormwater washes pollutants from roofs, parking lots and streets, carrying the un-treated oil, grease, animal waste, heavy metals, and other assorted pollutants to the bays. Stormwater pollution has a potentially major impact on the ecology of the coastal bays. This is due to the bays' shallow depths and limited flushing capabilities. Also, pollutants in general tend to settle out and concentrate in embayments and canals.

Development can greatly affect the amount and quality of stormwater. Management measures during construction and site planning can reduce its adverse impacts. During heavy rain events, runoff causes localized flooding. Generalized flooding results from rain, winds and tides associated with major storm events. The state passed the 1982 Stormwater Management Act which requires municipalities to adopt stormwater regulations, and Ocean City has adopted and is enforcing appropriate measures. [See Chapter 11 Water Resources Element for more information.](#)

For several reasons it is desirable to maximize infiltration of rainwater. This water serves to replenish the groundwater, thereby helping to hold back the salt water wedge. Also, less runoff reduces nuisance flooding and the adverse impacts of stormwater on water quality. The original sandy soils of Ocean City can absorb about eight times as much water as normal Eastern Shore soils. Such soils lend themselves to the use of infiltration practices for stormwater management.

~~Ocean City is subject to two types of flooding, localized and general. All of Ocean City is located in the 100 year flood zone. The V (velocity) zone on the oceanfront is subject to wave action in addition to flooding. Since avoiding developing in the floodplain is not an option, elevated construction, floodproofing, and special construction methods are required to protect property from flooding.~~

## Wildlife

Although Ocean City is a thoroughly urbanized barrier island, it still provides important habitat for many wildlife species. Dune systems established in the 1990's re-established a habitat that had previously been lost [for migratory butterflies, birds and small mammals.](#)

Wetlands protection regulations along with water quality standards should ensure the continuation of ~~these~~ rich ecological areas in the coastal bays. Conscious planting of food and shelter can also increase urban wildlife populations.

The Maryland Department of Natural Resources has compiled a “Summary of Current and Historical Rare, Threatened and Endangered Species of Ocean City, Maryland”. The summary identifies 9 animal species and 36 plant species that are either rare, threatened or endangered. Appendix A identifies these species by Scientific and Common names and establishes State and Federal rankings based primarily on known occurrences. An explanation of rankings is included as part of Appendix A. The Maryland Department of Natural Resources “Heritage Program” should continue to assist the Town in assessing ~~any~~ possible impacts a development project may have on the habitats of such species to afford them protection.

## Climate and Air Quality

Ocean City’s climate is greatly influenced by its proximity to the Atlantic Ocean. Average annual rainfall is forty-nine inches, and snowfall averages ten inches per year.

Violent weather comes in several forms. Thunderstorms occur about thirty times a year, bringing heavy short-term rains and high winds. Although rare, tornadoes and water spouts do occur. Hurricanes can make landfall, and northeasters occur regularly. Snowfall is generally light, but occasionally heavy snows occur.

In general, the air quality of Ocean City is good and likely to remain so. The northwest winds during the cooler months are brisk and help to reduce pollutant concentrations. During the summer, Maryland is often under the influence of a Bermuda High (a high pressure system) centered over the Atlantic Ocean. Air movement is slowed, resulting in a higher concentration of some pollutants. Air pollution is more likely during the summer months in the immediate vicinity of sources such as traffic congestion and construction sites. However, consistent onshore breezes along the coast help to disperse the pollutants.

Other pollution problems persist such as ozone, carbon monoxide, and particulate matter. Emerging problems such as acid precipitation will need to be ~~brought under control~~managed at a regional and national level. Acid rain is a result of ~~fossil carbon~~ fuel combustion, such as motor vehicles, which adds nitrogen oxides to the air. In ~~the past general~~, the rainfall in Maryland ~~has been~~is ten times more acidic than natural levels. In areas where soils and ~~rocks~~ geologic formations are thin, acid rain may cause the waters to become very acidic resulting in the decline of fish populations.

## Solid Waste and Recycling

Proper and timely disposal of solid waste is a key to a healthy environment. In addition to health, odor and aesthetic considerations are important. Substantial amounts of seafood are consumed in Ocean City, so in summer, collection is required on a nearly daily basis.

Over 30,000 tons of refuse are processed annually; peak volumes reach over 350 tons per day or 20 pounds per household.

Ocean City began developing its recycling program in 1989. Aluminum, plastic, cardboard, newspaper, office paper, metal, ~~waste oil~~ and glass are now recycled through regular refuse collection and transport of all waste materials to an energy production recycling facility. ~~Several recycling drop-off sites are located throughout the town (see community facilities chapter), and a limited collection system is operated in some residential neighborhoods.~~

~~An ordinance passed in 1992 requires all holders of alcoholic beverage licenses to separate glass and aluminum, which is collected by the town. This effort has been quite successful. The town now recycles over 2,800 tons of material per year, or almost 10% of the total solid waste collected. Efforts to improve this performance are continuing.~~

The ocean has received a variety of ~~man's~~ waste products over the years. Sewage sludge, radioactive materials, dredge spoil, industrial by-products, and military ordnance have all been disposed of at sea. ~~These items contain varying amounts of pollutants including highly radioactive materials, toxic substances, heavy metals, carcinogens, silt, and oxygen consuming materials.~~ The Ocean Dumping Act of 1972 curtailed many past abuses and funded research to further the understanding of the potential hazards and safety issues. The two major dump sites off the East Coast were brought under new regulations. The 12 Mile Site is located 10 nautical miles off Long Island and the 106 Mile deep-water dump site is located 115 nautical miles east of Atlantic City, NJ. Predominately used for sewerage sludge and industrial waste, the 106 Mile Site could affect the water quality of the coast of Ocean City. Currents and Gulf Stream eddies could transport pollutants along the Maryland and Virginia coasts. For this reason Ocean City should continue to support restrictions on ocean dumping and monitor annual water quality testing.

Recent report on top ten cleanest beaches: Today, Ocean City, MD is rated as one of the cleanest beaches in the nation by the Natural Resources Defense Council based on regular state and county water quality testing at 8 different locations along the beach. The beach is cleaned each night by the Department of Public Works Department, and numerous volunteers help to adopt a sections of town beach and collect litter from the dunes and beach.

~~A recent addition to the waste reduction arsenal, seaborne toxic waste incineration, has caused a great deal of public concern. The major issues surround leaks or spills during transportation, effectiveness of incineration in destroying the waste, and the danger of collision of the incinerator ship. The progress of this method should be closely monitored.~~

## Visual-Built Environment

The Town of Ocean City has many characteristics of an urban area and as such is responsible for managing its surrounding environment in unique ways. For human habitat, the importance of buildings and infrastructure to support activities, enclose and organize outdoor spaces, and accommodate natural environmental features is an essential element of the Comprehensive Plan.

Historic Resources are also managed in a way that recognizes the importance of cultural traditions at the beach, while recognizing the need to reinvent and rebuild the built environment.

Past comprehensive plans have described several offenses to the visual built environment, most of which continue to exist ~~detract from the visitor experience~~. The most negative aesthetic ~~factors~~ include overhead utility wires and poles, the proliferation of signs, the lack of landscaping, ~~architecture and~~ qualities of building design, and the proliferation outdoor displays of merchandise or signage by retail establishments.

Regarding overhead wires and poles, the 1969 Comprehensive Plan made a statement that is still valid today: “The greatest offense to view is the maze of poles and wires which seems to intrude everywhere but on the beach itself... No single accomplishment would more improve the appearance of the town than removal of overhead poles and wires.” Utilities have been placed underground in recently developed areas and in some downtown areas. Ocean City’s concerted effort to continue placing utilities underground would be the single most effective improvement to the visual environment.

An effective landscaping ordinance adopted in 1984 has added much greenery and greatly enhanced recent development. As parking lots are resurfaced landscaping should be added; . The landscaped medians installed along Coastal Highway in the 1990's show the major aesthetic benefit to be gained by added greenscape. The use of bermed landscaping along Coastal Highway would also improve its aesthetics greatly, as berms are effective at disguising parking lots. Combined with shrubs and trees they can create the illusion of a green space rather than a parking lot. Opportunities to create smaller vest pocket parks or green spaces that provide respite from hardscapes in the Town should be explored-encouraged as development and re-development occur over time.

For many years, Ocean City has been the recipient of the National Arbor Day Foundation’s Tree City USA Award and the MD P.L.A.N.T. Award administered by the Maryland Community Forest Committee. The Town of Ocean City Beautification Committee is appointed and commissioned by the Mayor and City Council to help determine the needs of the town for the planting, maintenance, and protection of all trees on the streets and in the

parcs of Ocean City and to make referrals for the enforcement of the landscape code. They are, also, the appeals board for city landscape code violations.

The Beautification Committee works in partnership with the Department of Recreation and Parks to bring the beauty of the trees and color to our barrier island town. Each year the Ocean City Beautification Committee searches for properties which are attractive, well maintained and pleasing to the eye. To show appreciation for this effort in civic pride, the Committee and the Mayor and City Council present Beauty Spot Awards in eight categories.

A concern for improved building design has been voiced by the town's citizens and officials, and much of the development community has responded with more imaginative design in recent years using variations in bulk, roof lines, and attention to fenestration and color. A noteworthy achievement toward improved design is the Downtown Design Guidelines, developed by the Ocean City Development Corporation in 2002~~3~~ followed by the Upper Downtown Design Guidelines in 2006. The guidelines are now being successfully applied to all structures in the Downtown area located between the Inlet and ~~3<sup>rd</sup>~~-17<sup>th</sup> street. The guidelines cover a number of aspects of design including site design, bulk, scale, signage, architectural design and landscaping. Recommended treatment of both private and public improvements is provided. Recommendations for public improvements extend to include treatment of the design in investments in public improvements, including sidewalks, street furnishings, landscaping, public spaces, public parking, Town gateways and waterfront vistas and public art.

This recent accomplishment has provided momentum toward a more pleasing visual environment. ~~Design guidelines are now being considered for additional areas of Town, in particular areas of the extended Downtown located between 3<sup>rd</sup> and 18<sup>th</sup> street. Development of design guidelines that encourage protection of the distinct character of this area would clearly continue the progress that has been made.~~ The keys to the success of the design review process to date include:

- A clearly written and illustrated design guide which presents standards and examples of what is desired, and which permits design flexibility.
- A partnership process of administering the Downtown and Upper Downtown design guidelines between the Town and the Ocean City Development Corporation (OCDC).
- Incorporation of advisory design guidelines that apply to the entire town into the Site Plan review process and approval by the Planning and Zoning Commission.
- Political and popular support of the objectives of the process.

The proliferation of signs made possible by the town's ~~overly~~-permissive sign regulations has caused a general degradation of Ocean City's appearance in past years. While signs are

important to the success of business, the excess permitted became a blight on the environment, a hazard to vehicular traffic, and a detriment to effective advertising because one sign cannot be seen among the many.

The sign regulations have since been reviewed and amended to reduce the number of signs, better regulate their location, and eliminate more obtrusive signs. The Downtown Design Guidelines establish provisions for better management of signage in the Downtown area. These provisions also recommend treatment for lighting, parking, fencing and screening which are important elements of the ~~visual~~built environment.

~~Visually,~~ Ocean City has made substantial progress in the quality and variety of both ~~in~~ public and private developments. In many cases, the quality of the natural environment enhances the visitor experience and success of individual businesses. The design review process and continued landscaping will ensure further progress. A more restrictive sign ordinance and control of outdoor displays will also contribute to a successful formula for the continued improvement of its visual image. See Chapter 8 Downtown / Redevelopment for additional strategies for the built environment.

## Energy Conservation

While much progress with energy conservation measures has been made in the areas of housing, transportation, and production of goods and services, nationally the need for energy conservation ~~has been progressively de-emphasized~~continues to be emphasized along with utilization of green energy sources. ~~This trend should be reversed;~~Conservation efforts should be supported and energy efficiency should be factored into all public construction and purchases including consideration of energy saving vehicle purchases.

In 2015, Ocean City was successful in bidding a 3 year contract for electricity supply and saved money while achieving a goal of 25% energy from sustainable or renewable sources. Three electric vehicle charging stations have been approved in recognition of the increasing number of EV visitors, and in response to a grant to install a TESLA compatible station.

Maryland is currently reviewing two applications for an off-shore 120 MW wind energy facility. This offshore wind farm is to be located more than 17 nautical miles off the coast of Maryland and interconnecting with the existing Delmarva Power 138-kV transmission system in Ocean City, Md. The Wind Farm will be located in the offshore wind energy area designated by the Department of Interior as block OCS-A 0482 and could be in-service by the end of 2022.

Night lighting in the resort has been affected by the recent shift to LED light fixtures. While potentially an energy and cost saving measure, it has generated increasing numbers of complaints regarding the glare and intensity of the LED light with impacts to residential properties. Additional study and installation standards may be required to manage this change in the future.

## Environmental Threats

Table 7-1 displays major environmental threats to Ocean City and nearby waters. Along with each potential threat are listed potential impacts and a qualitative assessment of each item's

severity and scope. Definitions for key terms used in the table including “Potential Severity”, “Scope”, and “Managed/Regulated” are as follows:

Potential Severity

- ~~\* Low Poses low probability of immediate threat, but should be monitored for long-term consequences.~~
- ~~\* Moderate Direct environmental effects have been detected. Generally requires mitigation effort to prevent further decline.~~
- ~~\* Major When it occurs, a severe disruption of habitat or environmental quality can be expected.~~

Scope

- ~~\* Local Effects are generally proximate to occurrence or site of activity.~~
- ~~\* Widespread Effects disburse or activity is pervasive.~~

Managed/Regulated

- ~~\* Yes Activity is regulated and/or examined for its environmental impact.~~
- ~~\* No Not monitored for environmental impact.~~

The items in the environmental threat table can be classified in three groups. One group are threats which have occurred or are on-going sources of environmental degradation which have control measures in place. These items require continued enforcement and monitoring of compliance. Examples of this class include sewage treatment plants, dredging, land alteration, industrial waste treatment, and automobile exhaust.

~~The second group is comprised of potential problems resulting from accidents or other specific events. Items in this category include chemical, toxic and radioactive material spills, oil tanker spills, tanker truck spills, natural gas leaks, nuclear war.~~

~~The third group includes those threats which are on-going but do not have an effective system of control mechanisms or rely on voluntary compliance. Some examples are agricultural runoff, development in aquifer recharge areas, boating, and climatic warming.~~

## Summary

Overall, Ocean City's environment is of high quality for an urbanized area. Air quality is excellent. The beaches are cleansed by the tides and by the City. Although some degradation has occurred, the bays and ocean retain much of their original quality. It appears the major challenge confronting Ocean City's environment centers on maintaining the quality and resilience of beaches, waters, and remaining wetlands that sustain the tourism economy and add value to the built environment.

Future coastal bays quality will depend on close cooperation among all levels of government. The Maryland Coastal Bays Program is a joint effort involving Ocean City, Worcester County, the State of Maryland, and the Federal government. It was initiated in 1996 to develop a plan for the protection and preservation of the Coastal Bays. The Town should continue to actively participate in the Program, and implement the recommendations of the Program as they are developed over time.

Beach, Inlet and barrier island preservation will require cooperation among property owners, Ocean City, Worcester County, the State and the Federal government. The USACE projects including Beach Replenishment, Inlet Management, and Sand Bypass Project isare a long-term commitment to maintaining Ocean City's Maryland's most valued coastal resort assets.

## Recommendations

### Air Quality

- ❑        State and Federal monitoring of air quality should continue to ensure its quality        remains high.
- ❑        Town officials should stay informed of the acid rain issue and lobby state and federal        agencies for appropriate actions to ensure acid rain does not disrupt the ocean and        bays' ecology.

### Water (Off-shore)

Ocean City's wastewater system should continue to provide sufficient capacity and \_\_\_\_\_ treatment so the ocean outfall does not degrade ocean waters.

~~■ \_\_\_\_\_~~

~~✘ \_\_\_\_\_ Off-shore disposal of dangerous and toxic chemicals should be tightly regulated to \_\_\_\_\_ prevent damage to Ocean City's waters and shores.~~

~~✘ \_\_\_\_\_ Off-shore dumping of waste should be prohibited.~~

■ \_\_\_\_\_ Off-shore drilling for oil and gas should be ~~tightly regulated~~ opposed to prevent environmental \_\_\_\_\_ damage and impact to the coastal resort economy.

~~✘ \_\_\_\_\_ Ocean City should actively participate with MARCO and the Regional Planning Body to implement the Mid Atlantic Ocean Action Plan.~~

### Coastal Management

■ \_\_\_\_\_ Threats to beach stability include major storm events, long term coastal erosion and potential changes in federal coastal management on Assateague Island. New adaptation —measures will be required to maintain the Ocean City Inlet and protect downtown —areas from storm surge and tidal flooding. The Ocean City Municipal Airport will be ———increasingly at risk from unmanaged overwash conditions on Assateague Island —similar to those experienced during the 1998 nor'easter storms.

■ \_\_\_\_\_ Continued management of the Ocean City Inlet is critical to maintaining water quality in the coastal bays, controlling the effects of storm surge, maintaining navigable channels and sediment flow to the ocean shoreline.

### Water (Coastal Bays)

~~✘ \_\_\_\_\_ Disposal of sewage treatment plant effluent should be limited by the capacity of the \_\_\_\_\_ bays to receive the nutrients and process them without reduction of water quality.~~

~~✘ \_\_\_\_\_ Existing emergency sewage treatment plant discharge or overflow to the bays should be closely monitored to \_\_\_\_\_ determine compliance with discharge standards and permit requirements. These \_\_\_\_\_ standards should be strictly enforced.~~

~~✘ \_\_\_\_\_ Stormwater should be controlled on-site to reduce negative water quality and flooding \_\_\_\_\_ impacts. Returning stormwater to the soil should be a priority. Requirements for \_\_\_\_\_ infiltration should be included in repaving requirements. The use of pervious pavers \_\_\_\_\_ should be studied and, if found to be advantageous, permitted where appropriate.~~

~~✘ \_\_\_\_\_ The Maryland Coastal Bays Program should be supported in its efforts to study the \_\_\_\_\_ bays and recommend management options to maintain and improve their quality. As \_\_\_\_\_ the program continues to evolve the Town should implement program~~

\_\_\_\_\_ recommendations that benefit water quality, ~~and~~ wildlife habitat and water based recreation.

### Groundwater

✘ \_\_\_\_\_ Well drawdown and recovery levels should continue to be monitored to determine if \_\_\_\_\_ pumpage levels are appropriate in specific aquifers.

✘ \_\_\_\_\_ The State and surrounding counties should adopt controls to ensure that no \_\_\_\_\_ inappropriate development occurs in aquifer recharge areas to protect the integrity and quantity of Ocean City's water supply.

✘ \_\_\_\_\_ Every effort should be made to monitor groundwater quality and to minimize the \_\_\_\_\_ threat of saltwater intrusion to potable water supplies.

### Land

✘ \_\_\_\_\_ Wetlands should be preserved, as they are critical to water quality, provide valuable \_\_\_\_\_ wildlife habitat, provide flood protection, and serve as nursery for virtually all \_\_\_\_\_ important finfish and shellfish. The federal, state, and local governments should \_\_\_\_\_ continue to protect them.

✘ \_\_\_\_\_ The Beach Replenishment Program, Navigation channel dredging, and Inlet sand bypass projects should be maintained to provide storm protection and recreational use.

✘ \_\_\_\_\_ No construction or structures should be permitted on the reestablished primary dune \_\_\_\_\_ and beach.

✘ \_\_\_\_\_ Controlled pedestrian access over the reestablished dune should be strictly enforced.

✘ \_\_\_\_\_ Private seawalls should be generally discouraged as they can accelerate beach erosion.

✘ \_\_\_\_\_ The beaches should always remain accessible to the public, and more public access to \_\_\_\_\_ the bays should be provided.

### Fish and Wildlife

✘ \_\_\_\_\_ The town should encourage landscaping for wildlife and provide resource materials \_\_\_\_\_ and staff assistance. This effort should be integrated into the town's beautification \_\_\_\_\_ efforts.

✘ \_\_\_\_\_ The public should be educated as to the harmful environmental effects of plastic litter.

Restrictions on the use of plastic in items that prove to be eventually detrimental to the environment may be necessary.

Habitat enrichment programs, such as planting submerged vegetation, should be investigated for their potential for improving the productivity of the bays.

Appropriate measures should be used to protect rare, threatened and endangered species.

### Solid Waste

The recycling program should be expanded whenever possible to reduce the waste stream.

Compaction of trash by the public and private sectors should be encouraged to reduce volume and prolong the lifespan of the landfill.

### Energy Conservation

The town's energy consumption patterns should be monitored and cost effective opportunities should be identified to institute public and private conservation measures.

The town should cooperate with the state and other agencies in disseminating energy conservation information.

The energy efficiency implications of the town's purchases and operations should always be considered.

### Visual-Built Environment

A town-wide urban design, beautification, and landscaping plan should be developed.

The Town should continue to administer and enforce The Downtown Development Guidelines in cooperation with the Ocean City Development Corporation (OCDC). These guidelines cover a number of aspects of design including site design, bulk, scale, signage, architectural design and landscaping.

Design standards appropriate to other specific town neighborhoods should be developed and an appropriate design review processes for development of all types should be instituted.

Recommendations provided by the Ocean City Development Corporation for public

\_\_\_\_\_ improvements should be implemented to the extent practicable. These include  
\_\_\_\_\_ consideration of the design treatment future investments in public improvements,  
\_\_\_\_\_ including sidewalks, street furnishings, landscaping, use of public spaces, public  
\_\_\_\_\_ parking, and public art as well as protection or enhancement of waterfront vistas and  
\_\_\_\_\_ town gateways.

✘ \_\_\_\_\_ A landscaping program for existing development should be developed. Repaving of  
\_\_\_\_\_ existing parking lots is an excellent opportunity to achieve this and improve on-site  
\_\_\_\_\_ stormwater management.

✘ \_\_\_\_\_ Sign controls should be strengthened to better regulate the proliferation and  
\_\_\_\_\_ appearance of signs.

✘ \_\_\_\_\_ A systematic program to bury utility wires should be developed and implemented.

# CHAPTER 8: Downtown Development

## Redevelopment/Reinvestment

(text only)

### Introduction

There has been considerable discussion over the past several decades about Downtown Ocean City. In the 1996 Comprehensive Plan there was extensive commentary on improvements needed in the area, the lack of economic growth, the appearance of the area and the general lack of direction on the part of both the Town government and the private sector. ~~The 1996 Plan acknowledged that most of the concerns were valid: there was no “plan” for the downtown at that time and implementation of past plans to that point had been sporadic and without continuity. Since then there has been dramatic growth in the downtown even as underlying problems remain.~~ In response, the Mayor and City Council supported the incorporation of the Ocean City Development Corporation to actively promote redevelopment and reinvestment in the upper and lower downtown areas. The success of this effort is a good model for other defined areas of Ocean City in the future.

With the 2016 update, this chapter of the plan will be expanded to include all areas of Ocean City for consideration of how best to manage future development in the context of existing neighborhoods and districts. The 2014 report of the Maryland Sustainable Growth Commission titled ‘Reinvest Maryland: Accelerating Infill Redevelopment & Community Revitalization’ has been used as a reference to identify successful practices already underway as well as new ideas for the future.

### Goal:

To plan for future development conditions and make public investments in infrastructure, encourage renovation of older structures, and promote redevelopment of properties that continue the traditions and architectural character of Ocean City, Maryland.

Objectives: In order to achieve the ~~population characteristics~~ redevelopment goal, the following objectives are adopted:

- 8.1 Model Block – Interim downtown parking will lead to increased activity and interest in redevelopment opportunities in the Model Block.

Marketing for private investment in long term revitalization and mixed use building that will support and encourage additional private investment.

8.2 Sunset Park – Program special events and activities throughout the year to attract visitors to the downtown area and encourage connections between bayside and boardwalk.

8.3 Renovation – Encourage the continued renovation of older structures throughout Ocean City, working with design guideline and grant program assistance where possible.

8.4 Redevelopment – Allow and encourage infill development and revitalization of properties while protecting established neighborhoods and districts from adverse impacts.

## Overview of Downtown Development Issues

The 1996 Plan noted that the Boardwalk seemed to be thriving as strongly as ever, and the Bayfront had become a popular location for restaurants, bars and marinas. However, the core area between the Boardwalk and the Bay was continuing to struggle. The physical appearance of the area was improving due to public investment and private efforts; however, there still seemed to be a lack of initiative on the part of many property owners to improve their properties. The Plan recounted the long series of planning and zoning efforts focusing on the Downtown area, including the following:

*Comprehensive Plans for Ocean City* (1968, 1978 and 1989) contained general goals and objectives and specific policy and action recommendations, generally referring to special efforts that should be made to retain the unique character of the area:

- Create downtown commercial and historic districts to encourage renovation and retention of historical characteristics.
- Preserve architectural character.
- Establish a Historical Zoning District or zoning provisions to preserve the area.
- Create an “old Town Commercial District” to encourage revitalization of older buildings in their present locations.

*The Downtown Revitalization Study* (1980) was a project-oriented follow-up to the general recommendations of the Comprehensive Plans. It offered numerous recommendations for public and private projects and actions, some of which have been accomplished either totally or partially including:

- Entry Park.
- Underground utilities.
- Street equipment and tree planting.
- “Jetty Park” improvements.
- Worcester Street Parking lot improvements.
- Public purchase of land for additional parking.
- Relocation of Town’s Public Works functions to alternate locations.

Consideration of *Historic Area Zoning* (1984) ended when the Mayor and City Council decided not to implement this technique. However, the Town formed an Old Town Committee which presented recommendations aimed at maintaining the character of the Downtown and improving its economic and social vitality. Many of the recommendations were addressed in the Comprehensive Rezoning Study (1986) which attempted to encourage the revitalization of Downtown while retaining the special character and flavor of the area. ~~However, public reaction was so negative that the Planning and Zoning Commission decided to send no recommendation to the Mayor and City Council. Interestingly, a review of the recommendations of the study shows that they are quite similar to those adopted later in the 1989 Comprehensive Plan for Ocean City.~~ Building height and density regulations were similar to those adopted in the Comprehensive Plan. No changes were proposed in the treatment of nonconformities.

*The TOPICS (Traffic Operations Program to Increase Capacity and Safety) Study* (1975) proposed traffic improvements in the Downtown area. The construction of a multi-level parking structure for approximately 500 cars was considered but eliminated as a viable alternative due to construction cost (\$1.5 million in 1975) and the potential to create severe congestion on adjacent streets. The Study did recommend the construction of a parking facility at the Worcester Street lot consisting of grade-level parking and one level of parking above-grade.

*The Parking Survey and Financial Feasibility Study (1984)* identified a parking shortage of approximately 550 spaces in the study area (N. Division Street to the Inlet, ocean to Bay) and recommended a parking structure at the Worcester Street lot. The structure would be planned for 850 to 900 spaces with an initial phase containing about 440 spaces. The projection was that the structure would lose money initially but become self-sustaining within 5 years. The construction cost for the first phase was estimated at \$3.4 million, with first-year operating costs of \$74,000.

In the *Ocean City Old Town Revitalization Study (1992)*, the State Department of Housing and Community Development, through the Maryland Main Street Program, recommended a two-year framework of public and private improvements. The recommendations included creation of an Ocean City Revitalization Office and a Commercial District Management Authority. The new organizations were to be tasked with creating a small historic district for the “Olde Towne” area, developing a retail marketing strategy, creating design standards and publishing a newsletter. There were specific project recommendations focusing on a Talbot and Somerset Streets link with the boardwalk to serve as a pedestrian gateway to Olde Towne, a northern beach bus station and development of a “major attraction” in Olde Towne. There was also the intent to create a low-interest loan pool to finance improvements managed by the enactment of the Design Standards Ordinance.

Throughout the 1980’s and ‘90’s the City ~~had~~ made significant investments in the Downtown, and continues to do so today. The list below (Table 8-1) identifies ~~ed over \$18~~

million in public improvement projects that had been accomplished following the 1980 Downtown Revitalization Study.

Table 8-1

~~In spite of these investments there was still no strong commitment to developing an ongoing improvement program that could be followed from year to year with clear goals. According to the 1996 Comprehensive Plan, “the history of the Downtown revitalization in the 1980’s was stop and start, hit and miss, with no clear plan.”~~

The 1997~~6~~ Plan recommended the following:

- 1.——The Mayor and City Council should commit to a comprehensive, long-term revitalization program. The program should be based on the Main Street concept which has proven to be a successful, implementable strategy.
- 2.——The Mayor and City Council should create the position of Main Street project manager (or Downtown Improvement Manager). This should be a full-time employee with the sole responsibility of developing and implementing the Downtown Revitalization Program.
- 3.——The Mayor and City Council should commit to a program budget for a minimum of three years.
- 4.——After committing to the first three recommendations, the Mayor and City Council should apply to the “Main Street Maryland Program” and become eligible to receive assistance from the State in downtown revitalization efforts.
- 5.——The Mayor and City Council should continue to make public improvements in the downtown, including Boardwalk improvements and underground utilities.
- 6.——Efforts should continue to develop a “major attraction” downtown, such as an aquarium, IMAX theater, museum or urban entertainment complex.

It concluded: “The “shotgun approach” has not had great success in the past; if the Town is truly serious about improving the Downtown, a planning-oriented program with consistent support from the Town and local business owners is needed.”

The *Ocean City Downtown Village Plan of Action* was prepared in 1999 with the assistance of the International Waterfront Group. The purpose of the plan was to set forth a specific set of proposals and projects to be implemented in the short and long terms.

The Action Plan presented an ambitious three-phased action program. Several years ago the City took the important step of establishing an Inlet Parking Lot Fund from which dedicated proceeds (roughly \$300,000 per year) support the activities of the Ocean City Development Corporation (“OCDC”), the entity that now leads the downtown revitalization effort. The organization’s work plan has evolved over the past several years and its 2004 newsletter contains the current version of the work plan.

Table 8-2

## Current Status

Following up on the 1996 Comprehensive Plan the City ~~has~~ made the downtown the focus of economic development efforts. The City organized the Ocean City Development Corporation (OCDC) as a non-profit charitable organization with the power to sell tax credits and accept tax-deductible contributions. This organization has responsibility for implementing the recommendations of the 1999 Downtown Action Plan.

The Action Plan presented an ambitious three-phased action program. Several years ago the City took the important step of establishing an Inlet Parking Lot Fund from which dedicated proceeds (~~roughly approximately~~ \$250,300,000 per year) support the activities of the Ocean City Development Corporation (“OCDC”), the entity that now leads the downtown revitalization effort. The organization’s work plan has evolved over the past several years and its 2016 newsletter ~~contains the current version of~~ presents several ongoing projects within the current work plan.

There has been significant action on priority projects over the past several years. Current status of key issues is the following:

- Parking structure: Development of additional parking continues to be a leading issue. The plan to build at the Worcester Street lot, replacing the 175-car surface lot, is still on the table. ~~Last year T~~the City ~~recently~~ hired a consultant to conduct a transportation study and evaluation of parking structure feasibility that has not been advanced further. that is addressing this and other transportation issues, and that work is nearly complete.
- Park and Ride Lot: Located in West Ocean City, the Park and Ride Lot provides remote parking for 700 spaces along the Route 50 gateway corridor with bus connections to the downtown transit station.
- Wrap-around Boardwalk: the concept of continuation of the Boardwalk along the Inlet and bayfront is still a priority. A conditional zoning map amendment of the former Cropper Concrete property was approved in 2016 including a public use easement to allow extension of a bayside boardwalk north of the Route 50 bridge.

- Sunset Park: the construction of Sunset Park has been one of the goals-significant accomplishments of the Ocean City Development Corporation since its inception in 2000. Sunset Park is designed as a linear park along South Division Street between Philadelphia Avenue and the Bay. This waterfront park ~~will~~ contains an entertainment ~~stage and provide a~~ venue for small to medium sized special events. The project ~~will~~ includes seating areas, decorative lighting, landscaping, a signature entrance fixture and a viewing area to watch the magnificent Ocean City sunsets. Sunset Park ~~will~~ also includes elements reflecting the railroad bridge that once entered Ocean City at this location. The restrooms and storage building ~~will~~ adhere to railroad architecture. Original train station bricks from the old downtown train station in Ocean City ~~will-behave been~~ included in the design construction of this ~~new~~ park. Construction ~~is-scheduled to start in August, 2005 was completed in 2006.~~
- ~~Model Main~~ Street Program: Ocean City was designated a Main Street Maryland community in 2012. The OCDC administers this program, the streetscape portion of this program has been completed along Baltimore Avenue up to 2<sup>nd</sup> Street and the City created a Merchant's Association two years ago to work on bringing in the correct business encouraging a complementary mix of Downtown businesses. mix.
- ~~Facade Improvement Program: the State-Maryland~~ Department of Housing and Community Development ~~has~~ funded the Community Legacy Program is program grants to encourage private reinvestment in downtown Ocean City. Over 185465 buildings have been renovated under the program with a total investment of over \$5.7 million. There have been over ten projects completed and there are another ten yet to be done. This grant program, which pays up to \$10,000 for half of a facade renovation cost, has made grants of \$80,000 that have leveraged total investment of \$500,000. There have been five facade projects on Somerset Street, which is now a "semi-pedestrian" street.
- Green Building Initiative: This business assistance program, roof replacement program, and property fencing are also administered by OCDC.
- Model Block Program: The Town of Ocean City and OCDC have assembled most of the block between Somerset and Dorchester Streets between S. Baltimore and S. Philadelphia Avenues in order to encourage a sizable revitalization project called the Model Block. An interim parking lot is in use while the project is marketed. The envisioned mixed use development will benefit the downtown area with increased pedestrian activity and economic vitality. the City owns about a third of the block and efforts are underway to secure more of the property.
- Downtown Design Standards: the standards, approved in November, 2002, are legally in place. They provide guidelines-requirements for signage and architecture. The Downtown Development Corporation OCDC Downtown Design Review Committee gets involved in is responsible for reviewing site plans and

~~enforcing-recommending~~ design standards in cooperation with the Ocean City Department of Planning and Community Development. Limited design standards were codified in 2006 for the Upper Downtown Area. However there have been new projects in the downtown that work against street activation and other good principles of urban design.

- Public Art Program: The City sees art work as a way to attract more people to the downtown. There are ~~manyfour~~ projects completed ~~andor~~ underway:
  - Marlin sculpture with water features.
  - Osprey sculpture at 4<sup>th</sup> and Philadelphia.
  - Wall mural of historic postcards.
  - Utility box paintings (25ten boxes have been painted)
  - Dolphin Sculpture at the Route 90 gateway

Table 8-3 summarizes the current work program.

~~According to the director of t~~The OCDC ~~current issues that are not formally in the work plan but are~~works on a number of important long term projects includinge the housing of seasonal workers. Every summer season Ocean City welcomes~~There are~~ roughly ~~2,700~~3,000 foreign workers (approximately 20 percent of the seasonal workforce), ~~mostly from Eastern Europe, earning \$85-100 per week and many of whom living~~ in and around the downtown. ~~Two years agoIn the past, the Chamber of Commerce recommended construction of a 500-room dormitory to house a portion of this population and this concept is still under study. Recently~~T-the OCDC took the lead in a project to meet workforce housing needs by relocatinge and restoring an old structure, the Tarry-A-While Guest House,~~and this will~~which nowFor its ninth year, OCDC has provided~~some space~~seasonal housing for summer student workersOcean City seasonal employees as well as office space for its operations~~as well as office space for OCDC itself.~~ OCDC grant programs administer State funds which can assist new mixed use projects containing an employee housing element.

There has been notable success in attracting new development to the downtown. The redevelopment of the Belmont Towers property on the Boardwalk at Dorchester Street ~~will be a major improvement~~has provided an important example for future redevelopment and a test of the design review process. The fact that it includes a mix of retail and residential uses is very positive.

## Redevelopment/Reinvestment

The 2014 report of the Maryland Sustainable Growth Commission titled ‘Reinvest Maryland: Accelerating Infill Redevelopment & Community Revitalization’ provides new State guidance on how to identify places where growth, revitalization and resource conservation should occur, and how existing communities may best work together with State programs to encourage and manage new development. In many ways, the OCDC has pioneered this cooperative effort within the downtown areas.

For the purpose of this chapter the following terms are defined:

**Infill** – the development of vacant parcels within previously built areas.

**Redevelopment** – building or rebuilding on parcels that have been previously developed, with redevelopment aiming for a higher and better use of the area for the community and landowner.

**Revitalization** – instilling new value and vitality into a community through infill and redevelopment or other activities such as building reuse and renovations, façade improvements, beautification efforts, small business loans, and special events.

## Conclusions and Recommendations

OCDC ~~continues to have~~ has the strong support of the Mayor and City Council and the business community, and has made significant progress on its initial agenda. ~~Now there is a need to reevaluate~~ The current work plan ~~has been~~ and updated ~~it~~ with additional priorities and projects. Many of the long-term issues are still unresolved and present a challenge to the ongoing revitalization process:

- Parking is still a major issue, as it has been for at least thirty years. OCDC has plans for a parking structure on the Worcester Street site. This project should proceed in some form. In fact it offers a larger opportunity to construct a garage with a mixed-use development, including some retail space on the ground and housing in air rights.
- Proximity to the Inlet and low ground elevation creates periodic challenges for access, stormwater utilities, and first floor retail space during storm and seasonal high tide events.
- The US Coast Guard Station is an important element of the downtown area which should be supported by any land-use change incorporated into long term redevelopment plans as both a key property and important public service resource.

- Diversity in programmed entertainment ~~and will complement~~ the range of traditional boardwalk attractions ~~is still lacking~~. There is a need for ~~a theater or~~ another type of destination entertainment venue and there may be a place in the downtown for this type of facility.
- Ongoing programs such as ~~the construction of~~ Sunset Park, the continued development of the wrap-around Bayfront Boardwalk, Main Street streetscape improvements to N. Baltimore Avenue, and the Model ~~Street-Block~~ program continue to be important and need long-term support. Completion of construction will mean the beginning of a continuing process of maintenance and improvement.
- OCDC can become more proactive in development by leveraging public properties and development opportunities to expand the range of attractions and promote mixed-use projects that add vitality to the area. The Main Street Program will continue to ~~relies on a manager for~~ promote special events and marketing that support downtown businesses.
- Meeting the need for housing for seasonal employees will represent an ongoing challenge.
- Opportunity to expand the Upper Downtown Design Overlay District to include area within the Sustainable Community program limits up to 33<sup>rd</sup> Street.

The progress that has been made in downtown improvements since the 1996 Comprehensive Plan suggests that focused actions have produced many tangible results. In summary, the City has a clearer vision for reinforcing the identity for its downtown and other sites for redevelopment and reinvestment. Accomplishing that vision will require substantial effort and an ongoing commitment of resources for many years to come.

# CHAPTER 9: Plan Implementation (text only)

The preceding plan document and maps provide a new and more focused direction for Ocean City. New initiatives for improving the quality of life in our resort, an emphasis on fostering better site planning and design characteristics in new structures as re-development occurs over time, and meeting the goals of the Annotated Code of Maryland Land Use Article, as amended, Maryland State Planning Act of 1992 and Maryland Smart Growth initiatives established in 1997 are but a few of the plan's many features.

The plan's purpose is not necessarily to produce a major diversion from the past, but rather to fine tune and guide future development and services to enhance Ocean City's vitality as a resort and a community. Many opinions have been expressed as to how to achieve this objective. Of necessity, the plan represents a blending and a compromise, the result of which must represent a balance between individual property rights and the overall community's welfare. The Plan update in 2016 generally incorporates current information into each chapter without proposing major changes. A full revision is scheduled in 2022 following the release of 2020 Census data.

## Goal:

To utilize the Comprehensive Plan as a reference and guide for local government decision making, and to identify projects which help to advance the goals and objectives adopted with the Plan. Action items will be evaluated with the annual report to the Maryland Department of Planning and updates will be completed in accordance with a 10 year cycle following release of new census data.

Objectives: In order to achieve the plan implementation goal, the following objectives are adopted:

- 9.1 Integration of Comprehensive Plan goals and objectives with all related plan documents such as the Hazard Mitigation Plan, Tourism Master Plan, Capital Improvement Plan, Recreation and Parks Master Plan, Special Events Plan, etc.
- 9.2 Achieve measurable progress on identified projects and activities
- 9.3 Initiate small area planning as a tool to define unique neighborhood or district strategies that will meet specific needs or goals

Planning without implementation is merely an exercise. Implementation will require a variety of public and private organizations and individuals to take action. Attempting implementation without broad based public support would produce limited results.

The plan strives to maximize the long-term benefits to the community. Such a perspective requires foregoing some short-term gains. Ocean City faces a future filled with shifting elements: the federal tax structure, changing vacationer expectations and needs, ~~and~~ a more competitive economy and a challenging environment. The year-round population ~~continues to grow~~ has stabilized and may grow or decline in the future. However, physical limitations on new development will slow the historically steady growth in the tax base, thus requiring additional resources to maintain the high level of service which the town has historically provided.

~~In a positive vein,~~ Prospects for tourism ~~remain~~ are excellent. Both population and incomes continue to grow substantially in the areas from which visitors to Ocean City come. Mobility has steadily increased with improved road and bridge access and personal vehicle ownership.

Challenges abound, but Ocean City's proven ability and resourcefulness will measure up to the task. Along with experience, determination and a positive attitude, several planning tools are available to prepare for the future. Comprehensive planning has been the first to be put to the task. Next the implementation tools which will carry out the plan must be addressed.

The Land Use Article of the Annotated Code of Maryland Planning Act of 1992 encourages the streamlining of regulatory mechanisms and the use of flexible development regulations to promote innovative and cost-saving site design and protect the environment. It has been the policy and practice of the Town to streamline regulations whenever possible, providing such streamlining is not a detriment to public or environmental interests that must be protected. The Town should continue to take advantage of opportunities for streamlining regulations, as long as the public interest is maintained.

The Town has already implemented several innovative regulatory techniques, including overlay zones, transfer of development rights, and the use of special criteria for special types of development. These techniques offer flexibility and greater discretion which may lead to better development. Other tools such as non-conformity of minimum parking criteria is often used to encourage reinvestment in older structures, however the cumulative impact of this incentive should be evaluated.

Outlined below are the approaches for implementing the comprehensive plan. Implementation begins with the Mayor and City Council through aligned priorities in the Strategic Plan, and through funded projects of the Capital Improvement Plan. Traditional methods, such as zoning ~~and~~ subdivision regulations and capital improvements programming, have withstood ~~legal~~ court challenge and proven to have practical value in directing private investment in the community. The plan recommends their continued use with some modifications.

## Strategic Plan

The Strategic Plan identifies and establishes short term priorities for projects and actions

which often involve multiple City Departments working together to manage and improve the ongoing operations and services Ocean City provides to its citizens and visitors. Figure 9-1 illustrates the 2016 Strategic Plan summary. A full copy may be viewed on the City Manager's web page.

## **Figure 9-1**

### **Capital Improvement Planrogram**

The Capital Improvement Planrogram (CIP) identifies and establishes long term priorities for ~~the~~ capital improvements in the town's infrastructure. The town annually prepares a CIP and should use it to implement the capital recommendations of this plan. This plan should also be used to prepare-inform future CIPs.

Briefly, the CIP identifies specific projects, their cost, and sources of funding. Each project is slated for funding in one or more of the program's five future years. Estimates of future income can be developed to determine needs for financing. This process helps elected officials and staff to anticipate major projects, and allows time for arranging site purchase and favorable financing terms.

Projects identified for the current CIP planning period (2016-2020) are incorporated by reference into the Comprehensive Plan. Selected priorities for CIP implementation which expand or change existing land use are identified below:

#### Public Safety

- Mid-Town Fire Station (proposed relocation of Station 3 from 74<sup>th</sup> Street to existing 65<sup>th</sup> Street Public Safety Building Complex)

#### General Public Works

- Boardwalk Tram Facility (Whiteside) Relocation to St. Louis Avenue between 2<sup>nd</sup> and 3<sup>rd</sup> Streets, conversion of existing site to public parking
- Potential Bus Transit Center relocation to 4<sup>th</sup> Street between Baltimore and Philadelphia Avenues (consolidation with Post Office parcel)

#### Municipal Facilities

- 65<sup>th</sup> Street Municipal Campus Plan with new employee parking, transit bus maintenance and public safety support facilities
- Potential relocation of Keyser Point Road Public Works Yard in Worcester County

#### Highways and Streets

- Potential southern extension of Philadelphia Avenue transit bus lane from 17<sup>th</sup> Street south to 4<sup>th</sup> Street.

#### Recreation and Parks

- Phase 2 construction of a pier at Sunset Park

### Environmental

- Construction of a new double lane bayside public Boat Ramp at 64<sup>th</sup> Street with channel dredging

### Technology and Communications

- Installation of telecommunications equipment at new 1<sup>st</sup> Street Water Tower

### Convention Center

- Phase 3 Expansion of Hall A-B (30,000 square feet to the north)
- Life Saving Museum Elevator and Exit Stairs

### Airport

- Taxiway A relocation (60 feet north of current location)
- Hanger K 3 bay expansion per approved master plan
- Combination aircraft hangar and commercial office building within long term parking lot

### Water

- Construction of new 1 million gallon water tower at 1<sup>st</sup> Street and St. Louis Avenue, with co-located utility services, removal of existing water tanks at Worcester Street and 15<sup>th</sup> Street.
- Proposed water treatment plant at 66<sup>th</sup> Street with raw water line extension from well field at existing 44<sup>th</sup> Street water plant.

### Wastewater

- Future construction of additional clarifiers within the existing wastewater treatment plant facility
- Installation of a structural liner within a section of the Ocean outfall pipe that lies beneath the beach

Other capital improvements within the corporate limits have been identified as a priority for planning, funding and implementation in partnership with others including:

- 
- Mixed Use Downtown Model Block redevelopment with OCDC
  - Downtown Parking Garage funded by a fee-in-lieu or special tax district
  - Expansion of Express Transit Bus Service along Coastal Highway with smart tracking technology
  - Parking Space Management System with smart signs and online technology to maximize use and capacity of downtown/boardwalk parking
  - Expansion of cellular communications networks to support future needs
  - Beach Replenishment and Ocean City Inlet maintenance by USACE
  - Stormwater outfall tide gates for Flood Protection by FEMA/HMGP
  - SHA project to replace the Route 50 bridge along the approved Alternative 5A north parallel alignment

- Future Route 90 dualization~~Dualization~~ by SHA
- Baltimore Avenue streetscape improvements (N. Division Street to 15<sup>th</sup> Street)
- OC Municipal Airport obstruction removal/clear zones

## Land Use Regulations

### Zoning

Zoning regulates the use, intensity, and bulk of buildings, as well as other attributes of development. This regulation is accomplished by segmenting the town into districts, each with its own set of permitted uses and development standards. The recommendations below address the process and content of the zoning code.

- Revise the code when necessary to reflect the location, and development standards and policies of the Comprehensive Plan.
- ~~Establish~~ Modify design guidelines, standards and a design review process to assure that the quality of re-development in various districts within the Town reflect the desired character for each district. This includes standards for buildings and structures, screening and landscaping and provision of open space or public amenities. (See appendices DB and EC to this plan).
- A long standing recommendation of the Plan is to r~~Revise~~ the zoning ordinance to eliminate the current pyramidal zoning framework. The current zoning framework ~~is permit~~sting conversion of commercial uses in areas zoned commercial to condominium residential development and allows potentially non-compatible ~~commercial use in established residential areas. is threatening to limit the~~ Although mixed-use and a range ~~of commercial uses is~~ needed to support neighborhoods in Ocean City, all areas ~~should not be considered equally flexible based on potential impacts to~~ surrounding uses. Revisions to the ordinance should encourage new commercial ~~development with~~limit first floor uses in commercial districts to those that are ~~commercial but may permit residential development above office or retail uses.~~
- Establish measures to preclude displacement of basic commercial retail uses by condominium development in appropriate locations.
- Develop incentives to encourage a healthy mix and distribution of commercial restaurant, retail, and service uses throughout the Town and promote mixed-use development which includes a workforce housing component and to minimize dependence on automobile use.

- Consider limitations on short term rental of single family homes in the R-1 zoning district to reduce incompatible commercial rental use and activities in established neighborhoods.
- Review site plan approval procedures and amend as needed, always looking for ways to streamline the development process while assuring compliance with codes and ordinances. Improve plan submission checklists and pre-application conference procedures.
- Examine permitted uses, and uses requiring special approvals; revise if necessary. Evaluate the best means to transition away from pyramidal zoning in specific areas identified through a small area plan process.
- Reduce off-street parking requirements where appropriate, especially for commercial uses. Otherwise, periodically review parking standards and revise if necessary. Establish modified minimum parking standards for non-conforming structures, significant improvements, change of use, and redevelopment.
- Investigate alternative and innovative approaches to zoning. Determine their usefulness and potential effectiveness for achieving Ocean City's goals and objectives.
- The current Continue the practice of allowing the ~~strictly enforcing~~ outdoor display of merchandise by retail stores ~~should be studied~~, as it contributes greatly to the ~~degraded~~ positive visual image of the Town.
- Combine code requirements for landscaping into a single section.
- Evaluate need for areas of commercial zoning east of Coastal Highway in order to meet basic needs for the ocean block, and minimize pedestrian and vehicle crossings of Coastal Highway.

### Subdivision and Land Development Regulations

Subdivision and Land Development regulations establish design standards, procedures and information requirements for the legal division of land. The purpose is to establish an orderly process which results in parcels complying with the zoning ordinance and having the proper relationship to streets, utilities, and surrounding properties. The subdivision regulations should be reviewed and improved where appropriate. Many of the design standards recommended for implementation through zoning may also be implemented through the subdivision regulations.

- Incorporate minimum standards for NFIP compliance and CRS criteria.

- Develop review standards for ‘land condominium’ divisions.
- Review and adopt minimum checklist and development standards to strengthen existing policies such as 8 foot wide sidewalks in heavy pedestrian use areas.
- Consider a street elevation policy to address areas subject to frequent tidal/storm flooding and the implications for future code revisions.

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## Development Tracking System

The Town’s computerized system (Laserfishe) which is used and maintained to track development and record land uses changes as they occur should continue to be improved. Improvements over time should focus on relating the system to the Towns geographic information system. Such a system should also continue to enhance the following characteristics:

- ~~Use of the computer for storage, retrieval and manipulation of data.~~
- Ability to track a project from site plan review through occupancy.
- Tied to the online permit system so initial construction as well as alterations are automatically recorded.
- Encourage increased use of the new online permit system by property owners, developers and contractors.
- ~~Contain key information about each parcel; for example, present use, number of units, parking facilities, and zoning.~~
- ~~Retrieval should be simple and be used on any of the parcels’ characteristics.~~
- ~~Utilization of the Town’s recently acquired current aerial photography as a component of the geographic information system.~~
- Improve capabilities for inspection/citation/tracking of development activities

## Design Criteria, Standards and Review Process

Across the country, many communities are recognizing the need to exert some influence over the design quality of development. This has demonstrated that a shared sense of

minimum aesthetic values, does exist and can be codified. In many areas the courts have supported this effort; others have found fault with its implementation. The U.S. Supreme Court stated in upholding a landmark protection law:

“We emphasize what is not in dispute... This court has recognized, in a number of settings, that states and cities may enact land-use regulations or controls to enhance the quality of life by preserving the character and the desirable aesthetic features of a City...” Penn Central Transportation Co. V. New York City, 438 U.S. 104, 129 (1978).

Design review does not stop projects or greatly reduce their size; rather it concerns items such as compatibility and the details of development. Some common considerations include:

- Building mass (height, bulk and nature of roof line.)
- Proportions (building’s emphasis on the horizontal or vertical plane.)
- Surroundings (open space and a building’s relationship to neighboring buildings and open space).
- Landscaping (amount and location).
- Facade (location and size of openings, color, texture, offsets and projections to break up mass and add shadow interest).
- Signs and Lighting.

Ocean City has implemented design standards for the Downtown Area in 2002 and Upper Downtown Area in 2006 ~~with~~ a cooperative process of design review including with landowners, developers and the Ocean City Development Corporation. ~~After only a few years in practice,~~ the process seems to be working has worked well and the use of design standards has already improved the quality of new development and re-development within the downtown area.

~~Written review standards and procedures should be established for additional areas, north of the Lower Downtown area.~~ Simplified design guidelines were adopted as Code Section 110-181(c) for other areas of Town in 2012 which ~~also manifest~~ encourages the review of compatible building form as a part of the site plan approval process. Additional recommended infill and redevelopment guidelines were adopted as Appendix D and E of the Comprehensive Plan in 2006. These guidelines should be regularly reviewed, updated and considered for adoption as infill development performance standards in the Zoning Ordinance.

~~Draft standards for consideration are provided in Appendices B and C to this plan. They provide a starting point for discussion and refinement in cooperation with the development community and interested civic organizations of interest. Such standards when adopted as code regulations are intended to allow for design flexibility, even when supplemented with graphic examples for clarity. The standards should be clear enough to allow implementation within the current administrative structure (staff and Planning Commission) or with OCDC assistance.~~

The proliferation of signs, allowed by the town's ~~overly~~-permissive regulations in the past has caused a general degradation of Ocean City's appearance. The sign regulations should continue to be periodically reviewed and amended to reduce the number of signs, and better regulate the location, height, lighting and quality of signs.

## Economic Development

The Town of Ocean City in its entirety is an area of critical state concern ~~as that it is~~ a major economic generator for the state and as a cultural asset. It is probable that more residents of Maryland visit Ocean City than any other recreational area in the state. It is estimated that 80 percent of Worcester County's state tax revenues originate in Ocean City and Worcester County contributes the highest ratio of taxes to benefits in the state. The state, county and towneity should continue to work together to improve Ocean City as a resort. This will benefit the state with added tourism and economic development.

~~The Ocean City Tourism Master Plan is incorporated as a part of the Comprehensive Plan and will continue to serve as the primary tool to promote economic development. New focus areas such as —Special Event Management and Free Family Entertainment will be evaluated regularly to determine unique impacts to existing businesses and residential neighborhoods as the community transitions to a year round resort.~~

~~Critical Infrastructure — see Chapter 4 — Transportation for priority issues related to future gateway road corridor improvements.~~

~~New Industries New industries that expand and complement tourism will be encouraged such as: —Brewery/Distillery, Offshore Wind, and Competitive SportingSport Events.~~

## Environmental Resource Management

- The Beach and Dunes - The Atlantic Ocean beach serves as one of Ocean City's main recreational assets. In addition, it provides storm and erosion protection which reduces risk and preserves life and property. The prime management action should be the continued implementation of the Beach Replenishment Project to improve the recreational and storm protection abilities of the beach.

- A part of the coastal management plan relies on the continuation of a Sediment Bypass Project at the Ocean City Inlet by the US Army Corps of Engineers and the National Park Service. Management of a transitional area at the north end of Assateague Island is critical to maintain a naturalized system of beach, vegetated dunes and bayside marsh for approximately 6 miles to the Maryland State Park.
- Grooming and cleaning of the recreational beach should be continued. Construction should not be permitted on the beach. The beach should be accessible to the public, and, ~~whenever possible, it should be held in trust under~~ public ownership.
- The Ocean and Bay Waters - Water is what makes Ocean City a resort. Ocean City is in partnership with tThe Maryland Coastal Bays Program's to implement a Comprehensive Conservation and Management Plan (CCMP); ~~which~~ This plan focuses on quality of life for the watershed, identifies five priority problems in Maryland's coastal bays: degraded water quality, loss of habitats, changes in living resources, unsustainable growth and development, and poorly planned recreational use of the bays. With a local economy that is heavily dependent on natural resources, Ocean City should continue to make environmental resource protection a priority, including:
  - Protecting sensitive habitats such as wetlands, shady bayside beaches, natural shorelines and native urban landscaping by:
    - Dissuading rip rap and promoting soft shorelines where feasible, and alternative bulk heading materials where appropriate.
  - Reducing water quality impacts from stormwater runoff by:
    - Encouraging the retention of open space and reduce impervious surfaces in site plans;
    - Retrofitting catch basins and dead end canals to treat the cumulative effect of runoff from small properties;
    - Source water prevention (minimize flooding by capturing ~~and~~ storing and infiltrating stormwater to be released at a slower rate later).
  - Reducing threat of development to cultural and natural resources by:
    - Encouraging development practices and design standards that minimize disaster through proper design and construction;
    - Promoting individual business and community evacuation in the event of coastal hazards. Encourage post disaster planning. How will the Town rebuild?
  - Enhancing recreational access, opportunities and infrastructure for the public.
  - Reducing resource impacts from marinas due to pollution, location and design.

- Other Town of Ocean City action items from the CCMP

## Transportation

- Coastal Highway - Coastal Highway is owned by the state and is the key element of Ocean City's land based transportation system. Efforts should continue to maintain and improve the road's capacity and safety. Walk Smart/Bike Smart programs should continue to promote pedestrian and bicycle safety. Median fence installation and lighting from Route 90 to Convention Center Drive will be installed as a phase one demonstration project in 2017.
- A number of recommendations for pedestrian improvements, street system improvements, bus system improvements and use of the Coastal Bays to augment transportation options are provided in Chapter 4 of this plan. These recommendations should be implemented as financial resources permit over time.
- Continue to strengthen the transit system to increase capacity of a fixed road system during peak use periods.

## Citizen Participation

Citizens participate in government in many ways, the most obvious is the electoral process. Legally mandated processes, such as public hearings, are also effective in encouraging public participation. Regular meetings of the City Council, Planning and Zoning Commission, and Board of Zoning Appeals are open to the public and recorded for viewing on the website.

Other public ~~participation information activities sources that should be undertaken or continued~~improved and regularly evaluated are regularly updated -including:

- **Community Newsletter**

The Ocean City Newsletter has proven to be useful for apprising citizens of progress made and objectives for the future. ~~An informed Citizenry~~citizens are important to the operation of local government. The Newsletter should continue to be published and distributed as widely as possible.

- **Annual Report**

The Planning and Zoning Commission ~~should~~shall prepare an annual report identifying actions taken and development activity occurring for the year. Maps identifying location of subdivisions, site plans approved, granted special

exceptions and conditional uses along with zoning map amendments ~~would be useful~~. Further, a description of upcoming work program elements ~~would be informative~~ shall be included.

- **News Media**

The staff and Planning Commission should make positive use of the extensive local media to inform and educate the public about planning and development issues.

- **Social Media**

Efforts to promote Ocean City under the Tourism Master Plan have combined with Emergency Management notification programs to create a vibrant social media connection with Ocean City residents and visitors. Keeping this information current and engaging is the responsibility of the Town's Public Information Officer working within the City Manager's Office.

- **Website**

In recent year the Town's website and links to the activities to the many Town departments have perhaps proved to provide the most promising opportunity to better inform residents about services, facility improvements, upcoming forums, and a broad range of Town affairs. New and interesting ways of utilizing this website should continue to be explored and updated.

**Figure 9-2 Chart with Summary of Key Objectives and Projects by Chapter**

# CHAPTER 10: Municipal Growth Element (text only)

House Bill 1141, adopted during the 2006 Maryland General Assembly legislative session, requires the inclusion of a “Municipal Growth Element” (MGE) in all municipal comprehensive plans. The MGE is to examine past growth trends and patterns, project future population growth and land use needs based on a capacity analysis, consider future annexation needs, and consider the impact of future growth on the municipal infrastructure.

This chapter was prepared separately from the last approved Comprehensive Plan in 2009, and at the time it served as both a summary and update to the overall Plan in 2011. Population projections and evaluation of build-out potential from this analysis provides information that has also been incorporated into water and sewer infrastructure master plans and capital improvement budgets.

With this update, Chapter Ten should continue to provide a summary of key information from all chapters that helps to evaluate future growth projections and infrastructure demands.

## **The Sustainable Growth and Agricultural Preservation Act of 2012 (SB 236)**

On October 9, 2012, the Town of Ocean City adopted a Sustainable Growth and Agricultural Preservation Act of 2012 Map in accordance with the requirements outlined in the Sustainable Growth and Agricultural Preservation Act of 2012 (the Act) (See Map #3-1).

The Act was designed to improve water quality and to encourage smart growth by limiting where major residential subdivisions can be located and establishing parameters for sewerage system service. The Act outlines four basic Tiers (Tiers I, II, III, and IV) which identify where new major and minor residential subdivisions may be located and what types of sewerage system can serve them.

As the entire municipality is currently shown as an existing sewer service area in the Worcester County 1994 Water and Sewerage Plan, and as the Town of Ocean City has no municipal growth areas designated within the 2006 Worcester County Comprehensive Plan, the Town of Ocean City Sustainable Growth and Agricultural Preservation Act of 2012 Map only depicts a Tier 1 designation for the entire municipal boundary.

In accordance with the Act, the Town of Ocean City’s Sustainable Growth and Agricultural Preservation Act of 2012 Map is hereby incorporated as part of the Town of Ocean City Comprehensive Plan.

# Population

## Year-round Population

During its early years, Ocean City was a small resort community experiencing slow year-round resident growth. Through four decades from the period 1930-1970 the Town's resident population grew by only 547 new residents. The Town's population declined in the 1950s only to recover in the 1960s when the northern section of the island was annexed. The modest population decline in the 1950s has been attributed to permanent residents moving to the mainland, either selling or renting their high-value island property. Since 1970 growth in the year-round population has increased dramatically. Over the past ~~40~~34 years the year-round population has increased ~~over~~ almost 5 fold: from 1,493 residents in 1970 to an estimated ~~7,1028,000~~ in 201009.

The growth in the 1970s and 1980s resulted from the increasing tourist economy enabling more households to be supported year-round by the summer trade, and the expansion of public facilities to serve an increasing population. In addition, there has been an influx of retirees who have found Ocean City to be a desirable place to live. Table 1 displays the Town's historic and projected year-round population which reflects more recent trends toward a stabilized population.

Chapter 1, Population Characteristics and Trends, of the Comprehensive Plan, contains a detailed analysis of the year-round population of Ocean City.

## Seasonal Visitor Population

In a resort such as Ocean City, it is much more important to understand the demographics of the total population, including year-round residents and seasonal visitors, rather than only the permanent population. Planning for future development and for the provision of public facilities must be based on the total population to be accommodated and served. Ocean City's infrastructure is sized to accommodate the larger seasonal population rather than only the year-round population. Much of the infrastructure and services are scaled back during the off-season and then operated at full capacity during the peak season.

Measuring the seasonal visitor population is a difficult task for any resort community. Since the 1970s, Ocean City has estimated its total population by a mathematical formula called "Demoflush", which estimates population based on flow amounts through the sewage treatment system. When compared to other indicators of population, Demoflush population estimates may seem to overstate the actual number of people in Ocean City, but it is ~~valuable~~ still useful as a tool to compare population over time and by season, since it provides a consistent methodology for estimating seasonal changes in population through the course of the year and for estimation of changes from year to year.

~~Table 1-3 of Chapter 1 of the Comprehensive Plan (updated below) shows the peak Demoflush population for each year since 1977. This is the number of people in Ocean City on the peak day in each year. The table indicates that the peak day population of 162,900 in 1977 virtually doubled some 10 years later to 332,400 by 1987. Since that time the peak population has remained relatively stable within the range of 320,000 to about 345,000 in subsequent years.~~

~~The average weekend population by month is shown in Table 1-4 of the Comprehensive Plan. Since 1992 the year-round average weekend population has shown only a slight increase of just under two percent and typically ranges from 153,000 to 158,500 over the course of the year. The average weekend populations through the summer months have remained quite stable through the 1992-2005 period. Most noteworthy are trends reflecting more substantial increases in average weekend populations during the peak season shoulder months and winter months. Through the period shown in Table 1-4, the months of January, March, April, October, November and December each recorded substantial weekend population increases in excess of 23% or more.~~

-Chapter 1, Population Characteristics and Trends, of the Comprehensive Plan contains a complete detailed analysis of the seasonal population of Ocean City.

## **Population Projections**

Population projections for Ocean City must be made for both year-round and seasonal projections. Projecting year-round resident and seasonal population in Ocean City is complicated by several factors. The uncertainty about the accuracy of the Census and the small size of the year-round population compared to the total population decreases the accuracy and importance of projecting future year-round population.

Seasonal population projections present their own set of problems. Vacationers and seasonal workers are not counted by the Census, so historical counts rely on symptomatic data, ~~such as wastewater flows (Demoflush)~~ that can only offer a surrogate measure as a basis for projection. Future growth depends on a variety of economic and demographic characteristics. Finally, Ocean City's physical capacity (a geographically confined, largely built community with 95% of the land developed) and land use policies will have a major effect. It is likely that much of the change in the capacity of the City to absorb increases in the peak seasonal visitor population will be largely influenced by City redevelopment policies as much as new development over the next 20 years.

~~For planning purposes, the size of Ocean City's **year-round population** is relatively unimportant. The number of people in the city at any time is much larger than the year-round population and is of much greater import in influencing demand for community facilities and services. The following table 1 presents both the historic and projected year-round population. Given the unique characteristics of Ocean City as a resort community it is difficult to develop a single set of year round resident population forecasts that can be considered reliable. The projections are taken from Chapter 1 of the Comprehensive Plan, and project that Ocean City will retain its current proportionate share of the~~

Worcester County population, yielding a year-round population in the year 2030 of 9,473.

The projection of future total, or seasonal, population is more important to planning efforts in Ocean City than the projection of year-round population. It is the total number of people in the city that impact the environment and demand for public services and facilities. Projecting the future total, or seasonal, population is as difficult and uncertain as estimating the current total year-round resident population. ~~This element updates the future total population projections found in Chapter 1 based on the actual Demoflush population figures from 1990 through 2008.~~ In this period the peak seasonal visitor population has been relatively stable, growing at an average rate of .22% annually, and this plan projects that trend to continue in the foreseeable future.

~~“Adjusted” population figures are presented which are 85 percent of the Demoflush population. Adjusted figures are presented because it appears that estimating the visitor population using the Demoflush methodology probably overestimates the population. To illustrate, comparing the 2000 average summer population (286,213), less about 10 percent day visitors, to the number of housing units (26,320 as reported by the 2000 Census plus about 9,500 hotel units) results in an average of 7.5 persons per unit. It seems more likely that, if the average unit contains 2 bedrooms, four to six people would occupy the average unit in the summer.~~

~~Thus, a P~~population estimating methodology used in prior versions of the Plan indicates that incorporates persons per unit indicates that between 170,000 and 240,000 people are in Ocean City at any time during the peak season (excluding day visitors). Adding another 10 percent to account for day visitors who are not staying overnight yields a maximum of about 264,000 as a total average summer population (about 85 percent of the Demoflush figure). This ~~is probably a more accurate~~ population estimate is used for purposes of planning for parks, recreation, police, fire and emergency medical facilities and services as well as Town administrative facilities. ~~However, the~~ A slightly higher Demoflush figure ~~iss are~~ used in water and wastewater planning to provide a safety factor to assure adequate water supplies and satisfy wastewater treatment capacity needs.

Table 2 shows historic and projected peak-day Demoflush population, both adjusted and non-adjusted.

Growth within the area of Worcester County near Ocean City has an effect on Ocean City’s services, since many of the residents and property owners of Ocean Pines, West Ocean City, and the Route 611 corridor visit Ocean City regularly. Growth in West Ocean City, in particular, has accelerated over the past 10 years. This is partially counted for by a 10 percent addition to the adjusted Demoflush data for day visitors. The impact of the nearby area West Ocean City may become greater if growth in Worcester County ~~reflects the “Visions” of the Maryland Planning Act of 1992, which encourages growth to be~~ continues to be directed to existing growth centers. The growth policies of the recently adopted Worcester County Comprehensive Plan reflect this vision.

Growth in the unincorporated area proximate to Ocean City is discussed later in this element.

### **Housing Stock and Households**

Similar to future population, the housing stock is projected to increase at a slower pace than in the past. This is a function of demand for additional seasonal units as well as the lack of vacant land. The majority of the growth of the housing stock will be in the form of redevelopment of older units. Table 3 presents historic data and projections of the housing stock.

The number of households can only be calculated for year-round residents. It is projected to increase at approximately the same rate as the increase in the year-round population.

As is the case with the increase in year-round population, the increase in year-round households has no appreciable impact on town services.

### **Tourism Dashboard Data**

In order to improve the evaluation of seasonal population impacts on municipal services, the Town of Ocean City Tourism Commission has developed a ‘dashboard’ of monthly information and statistics. A new tourism dashboard published since 2013 collects data to use as a metric in determining tourism productivity. This includes trash collection, bus ridership, parking lot revenue, hotel room tax revenue, amusement and admissions tax, meals tax and Smith Travel Report hotel occupancy. With three years of data collected, this tool will continue to be used and modified to evaluate the success of tourism management techniques, and changes to the seasonal influences on the local economy.

## **Land Use**

### **Existing Land Use**

Second only to growth policies, the most important factor affecting land use in Ocean City is the geographic limitation of the town. Surrounded on three sides by bodies of water and on the fourth side by the Maryland-Delaware state line, future growth is limited without annexation. The Mayor and City Council has not indicated any desire to consider annexation into Worcester County to accommodate future growth. However, this statement does not preclude such consideration in the future.

Chapter 3 of the Comprehensive Plan presents a detailed analysis of the past and projected land use patterns in Ocean City.

The present land use pattern contains a thorough mixing of residential types and substantial commercial strip and center development along Coastal Highway (see Comprehensive Plan Map 3-1). This unusual development pattern resulted from several factors, which are described in detail in Chapter 3 of the Comprehensive Plan.

Now established, this pattern will continue into the future. In recent years the ocean side's residential diversity has tended to decrease. Infilling and redevelopment has largely involved multifamily structures in condominium forms of ownership. Therefore, the character of the ocean block has become increasingly multifamily with a rise in the number and size of individual units within condominium projects developed in recent years. There is a great variation in the density of residential development. The oceanfront areas range from 20 units per acre to over 80 units per acre in completely developed blocks. In these areas most blocks average from 40 to 70 units per acre.

On the bay side, a few higher density projects dot the waterfront. However, the majority of land is developed at less than ten units to the acre. This is due to extensive use of land committed to commercial uses and the location of a number of single family neighborhoods. Areas developed with townhouse and manufactured homes approach a density of twenty units per acre.

Most important to the analysis of existing land use is the fact that less than only 5.53 percent of land in Ocean City is vacant. Thus the potential for new development, other than redevelopment, is limited. As older development is replaced or expanded, one of the greatest challenges is providing adequate parking to meet zoning requirements as well as meeting minimum market demand for new uses.

Commercial development occurs predominantly along Coastal Highway. The greatest concentration occurs on the bayside where land is less costly. Presently, neighborhood shopping centers of a variety of configurations are distributed about town. Five community shopping centers are concentrated north of the Route 90 Bridge. Two major amusement areas exist, one at the south end of the boardwalk and pier area, and the other at 30th Street on the bayside. All areas of the Town fall within the standard trade area of a convenience market or a major grocery store. This indicates that, for the most common needs of vacationers, existing commercial developments adequately serve the market.

The pyramidal structure of the Ocean City zoning regulations encourages mixed-use development, but also makes it difficult to identify certain districts as "residential" or "commercial". Generally, however, the 2,500,010 acres of developable land are zoned as follows:

Residential	<u>1,818,173</u> acres	( <u>5873</u> %)
Commercial	<u>555,377</u> acres	( <u>1922</u> %)
<del>Mixed-Use</del> Municipal/Public	<u>123,103</u> acres	(5%)
Recreation	<u>55</u> acres	(3 %)
Open Space	<u>254</u> acres	(13 %)
Vacant	<u>48</u> acres	(2 %)

~~In recent years there has been substantial pressure for condominium residential development that, because of pyramidal zoning, in many cases has displaced a number of commercial uses including restaurants, office uses and shops.~~ Opportunities to maintain

or encourage development of commercial uses and/or to promote mixed-use development are being explored to maintain such uses as an important component of the Town's economic base. Sustaining the distribution of commercial restaurant, retail, and service uses throughout Ocean City and promotion of mixed-use development can reduce dependence on automobile use by residents and visitors, thereby reducing demand on transportation system infrastructure and services over time.

## New Trends

### Hotels

Large capacity restaurants with indoor/outdoor seating and entertainment areas

Renovation of Existing Structures

Short Term Rental/Workforce Housing

Special Events

## **Future Land Use**

~~As discussed earlier~~ Based on Census data and American Community Survey estimates, the year-round population of Ocean City is expected to ~~continue growing at a moderate pace~~ remain constant or decline slightly, however, but this growth is relatively unimportant in the context of infrastructure and service needs. The infrastructure is designed to service the seasonal population, which, based on trends over the recent past, is expected to ~~grow at a modest pace~~ remain at current levels for the foreseeable future.

National trends continue to indicate a generational desire to live near the coast, retire in an active living area, and invest where you vacation. (NOAA study) Planning for a moderate growth rate consistent with both State and County estimates is proposed.

The fact that only about 35% of land in Ocean City is vacant means that most future development will be in the form of redevelopment. Existing development patterns are well established, and opportunities for major changes are limited. Major changes are not recommended by the Comprehensive Plan, but some general guidelines are promoted:

- New residential development on the bayside should be of moderate to low density and building height.
- Higher density residential development should continue to be encouraged to locate on the oceanside.
- Stable residential neighborhoods, primarily on the bayside, should be protected from the impacts on non-compatible land uses and activities.
- Limited higher density and taller buildings (maximum of eight stories) on larger bayside parcels may be permitted through the establishment of special, carefully crafted regulations.

- Existing commercial areas should be retained. Future commercial demand should be met through more intensive use of existing areas and also through opportunities outside of the town. ~~Additional community scale shopping centers are not encouraged.~~
- Mixed-use development is strongly encouraged, especially in the Downtown.
- New Hotel uses located on the bayside should be evaluated for offsite demand for pedestrian safety improvements to cross Coastal Highway, and should be encouraged to provide a private shuttle service for guests to visit the beach.

## Build-Out Projection and Analysis

The typical method of conducting a build-out analysis does not readily apply to Ocean City. There are ~~26,320~~ **28,000** dwelling units in the town to accommodate the population of ~~7,473,102~~ (20~~1000~~ Census). Obviously, the vast majority of the units are used on a seasonal basis by nonresident owners or rented to vacationers. However, except for those that were built before modern building and housing codes, most of these units would be available to house future residents, so additional housing units would not necessarily be needed to meet the demands of future population growth. In fact, many owners of seasonal properties buy with the intent of living in them in the future.

Beyond housing needs, a build-out analysis can be a valuable tool to use when planning for future infrastructure and service expansions. Using the Maryland Department of Planning model as a basis, the following table summarizes the build-out analysis for Ocean City.

“Developable land” excludes all land east of the building limit line (the beach), all wetlands and public streets. It includes vacant land and improved properties that have 4 or fewer dwelling units that were built prior to 1970. These properties are considered to have the potential to be redeveloped in the planning period. Developable land also excludes fragmented parcels smaller than 1,500 square feet in size (the minimum lot area for a townhouse).

Ocean City’s zoning regulations allow parcels that are nonconforming as to density to redevelop and retain that nonconformity. In reality, most cannot regain the full nonconformity because other requirements must be met (parking, landscaping, stormwater management, etc.), so reducing the build out by 25% accounts for this fact.

The number of potential additional units identified in Table 5 is the maximum number possible, because it assumes that all redevelopable commercially zoned land is developed with residential units, reflecting the pyramidal structure of the zoning code. This would not be the case in reality, but this scenario is used to obtain a maximum build-out result.

As stated earlier, this projection is less meaningful in Ocean City than in other areas because of the existing housing supply. The potential addition of 7,760 units simply adds to the existing surplus of units.

The standard method of projecting an increase in population based on the possibility of an additional 7,760 units does not necessarily lead to an assumed increase in the year-round population because the majority of the new units would probably be used for seasonal occupation. If it is assumed that the additional units would be 100% occupied by an average of 4 persons per unit on one particular day, an additional 31,040 people would be in the Town. Because all units in Ocean City are never occupied at the same time, using this projected increase in population would result in a much higher maximum population than is realistic.

Therefore, for planning purposes, the projected future increase in ~~the Demoflush~~ population ~~discussed earlier~~based on the current State and County growth rate is used. No change is proposed with the 2016 update.

## **Impact of Growth on Public Services and Facilities**

Even though the build-out analysis indicates that 7,760 additional units could be built in Ocean City, the projected increase in the year-round population is not expected to have any effect on the provision of public services provided by the town. Ocean City's utilities are sized to accommodate the seasonal population, and the level of other services is routinely adjusted to meet the need at any particular time. Additionally, the peak seasonal population is not expected to increase substantially beyond the level of the past 15 years, thus substantial additions to capacities are not anticipated. These trends are monitored continuously, and if larger than anticipated population and housing growth appears to be a possibility, provisions for additional levels of service will be made.

### **Public Schools**

The Worcester County Board of Education's Facilities Master Plan follows the growth concept contained in the Worcester County Comprehensive Plan that promotes future growth in the vicinity of existing population areas. Attendance areas reflect the growth areas identified in the Comprehensive Plan. Students in Ocean City attend North County schools (Ocean City Elementary, Berlin Intermediate, Stephen Decatur Middle, and Stephen Decatur High School) along with students from Berlin, West Ocean City and Ocean Pines.

Historical enrollment figures for the North County schools are presented in Table 6. From 199~~6~~4 to 20~~13~~09 the North County enrollment for all schools increased by ~~263~~263 students per year. Since Stephen Decatur Middle School did not exist in 1991 the total change in student population for the schools attended by Ocean City students cannot be computed.

The ~~2008-2013~~ enrollment, projected enrollment, and state-rated capacities of the schools that students from Ocean City attend are presented in Table 7. ~~Only Berlin Intermediate and Stephen Decatur Middle School projects~~ to slightly exceed the State-rated capacity by 2018.

The ten-year enrollment projections for all County schools (K-12) is projected to ~~decrease~~ ~~increase~~ by ~~8326~~ students by 20~~23~~18. The school age population of Ocean City (201~~000~~ Census) is only about 7.58% of the town's total population compared to about 15.~~63~~% of the Worcester County population. Thus the year-round school-age population (present and projected) of Ocean City has a minimal impact on the public school system enrollment.

### **Public Libraries**

Worcester County is responsible for the public library system. A new branch was ~~recently~~ constructed ~~and opened in 2008~~ in Ocean City located on Coastal Highway at 100<sup>th</sup> Street. This facility will serve the projected municipal growth well into the future.

### **Public Safety**

The Ocean City Police Department (OCPD) enforces the criminal and traffic portions of the Code of Ocean City. The OCPD's jurisdiction includes the corporate limits of Ocean City to three miles off-shore. The bays and ocean are not regularly patrolled, but the department has jurisdiction to continue pursuit in these areas.

Staffing of the Department varies with the season. The full-time, year-round force includes **97** full-time sworn officers and **20** civilian personnel. During the visitor season, approximately **110** seasonal police officers and **fifty** non-sworn members of the department augment the core year-round staff. These figures include public safety aides, who are responsible for processing and transporting prisoners, enforcing parking laws, directing traffic and generally assisting visitors.

~~The size of the year-round population has little impact on the staffing of the OCPD.~~ As with other public services in Ocean City, it is the visitor population that determines the manpower needs of the OCPD. Other sections of the Plan have identified priorities for expanding the visitor population in the shoulder seasons, and increasing the number of special event weekends. Public Safety staffing continues to respond as these changes transition from the historic peak summer season to more year round demand for services.

The same is true for the other public safety sectors of the municipal government, including the beach patrol, fire department, emergency medical services, and emergency management. All of these functions are driven by the seasonal population.

## Water and Sewerage Facilities

As with all community infrastructure and facilities, all services are sized to serve the total maximum population (visitor and year-round). All projections of future water and wastewater facility needs are based on the projections of peak visitor population found in the 2006 Comprehensive Plan.

### Current Inventory of Water Supply System

A complete analysis of the water system is found in the *Town of Ocean City Comprehensive Water Supply Study – 2005 Update*, and in the new *Water Resources Element* in Chapter 11.

Generally, the existing raw water supply consists of 15 wells in the Ocean City Aquifer and 9 wells in the Manokin Aquifer. The location of the wells has been spread out to the extent possible to reduce the effects of seasonal draw down and to minimize the potential for increased salt water intrusion by upconing in specific areas. The current available raw water supply safely exceeds the treatment capacity of each associated treatment plant. ~~Therefore, no~~ As the water supply system is improved in the future, additional wells are planned for the immediate future to manage system demand and impacts to the groundwater supply.

The current permitted allocation (8 MGD annual average / 17.6 MGD daily average in the month of maximum use) is more than adequate to meet the projected water demand to the year 2025.

### Current Inventory of Water Treatment System

The existing water treatment facilities are producing excellent quality potable water meeting all regulatory requirements. There are three treatment plants (15<sup>th</sup> Street, 44<sup>th</sup> Street, and Gorman Avenue) that treat raw water to remove iron, manganese, and chlorinate the water. Improvements to the plants completed over the past several years have improved operations and reliability, and extended the useful life of the facilities. The current design treatment capacity of 18 MGD is more than adequate to meet the projected 2025 maximum day demand of 16.8 MGD.

### Current Inventory of Water Storage and Distribution Systems

The town's water storage and distribution facilities have been expanded and upgraded over the years to meet maximum day water demands and fire flows. There are seven elevated and one ground level water storage facilities spaced along the near 10 mile length of the town. These tanks provide a total useable storage of 6.3 million gallons.

Improvements to the distribution system are made according to a detailed improvement program. A new 1 mgd elevated water tank at 1<sup>st</sup> Street will replace the existing downtown Worcester Street facility in 2017.

### Saltwater Intrusion

A threat to Ocean City's water supply is saltwater intrusion, which is the horizontal movement of saltwater into the freshwater aquifer from the ocean or the bay. It could also occur from a vertical movement by downward leakage from the ocean or bay, or upward leakage from lower aquifers.

Testing in the past had shown a rise in chloride levels in the 44th Street area. This is caused by heavy year round water use in the area and leakage between the Ocean City aquifer and the saltier Manokin aquifer in this area. The upconing of salt water at the 44th street plant stabilized after much of the pumpage was shifted to the Gorman Avenue Plan in 1989 and 1990, indicating a state of equilibrium may have been reached. Saltwater intrusion is occurring in localized parts of the unconfined Columbia Aquifer, but it is not considered a major threat. However, it is still possible that a salt front is moving in from the oceanside or bayside near 44th Street.

The "Comprehensive Water Supply Study" recommends spacing future wells to distribute drawdown from the aquifers and relieve the salt intrusion in any particular area. The study also notes that any future water supply production wells should probably be located in the northern part of the Town where the hydrogeologic conditions are more favorable with respect to available drawdown and saltwater intrusion. The Study also states that future planning must recognize the possibility of saltwater intrusion, and flexibility in design of the water supply system must be provided so that the problem may be addressed if and when intrusion occurs.

### Aquifer Recharge balance with peak seasonal use

~~An increasingly attractive solution to salt intrusion is the rapidly developing technology and operating methods of desalination of brackish water. Desalination could be accomplished as needed by converting existing water treatment plants. By employing desalination, the saltwater intrusion could be contained at the coastline indefinitely.~~

### Water Supply Study update

### USGS Study

### Critical Infrastructure protection/emergency generators

## **Wastewater Treatment**

In 1994, the Town of Ocean City assumed control of the Ocean City wastewater system from the Worcester County Sanitary Commission. The system has collection, treatment

and disposal capabilities. The treatment plant at 64th Street was constructed in 1969, with expansions and secondary treatment upgrades completed in 1974, 1981, 1990 and 1992, ~~and~~ 1998, and \_\_\_\_\_.

The plant's Wastewater treatment design capacity is currently 14 million gallons per day (mgd). Additional sludge handling capabilities constructed in 1998 increased the capacity from 12 to 14 mgd.

The average daily flow treated during the maximum month between 2003 and 2008 was 10.87 MGD in July of 2006. The available or unused capacity has averaged 23.6% during this time. Year 2020 maximum wastewater treatment flows are projected to increase to approximately 12.4 MGD for the Town of Ocean City and West Ocean City combined. Recent engineering studies have concluded that the future wastewater treatment capacity required will be 16 MGD.

#### Ocean outfall, new public works campus expansion

A portion of West Ocean City is now served by a new Worcester County treatment facility at \_\_\_\_\_. This facility has allowed for public sewer connection at the Ocean City Municipal Airport with a beneficial re-use of treated effluent as spray irrigation at the Golf Course.

Again, all future planning is based on the total visitor population projections.

#### Critical Infrastructure

##### **Stormwater Management**

Three approaches are used in Ocean City to remove stormwater from City streets. Sheet flow is used on the ocean block and essentially it uses the street to conduct the water west to Coastal Highway and eventually to the bay. On Coastal Highway, Baltimore Avenue and Philadelphia Avenue and the bayside, both a traditional stormwater system and sheet flow with sediment basins are used. Sediment basins are only at selected street ends.

The pipe and catch basin system suffers from the island's lack of relief. Without the required fall, water can back up. Several streets on the bayside are simply sloped toward the bay. At the end of the street, a sediment basin removes pollutants and debris. Tides have a significant impact on the conveyance system. Submerged outfalls back water up until the tide recedes.

Private and public development is required to meet all State and local stormwater management regulations. As more development covers the land with concrete and black top, stormwater problems will increase. Several alternatives exist for controlling stormwater on site, including infiltration beds and trenches, pervious black top and open cored pavers. These items, as well as "low impact" development techniques, are being

promoted to the extent possible to attenuate stormwater flows, reduce sedimentation and improve the overall quality of stormwater discharges.

The fact that development and redevelopment is and will be required to meet current, more stringent standards means the stormwater problems should be lessened in the future.

Study of a Stormwater Utility tax system denied, scope and age of pipe system.

New TMDL standards for the Coastal Bays

Demonstration project for tide gate controls, permeable pavement infiltration bands

## **Recreation and Parks**

Ocean City offers a variety of recreational opportunities and services to its year-round residents and visitors. Programs offered include camps, classes, clinics, sports, events and tournaments. Lessons in exercise, fitness, dance, and gymnastics, creative arts, swimming, first aid and CPR, boating and seamanship to name a few, are given. Programs are structured to support the needs and interests of adults, seniors, and youth of all ages. Special events and outings round out the spectrum of recreational program offerings.

The 15 town-owned and operated parks and recreational facilities occupy about 80 acres spread out through the town. Including the 319 acres of beach, which is open space accessible to the public and maintained by the town, the total park and open space is 399 acres, surpassing the State guidelines for the provision of park and open space lands of 30 acres per 1,000 residents (approximately 240 acres).

It is the Town's policy to meet the recreational needs of the seasonal and year-round population. Demand is monitored and, as facilities approach capacity, new ones are planned and constructed. It is important to note that given the high land costs in a oceanfront community, utilization of existing parkland more efficiently is often more cost effective than public acquisition of additional parkland to satisfy demand for recreation facilities. Nevertheless, land acquisition for parks remains a planning objective and existing parks should not be converted to non-recreational uses.

Special event planning, and free family entertainment

Basic town infrastructure used to accommodate multiple events: car/jeep/firetruck parades, beach activities, multi-function park space

Mid Atlantic Sports Partnership will increase field capacity in neighboring counties, while Ocean City is able to provide lodging, restaurants, and destination entertainment to successfully market the regional effort.

Recreation and Parks Master Plan process underway

## **Financing Future Public Services and Infrastructure**

The Mayor and City Council have an adopted Capital Improvements Program (CIP) that identifies future infrastructure needs, priorities, and financing mechanisms.

The CIP anticipates funding from the issuance of general obligation bonds, with pay-as-you-go revenues that may include current year tax receipts, development fees, donations, and water and wastewater user fees. State and federal grants are primarily received for transit projects and recreational and park improvements that qualify for funds from the State of Maryland Program Open Space program. Under the taxing authority of Worcester County, the Town receives receipts from a tax on the sale of food and beverages sold in the Town. The receipts may only be used to fund the debt service for expansion of the Roland E. Powell Convention Center.

General obligation bonds are bonds that are secured by the full faith and credit of the issuer. Authorized by ordinance, they are secured by a pledge of the Town's property taxing power. Payment of future debt service of the bonds, however, may be from property taxes or by user fees such as debt repaid from the water and wastewater funds.

Outstanding debt represents **0.90%** of the assessed valuation of property in the Town. The debt limit is 5.2% of assessments, leaving a legal debt margin of **\$371** million dollars.

All potential capital funding resources are evaluated to ensure equity of funding for the CIP. Equity is achieved if the beneficiaries of a project or service pay for it. For example, general tax revenues and/or general obligation bonds appropriately pay for projects that benefit the general public as a whole. User fees, development fees, and/or contributions generally pay for projects that benefit specific users. Other factors considered when funding the capital plan are whether the financing method provides funding when needed and the other financial costs associated with the funding source.

Water and wastewater fees are comprehensively studied and rates are established over a five-year period to adequately fund operating and capital costs.

In 2005, the Mayor and City Council began assessing impact fees on new development. These fees help pay for infrastructure improvements necessitated by new development, and ensure that development pays a fair share of those improvements. The fees are specifically allocated toward future water, wastewater, and general infrastructure improvements. The fee structure is reviewed periodically and increased when appropriate to reflect rising costs.

## **Rural Buffers and Transition Areas**

The fact that Ocean City is surrounded on three sides by water and on the fourth by the State of Delaware makes the consideration of rural buffers and transition areas

inappropriate. There are transition areas within the corporate boundaries (such as between zoning districts), but bodies of water and a state line provide the buffers and transitions to the unincorporated county.

## **Burdens on Municipally Provided Services and Infrastructure Beyond Municipal Growth Limit**

The Town of Ocean City provides fire protection, emergency medical service, and limited wastewater treatment services to the area of Worcester County generally known as West Ocean City. This unincorporated area is immediately across Route 50 and the bay from the town limits.

The West Ocean City service area contains about 11 square miles and extends approximately 3.5 miles west, 4.5 miles south, and 3.0 miles north of the Rt. 50 entrance to Ocean City. The Ocean City Fire Department owns and maintains a fire station in West Ocean City to provide quicker service. The Fire Department averages about 175 calls for service per year to this area. The EMS division also serves this area and averages between 150 and 200 calls for service each year.

Assuming the same agreement for fire and EMS service continues into the future, growth in this area will certainly mean more calls for service and responsibility to the town.

When Ocean City assumed its wastewater treatment responsibilities from Worcester County in 1994, it was agreed that the town would provide wastewater treatment and outfall capacity of 1 MGD for unincorporated West Ocean City. This is the maximum responsibility of the town, so future growth in that area should not be a burden on the municipal system.

Other Municipal facilities are located in West Ocean City including the Ocean City Municipal Airport, Eagles Landing Golf Course, and the Keyser Point public works yard.

The population of the unincorporated area outside the municipal limits is indirectly served by the town in other ways. While there has been considerable retail and service growth in that area, many of those residents come to Ocean City for our beaches, restaurants, shops, marinas, etc. These people Day trip visitors use the street system, public transportation, generate solid waste, and are serviced by the police, fire, EMS, Beach Patrol, and Recreation and Parks departments, among others. Any future increases in day trip visits from new West Ocean City hotel construction and campground expansions will also increase demand for parking and transit solutions. These visitors are accounted for when total (seasonal) population is estimated and projected.

## **Protection of Sensitive Areas**

The “Sensitive Areas and Environmental Protection” chapter of the Comprehensive Plan discusses these issues important environmental considerations in detail. That chapter contains goals, objectives, principles, policies, and standards designed to protect sensitive

areas from the adverse effects of development. Sensitive environmental areas specific to the Atlantic Ocean coastline and the coastal bays include the following: 1) ~~streams and their buffers,~~ 2) 100-year floodplains, 3) habitats of threatened and endangered species, 4) ~~steep slopes,~~ 5) coastal bays and buffers, 56) wetlands and tidal/nontidal buffers, 67) dunes, and 78) beaches.

~~Ocean City does not contain any streams. Steep slopes are generally defined as slopes greater than 25 percent, and development is usually prohibited or strictly regulated in these areas. There are no steep slopes in the Town. Virtually all of Ocean City's land area includes approximately \_\_\_\_\_ acres or \_\_\_\_\_ % areas within a Special Flood Hazard Area the 100-year floodplain. This floodplain area is defined along with other flood risk areas by adopted Flood Insurance Rate Maps that are based on a FEMA Coastal Flood Risk Study completed in 2015.~~ As a growth area that is already 95 percent developed, development in the 100-year floodplain cannot be avoided. Ocean City's flood protection and stormwater management regulations take into account the problems inherent in developing in the floodplain, and strict enforcement of these regulations continues.

An inventory of threatened and endangered species is provided in Appendix A of the Comprehensive Plan. Habitats of threatened and endangered species should be protected and state and federal guidelines for their protection should continue to be adhered to.

The sensitive areas most vulnerable to the effects of growth are the Coastal Bays. The town participates actively in the Maryland Coastal Bays Program and implements many activities identified in the Comprehensive Conservation and Management Plan (CCMP) developed by the Program. Stormwater management is the single most important protective measure the town can take in protecting and improving the water quality in the bays. State stormwater regulations are ~~enforced~~ administered by Ocean City through the Critical Area program, the physical stormwater system is continually upgraded, and as redevelopment takes place on-site stormwater management is improved, reducing pollutant loads entering the bays.

## **Vision of Ocean City's Future Character**

The Town of Ocean City will continue to improve its standing as a premier seaside resort and a desirable place to live and work. Redevelopment will present a unique opportunity to improve the quality of ~~development the built environment~~ in terms of aesthetics, structural safety, and environmental sensitivity while protection favorite traditions and providing new activities and destinations each year.-

As a growth center and State-designated Priority Funding Area, Ocean City will continue to improve its infrastructure and expand it when necessary to meet the needs of future development. This vision, in conjunction with Worcester County's dedication to smart growth and agricultural and rural preservation, will guide the future development of the town.

Ocean City has a vision of being a walkable, pedestrian-friendly community, especially in the Downtown, and a community less dependent on the automobile. The public transportation system is an important factor in achieving this vision. (See Chapter 4 of this Comprehensive Plan.)

The town's future depends on a healthy natural environment. Every development action, both private and public, will be analyzed with respect to its impact on the environment. The quality of the ocean and bay waters must be maintained in order for the vision of the future to be achieved.

Other Strategic Plan priorities

# Chapter 11: Water Resources Element / Mineral Resources Element (text only)

~~The State of Maryland Land Use Code Sec. 3-102 lists required comprehensive plan elements: 3-106 requires all Maryland municipalities/jurisdictions with zoning authority to prepare/include a water resources element to be added to/in the comprehensive plan; and. This directive comes from House Bill 1141. Section 3-107 requires the preparation of a mineral resources element if geologic information is available. For coastal Maryland areas, these subjects are a related story with layers of sand and clay separating groundwater aquifers.~~

The water resources element must address the following topics:

- ~~1. Water supply needs for the present and future population of Ocean City. Drinking water and other water resources that will be adequate for the needs of existing and future development proposed in the land use element of the plan; and~~
- ~~2. Wastewater treatment, septic supply (not applicable to Ocean City), stormwater management capacity to meet current and future needs. Suitable receiving waters and land areas to meet stormwater management and wastewater treatment and disposal needs of existing and future development proposed in the land use element of the plan.~~
- ~~3. The impact of meeting these needs on water resources.~~

~~This is the water resources element for the Town of Ocean City, Maryland's Comprehensive Plan was originally adopted in September/October 2009/06 and has been updated and combined with a new mineral resources element with this Plan. (adopted month September, 2006). It The chapter presents analyses of land consumption/use and facilities impacts that can be expected as a result of the projected growth of the Town's year-round population and seasonal peak use periods. The water resources/mineral resources element provides a strategy to sustain the water needs and coastal protection for Ocean City's population through the year 2035 and beyond. The "planning period" extends up to and through the year 2035/25. By this action the water resources element becomes part of the Comprehensive Plan of the Town of Ocean City, Maryland. The comprehensive plan contains the following goal and objectives that relate to the water resources and mineral resources element:~~

## Goal:

~~Maintain and protect the town's current water resources for their ecological and water supply benefits and to understand and mitigate, to the extent possible, the adverse effects of future growth on these resources. Maintain and protect the structure and resilience of Maryland's barrier island coastline, and the Ocean City Inlet through coordinated Federal, State and Local management of sand resources. The water resources/mineral resources element provides a strategy to sustain the water needs and coastal protection for Ocean City's population through the year 2035 and beyond/25.~~

**Objectives:** In order to achieve the water resources/mineral resources goal, the following objectives are adopted:

- 11.1 ~~Provide adequate public health, safety, social, recreation, and waste disposal services~~Maintain the highest possible drinking water quality through consistent monitoring of the groundwater supply and the infrastructure used to acquire and treat water.
- 11.2 ~~Protect drinking water supplies and preserve groundwater resources as the primary water supply for~~ the present and future population of Ocean City.
- 11.3 ~~Preserve and protect natural resources and their ecological functions~~Manage peak season groundwater withdrawal in compliance with State permits and sustainable practices.
- 11.4 ~~Accommodate future growth and redevelopment with standards designed to minimize environmental disruption, create an attractive theme, allow architectural variety, retain identifiable neighborhoods, and preserving special and historic buildings using incentives.~~Coordinate with State and Federal agencies to meet regional standards for source water protection of critical watersheds, groundwater recharge areas, wells and treatment facilities.
- 11.5 Continue and enhance land management practices including beneficial use of dredge material, allocation of ocean sand resources, balanced approach of natural system management that provides protection of barrier island system and wildlife habitats.
- 11.6 Actively participate with the Maryland Coastal Bays Program in seeking management of the Coastal Bays Estuary which maintains navigable waterways, channels and water depth to support a healthy and diverse ecosystem that meets State water quality standards.
- 11.7 Identify sand resources necessary for long term beach replenishment, and potential emergency dune or breach repairs.
- 11.8 Prepare strategy for incrementally raising land elevation to minimize flood risk within the municipal limits as redevelopment occurs.
- 11.75 Provide for adequate public-municipal water, wastewater and stormwater services to facilitate the desired amount and pattern of growth.

### **Section 1 - Coastal Geology and Groundwater Resources**

Ocean City is located in the Coastal Plain, and occupies the southern end of a barrier island named Fenwick Island. Such land forms are dynamic in their development and continue to be active. Fenwick Island, like most barrier islands, was formed through wave, wind, and tidal

action.

Beginning at the surface, the soils of the Coastal Barrier Islands are predominantly sediments consisting of loose sand and shells. No arable soils have developed. These soils are suitable for only the most tolerant vegetation and present limitations for urban development.

Maryland's Atlantic coast is rich in natural resources. We prize these natural assets for their intrinsic ecological, industrial and recreational value. Mineral resources from this region are used as construction materials, and in agriculture and aquiculture. Water resources include habitats for wildlife, shellfish and fin fish, and sources of potable and irrigation water. Land resources are managed as wildlife habitats and for agriculture. We also enjoy the recreational benefits of these priceless resources. It would be impossible to hike, fish, play, hunt, boat, surf or swim without them.

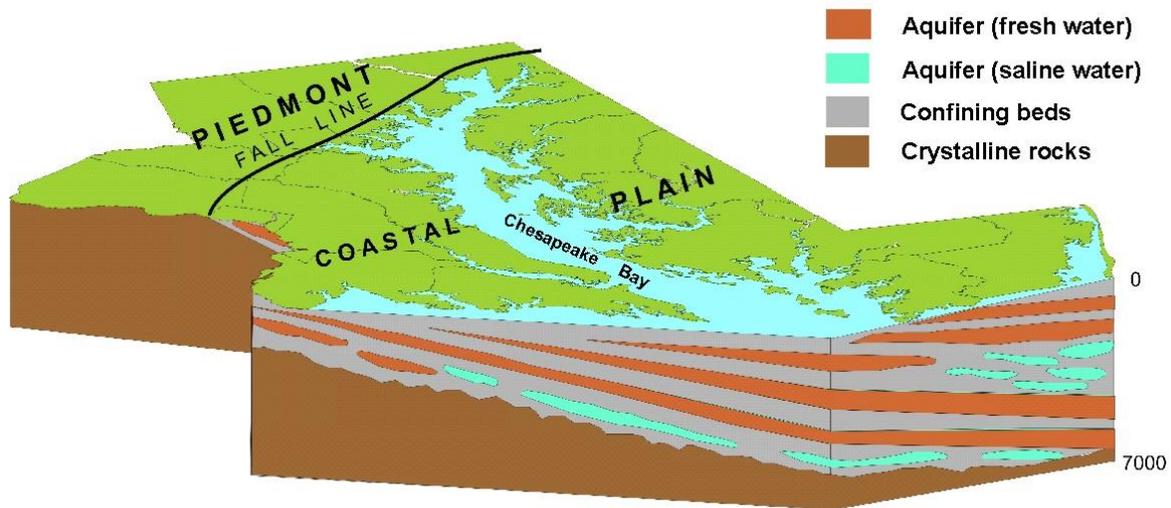
Natural resources must be used and maintained wisely. Maryland Geological Survey conducts many studies that explore the evolution, current state, and behavior of geologic environments that comprise our natural resources. Sand is an important resource that is found on Maryland's Atlantic coast. Sand is used in the construction industry, and for restoring and protecting eroding beaches. The Coastal and Estuarine Geology Program at MGS is currently assessing potential offshore sand resources.

[http://www.mgs.md.gov/coastal\\_geology/offshore.html](http://www.mgs.md.gov/coastal_geology/offshore.html)

## Mineral Resources

The Town of Ocean City overlays substantial deposits of sand and some gravel. Extraction of these resources is limited by economic and environment restraints. Since the Town is fully developed, commercial excavation of sand and/or gravel deposits is precluded. Moreover, traditional impacts associated with quarrying activity, e.g., heavy trucking, dust and noise, are not consistent with the town's character. Ample sources of these materials, to support community needs for them, exist nearby in more rural areas of Worcester and Wicomico Counties. Presently, the Zoning Code of Ocean City does not permit mining within the town. This is due to the disruptive effect such activities would have on the town's tourism dependent economy.

Extraction of materials from beneath the bay,s or near shore coastal areas, other than for normal maintenance dredging poses similar difficulties. Environmental impactsdamage to wildlife habitats, as well as the sport and commercial fisheries must be considered along with potential impacts on tourism. In light ofthe potential problems with energy exploration and mineral extraction, proposals for such activity should be approached with much caution and full consideration of environmental and economic externalities. ~~By and large, such activities should not be encouraged in or near Ocean City.~~The US Army Corps of Engineers has completed the necessary study and permits for many beneficial use and navigation projects along the Maryland coast, the Ocean City Inlet and the Coastal Bays.



Coastal Plain sediments thicken from northwest to southeast, increasing from a few feet at the Fall Line to greater than 7,000 feet at Ocean City. Most aquifers in the Coastal Plain are overlain by low permeability clay layers (forming confined or artesian aquifers) which prevents surface contaminants from reaching the aquifers. In the Coastal Plain physiographic province, groundwater flows through pore spaces between sand and gravel particles – known as intergranular flow. Wells in the Coastal Plain commonly have moderate to very high yields. Groundwater levels are not affected significantly by short-term variations in climate (droughts and wet periods), but typically do respond readily to increased groundwater withdrawals.

[http://www.mgs.md.gov/groundwater/md\\_groundwater.html](http://www.mgs.md.gov/groundwater/md_groundwater.html)

## Groundwater

Four groundwater aquifers underlie Ocean City. The upper two, the Pleistocene and Pocomoke, suffer from vulnerability to salt intrusion. The lower aquifers, Ocean City and the Manokin, are used for water supply, although portions of the Manokin, between 28th Street and about 80th Street, contain brackish water.

The Ocean City and Manokin aquifers provide good quality water, but could be threatened by salt water intrusion. Intrusion can occur either vertically or horizontally. Vertically, brine could move from leaks in the upper aquifers or be drawn up from the salty St. Mary's aquifer. Studies performed in the past by the U.S. Geological Survey indicates that vertical intrusion is not currently a problem. Above the water supply aquifers lies a confining layer which prevents inter-aquifer leakage. The St. Mary's formation below is very dense and requires a high pressure differential for leakage to occur which is not considered likely.

However, horizontal intrusion could come from the salt water being drawn in from the ocean. The probability of this occurring has not been scientifically determined, but if Ocean City is similar to other Atlantic Coast situations there is no imminent danger. In any case, the location of the offshore "salt wedge" should be monitored so an accurate picture can be drawn for future policy decisions.

The water supply aquifers are recharged in the Manokin subcrop. This subcrop is a seven mile wide band beginning northwest of Salisbury in the Hebron area and spreading northeast through Laurel, Georgetown, and ending at the coast at Broadkill Beach in Delaware.

## Section 2 - Section 1—Land Use Plan Analysis and Growth Projection

~~State and local governments establish regulations for governing the development and use of land within their jurisdictions. The goal of these land use regulations is generally to promote sound physical, social, and economic development.~~

~~The Ocean City Comprehensive Plan, Land Use Chapter, states the need to maintain and encourage development of commercial uses and promote mixed use projects with the intent of sustaining the distribution of commercial restaurant, retail, and service uses. Also, we will promote mixed use projects to reduce the strain on the transportation system's infrastructure and services by reducing the need for driving to commercial establishments. Through the use of design standards we hope to maintain and create more open space. Industrial and utility projects are considered inappropriate uses due to their adverse impacts on adjacent properties.~~

~~Presently, town streets occupy about 25% of the town's land area. Redevelopment may decrease that amount and allow for more open space. For over forty years, our land use pattern has remained "natural", meaning that it is driven by market forces. This pattern will continue into the future as the economy and other factors affect why visitors come to the beach.~~

~~The character of the ocean block has become increasingly multifamily with a rise in the number and size of individual units within condominium projects developed in recent years. There is a great variation in the density of residential development. The oceanfront areas range from 20 units per acre to over 80 units per acre in completely developed blocks. In these areas most blocks average from 40 to 70 units per acre.~~

~~The majority of land on the bayside is developed at less than ten units to the acre. Much of the bayside is being used for commercial uses and also has a number of residential neighborhoods that have remained for decades, improving with time. New commercial uses include breweries/distillery which will increase water demand and create new wastewater treatment needs.~~

~~The aging of the United States population will offer unprecedented new challenges and opportunities. The arrival aging of the Baby Boom generation is creating unparalleled an urgency for understanding the need for geriatric services and making ADA code compliance in the homes being built in Ocean City all that more important. With people age 65 and older constituting 20% of the national population by 2030, Ocean City will meet their water demands and the wastewater infrastructure needed to support this changing culture. The high-rise condominiums and privately owned homes built during the 1960s through the 1980s are being replaced or renovated with multi-use projects and more efficient residential units together with commercial amenities. Preserving the character and quality of development with a focus on design variety is one of our main objectives.~~

The comprehensive plan anticipates a slow rate of population growth consistent with the last 10 years and a steady increase intrend toward retirees with multifamily units continuing to be the majority of housing structures. There is a lack of land available for future development. A demand for seasonal use and multi unit housing will persist throughout the planning period.

Single-family detached housing has been and ~~should will~~ continue to be less than 10% of the total housing ~~stock supply because of limited land area for development~~.

The lack of affordable employee housing is ~~the main housing problem being beginning to be addressed through the conversion of older structures and new mixed use development~~. Some recommendations to accommodate the future employee population of Ocean City include employer-provided housing, a seasonal housing community in West Ocean City, and on-site housing provided within the larger commercial developments. Otherwise, Ocean City has the housing capacity to absorb year-round growth with existing housing stock and available infrastructure, excluding changes to our infrastructure and services.

Upgrades to our infrastructure will occur as needed. ~~Recent trends to use single family housing for short term rentals and conversion of residential housing to work force housing should be studied for possible impacts to water demand quantity and peak use periods. New commercial uses include breweryies/distillery which will increase water demand and create new wastewater treatment needs.~~

The existing land use map (Chapter Three, Land Use and Community Character, ~~2006 Comprehensive Plan~~) indicates existing residential and commercial development. Commercial uses on the Oceanside of Coastal Highway ~~should may~~ be increased to provide services to residents on that side of the road. There are desirable services that cannot be found in Ocean City. In those cases, shoppers must travel outside the town to West Ocean City, Berlin, and Salisbury.

The future land use map (Chapter Three, Land Use and Community Character, ~~2006 Comprehensive Plan~~) proposes a majority of residential ~~projects land use~~ east of Coastal Highway which may include multi-use projects. Larger ~~department stores commercial uses~~ will remain west of Ocean City due to the lack of developable land in Ocean City.

~~Current land uses and regulations have limited commercial development along the east side of Coastal Highway, and many of those commercial uses do not sustain visitor's basic daily needs. There is a great variation in the density of residential development. The oceanfront areas have blocks averaging from 40 to 70 units per acre.~~

~~An increase in mixed-use developments will provide Ocean City's residents and visitors with the basic necessities. With the appropriate zoning in place it will be possible for commercial use to be more prominent on both sides of Coastal Highway. However, supermarkets, hardware stores, and big box retailers will continue to be situated along U.S. Route 50, within a few miles of Ocean City.~~

### Year Round Population

Very little increase in residents occurred between 1930 and 1970 (Table 1-1). The largest increase in residents happened between 1970 and 1980 when over 3,000 new residents moved to Ocean City. The year round population ~~was determined to be remained stable at~~ 7,102~~37~~ in 2010~~04~~ (U.S. Census Bureau) ~~and could easily reach 9,000 by 2025~~ (Figure 1-1). Nevertheless, we will focus on the impact of the seasonal population as it affects water demand

and wastewater treatment since we must maintain effective infrastructure to support the maximum demands of the summer seasonal population.

~~Given~~ In the past, the unique ~~c~~Characteristics of Ocean City as a resort community ~~it is~~made it difficult to develop a year-round resident population forecast that can be considered reliable. After 15 years of all metrics demonstrating stability in the year round population, the long range projection has been modified to accommodate our local share of projected State and County population growth at an estimated rate of 1.5%.

### Seasonal Population

Seasonal population ~~has traditionally been~~is estimated by a formula called “Demoflush”, which estimates population based on wastewater flows using a pre-determined number of gallons per person per day. The equation contains adjustments to account for infiltration and “day trippers” who do not use the wastewater system to any great extent.

The formula for figuring the demoflush population is:

The number of gallons of wastewater flow minus infiltration into the system is divided by the number of gallons per person per day (36.04). Infiltration is estimated to be 570,00 gallons per day. Example: If the wastewater flow on a Saturday is 10,000,000 gallons, subtract 570,000 and divide by 36.04 and the result is 261,654 people for that day. The 36.04 results from an assumption of the gallons per person per day attributed to permanent residents (60), overnight visitors (40), and day visitors (7), and the percentage of each of these groups (4%, 86%,10% respectively).

The peak demoflush population (Table 1-2) is more important in our planning efforts than the year-round population estimate from the U.S. Census. It has been relatively stable in recent years, increasing by only about .22% per year. This plan projects the peak weekend population to continue to rise slightly through the next planning period. (Figure 1-1)

~~The Town’s ability to provide vital services must be coordinated with seasonal population growth and certain demographic aspects of the population, such as age, gender, and educational levels.~~

“Adjusted” population figures, which are 85 percent of the demoflush population, are discussed in Chapter 1 – Population, of the Comprehensive Plan, and in the Municipal Growth Element. For the purposes of projecting future water and wastewater need, however, the full demoflush estimate is used.

Figure 1-2 projects future total population through 2035~~25~~ based on historic demoflush population figures. It is likely that much of the increase in the peak seasonal population will be influenced by Town’s redevelopment policies rather than new development over the next 20 years.

New metrics are needed in the future to provide an alternative to the demoflush calculations.

## Recommendations

The water resources element provides the Town with an assessment of its water resources and how future growth will affect them. The assessment assists the Town in determining the needs of its residents and visitors and helps avoid unnecessary future expenses. The 201606 update to the comprehensive plan anticipates about 6,000 new residents by 203525 and a slight but steady increase in the seasonal population. There are no anticipated annexations outside municipal boundaries during the planning period. ~~Clean water sources are sufficient to handle the population's needs with ample water supply to last past the planning period.~~ Based on previous calculations and advanced planning, it is not anticipated that population growth or significant development activities will exceed the design capacity of the Ocean City's water supply system.

## **Section 2--Water Supply**

### Introduction

Ocean City's water supply system includes 3 water treatment plants which treat raw water to remove iron, manganese, and chlorinate the water. The 15th Street plant was constructed in the mid-1990's and replaced two old plants. Ocean City supports a proactive approach to public health. One of the Town's goals is to maintain the highest possible drinking water quality through consistent monitoring of the ground water supply and the infrastructure used to acquire and treat water. A comprehensive water study was performed by the consulting firm of Whitman, Requardt, and Associates in 1997 and updated in 2005. The firm was directed to conduct an investigation of the drinking water treatment and distribution system. The study indicated that the water supply within the Manokin and Ocean City aquifers had been and will remain safe and adequate to supply the Town of Ocean City, Maryland's safe drinking water needs beyond the planning period, ending in 2025.

There are extreme seasonal differences in population served with approximately 7,000 year-round residents augmented by over 250,000 visitors during a peak summer weekend; in essence, two completely different treatment and distribution system scenarios.

### Ocean City Water System - Ownership

The Ocean City Water System is owned by the Mayor and City Council of Ocean City, Maryland, and operated by the Town of Ocean City Municipal Water Department. The system is comprised of 24 production wells (Figure 2-1), 3 treatment plants, 7 elevated water storage tanks and 1 ground storage tank. A well maintenance program is also in place to ensure that the wells maintain their productivity and reliability.

### Supply and Demand

The Ocean City Water System must have adequate capacity to serve the peak seasonal population. In ~~1994-2008~~ the system served an estimated population of ~~330,133~~ 300,000 during

the peak season. The maximum daily demand was 14.41 MG. The ultimate build-out population has been projected to be approximately 381,000 in the year 2025 as estimated by the Town's consulting engineers. This figure differs from the lower estimate of about 360,000 projected using Demoflush. Historical data for recent years indicates the maximum day per capita demand of 44.0 GPD. The corresponding maximum days system demand at build-out is projected to be 16.8 MGD.

Future water system requirements were evaluated in 1997 on the projected Year 2020, 16.6 MGD maximum day demand. Recent evaluation of demand by Whitman, Requardt and Associates indicates that adding allowance for additional development at year 2005 may place demand in the year 2020 somewhat higher at 17.12 MGD. The existing raw water supply consists of 15 wells in the Ocean City aquifer and 9 wells in the Manokin aquifer (Figure 2-2) distributed along the length of Ocean City corresponding to the distribution of existing and projected development.

The use of low flow water fixtures wherever possible by property owners can reduce the waste of additional water resources. Broken water lines within unoccupied units have been reported to the Building Office in order that repairs can be made and water saved. Rationing of outdoor water use could be an option if supplies become short.

#### Water Quality, Capacity and Treatment

The Ocean City Aquifer has a 7,900,000 gallon month of maximum use withdrawal. The Manokin Aquifer has a 9,700,000 gallon month of maximum use withdrawal.

The Ocean City Water System consists of 3 water treatment plants. The first plant, located at 15th Street, using wells in the Ocean City aquifer, is a 6.0 MGD plant. The second plant, located on 44th Street, uses water from the Ocean City aquifer and is a 4.0 MGD plant. The third WTP is located in North Ocean City at Gorman Avenue with wells in the Manokin aquifer and is an 8.0 MGD plant.

The Town conducts required regulatory water quality monitoring. According to Whitman, Requardt recommendations, additional monitoring sites within the distribution system should follow when budgetary conditions allow. Rising chloride levels in an Ocean City aquifer well serving the 44th Street plant had raised concerns about intrusion of salt water into the fresh water aquifers, but this appears to have stabilized.

Continuing improvements in desalination technology have led to a change in philosophy with respect to the possible salt-water intrusion problem. The preferred approach would be to continue to pump water from the existing well fields and, if the water became brackish, to treat it by using either the reverse osmosis procedure or the electro-dialysis reversal process installed only when needed. This approach is judged to be more cost-effective, and more environmentally acceptable because it would prevent further westward movement of the salt-water front.

Desalination, if required in the future, could be constructed at the 15th Street Plant on the site. Additional land would be required to add desalination at 44th Street. At the Gorman Avenue

Plant, desalination facilities could be constructed on the site previously occupied by the police station, or could be located offsite. Due to the naturally protected characteristics of the confined aquifers, Ocean City water supply is not susceptible to the other inorganic compounds. The wells serving Ocean City water supply pump water from confined aquifers. Confined aquifers are naturally well protected from activity on the land surface due to the conforming layers that provide a barrier for water movement from the surface into the aquifer below. A properly constructed well with casing extended to the confining layer above the aquifer and with sufficient grout should be well protected from contamination at the land surface.

Research indicates that rising sea levels resulting from climate change could result in increased saltwater intrusion into the groundwater in coastal regions. This is cause for concern and should be studied in depth over the next few years. The Town is prepared to deal with desalination when the time comes.

### **Saltwater Intrusion**

A threat to Ocean City's water supply is saltwater intrusion, which is the horizontal movement of saltwater into the freshwater aquifer from the ocean or the bay. It could also occur from a vertical movement by downward leakage from the ocean or bay, or upward leakage from lower aquifers.

Testing in the past had shown a rise in chloride levels in the 44th Street area. This is caused by heavy year round water use in the area and leakage between the Ocean City aquifer and the saltier Manokin aquifer in this area. The upconing of salt water at the 44th street plant stabilized after much of the pumpage was shifted to the Gorman Avenue Plan in 1989 and 1990, indicating a state of equilibrium may have been reached. Saltwater intrusion is occurring in localized parts of the unconfined Columbia Aquifer, but it is not considered a major threat. However, it is still possible that a salt front is moving in from the oceanside or bayside near 44th Street.

The "Comprehensive Water Supply Study" recommends spacing future wells to distribute drawdown from the aquifers and relieve the salt intrusion in any particular area. The study also notes that any future water supply production wells should probably be located in the northern part of the Town where the hydrogeologic conditions are more favorable with respect to available drawdown and saltwater intrusion. The Study also states that future planning must recognize the possibility of saltwater intrusion, and flexibility in design of the water supply system must be provided so that the problem may be addressed if and when intrusion occurs.

An increasingly attractive solution to salt intrusion is the rapidly developing technology and operating methods of desalination of brackish water. Desalination could be accomplished as needed by converting existing water treatment plans. By employing desalination, the saltwater intrusion could be contained at the coastline indefinitely.

Water direction frequently reverses at many points in the distribution system as treated water is pumped into the system from different plants. These reversals generally contribute to improved water quality by limiting biofilm accumulation.

## Storage/Maintenance

The Town has 7 elevated tanks and 1 ground level tank with a total useable storage capacity of 6.30 million gallons (Figure 2-3). The present storage facilities have adequate capacity to support a maximum day demand of 18.00 MG. Under normal operation, water levels in the tanks do not significantly fluctuate. Mains are typically flushed twice each year to remove debris and iron sediment. The pipes, themselves, are in acceptable condition with little evidence of corrosion. No new storage towers are expected to be erected during the planning period.

## Potential Service Area

The Town of Ocean City extends from the Ocean City Inlet to the Maryland/Delaware line and is separated from West Ocean City by the Isle of Wight Bay. The existing Ocean City Water System covers the entire municipal area. Maps of the water lines are shown as Attachment “A” and were part of the 2005 Water Study done by the firm of Whitman, Requardt, and Associates. A West Ocean City connection to the Ocean City water system does not seem necessary or likely.

Appropriations for the Ocean City aquifer are 3.6 mgd/daily average. Appropriations for the Manokin aquifer are 4.4 mgd/daily average. The total average is 8 mgd, 80% of which is 6.4 mgd. The average withdrawal was 5.49 mgd, less than 6.4 mgd (2008). By the end of the planning period Ocean City will have reached total build-out of available lands. It has been estimated that approximately 381,000 people will need about 16.8 mgd. The maximum possible water withdrawal is 18 mgd.

The maximum per day per capita demand for water in 1997 was approximately 60 gallons per day. The corresponding maximum day system demand at build out was projected in 1997 to be 16.6 million gallons per day (MGD). Future water system requirements were evaluated in 1997 on the year 2020's 16.6 MGD maximum day demand. Recent evaluation of demand indicates that adding allowance for additional development at year 2005 may place demand in the year 2020 somewhat higher at 17.12 MGD (Figure 2-4), acceptably less than the 18 MGD limit. A water usage rate of 44 gallons per capita per day was applied to the peak weekend population projections, resulting in a 2025 maximum water demand of 16.8 MGPD ( $44\text{gpcd} \times 381,114 = 16,769,016$ ), per Whitman, Requardt, and Associates.

## Conclusion

The projected maximum peak population may require 17.2 mgd, and water withdrawal will not surpass the maximum withdrawal of 18 mgd through the year 2020. Ocean City has more than ample quantities of groundwater resources available from the Ocean City and Manokin aquifers for its projected growth and development. Clean water sources are sufficient to handle the needs of future populations.

Upgrades to the municipal water withdrawal and treatment systems should be correlated with population changes and as equipment warrants replacement. Ocean City should continue to

work with Worcester County government and the Maryland Coastal Bays Program to assure that the goals of the Isle of Wight subwatershed plan are realized. The Town will continue to implement the Maryland Coastal Bays Critical Areas Program actions, promote effective Stormwater Management techniques, and encourage Environmentally Sensitive Design standards to protect the source water for the town's future.

There are operational issues in Ocean City that may not be present with other drinking water utilities with more stable consumer populations. Ocean City's future withdrawals from its wells will have little to no impact on the water resources.

It is recommended that: Well drawdown and recovery levels are monitored, inappropriate development does not occur in aquifer recharge areas, groundwater quality is monitored, and the threat of saltwater intrusion is minimized.

### **Section 3 - Wastewater**

#### Introduction - Treatment

In 1994, the Town of Ocean City assumed control of the Ocean City wastewater system from the Worcester County Sanitary Commission. The system has collection, treatment and disposal capabilities. The service area ~~includes, for the most part,~~ the boundaries of the Town of Ocean City, Maryland (See Chapter 10 for Tier 1 Map). ~~There are currently no maps of the wastewater service area to include in this report.~~ The treatment plant at 64th Street was constructed in 1969, with expansions and secondary treatment upgrades completed in 1974, 1981, 1990 and 1992, and 1998.

The plant's wastewater treatment design capacity is currently 14 million gallons per day (MGD). Additional sludge handling capabilities constructed in 1998 increased the capacity from 12 to 14 MGD. The plant will serve the same physical land area of Ocean City throughout the planning period with no anticipated decreases or increases in service area coverage. (Figure 3-1)

Maximum month wastewater treated has ranged from 10.4 to 11.6 MGD for the period 1990 through 2003. The available, or unused treatment capacity, has fluctuated between 2.4 MGD (17% of the total capacity) in 1994 and approximately 3.59 MGD (25% of the total) in 2003. The average flow treated during the maximum month through the period was 11.2 MGD representing roughly 80 percent of total capacity. The average daily flow treated during the maximum month between 2003 and 2008 was 10.87 MGD in July of 2006. The available or unused capacity has averaged 23.6% during this time.

Year 2020 maximum wastewater treatment flows are projected to increase to approximately 12.14 MGD for the Town of Ocean City and West Ocean City combined. Work is currently being conducted by the City to evaluate needs for future wastewater treatment plant improvements.

Ocean City is looking into adding a fourth secondary clarifier at which point, we would have the capability of treating 16 MGD. We are currently permitted for 14 MGD. The limit for expansion of the current treatment plant is about 16 MGD. If our permit were to change and

require us to begin nitrogen and phosphorous removal, we would require that some equipment changes and additions be made. Currently, we are only required to monitor these levels.

~~The Sunset Island was the most recent new development with an increase in development has a sewer demand of 200,000 GPD with no limits to the amount of flow.~~

### Wastewater Discharge

Discharge point "001" is the Atlantic Ocean off of 64th St. between 3600 ft. & 4600 ft. from shore. Diffusers are located near the ocean floor at 50 foot intervals. Outfall point "002" is located at the Northwest corner of the treatment plant complex on the Assawoman Bay. This outfall would only be used in an emergency situation. To date, the Assawoman outfall has never been used. If it ever does the treatment level to the bay would be "secondary" only. This level of treatment would not be adequate and we would have to repair the ocean outfall as quickly as possible. We do flush the bay outfall annually, in February, to keep the line clear. Our NPDES permit allows us to perform this annual maintenance. We must notify MDE in advance of the date and time. The Atlantic Ocean is and shall remain the most suitable receiving water body for discharge. These discharge points will not change in the foreseeable future. Presently, our NPDES permit does not require us to report nutrient loads. ~~There is no A total maximum daily load for nutrients (TMDL) was adopted for the Coastal Bays by EPA in 2014. Worcester County is currently working on a Watershed Implementation Plan to achieve minimum State water quality standards in partnership with Ocean City, Maryland Coastal Bays Program and others. TMDL for wastewater nor any impairments of our receiving waters. There is a TMDL for the Assawoman Bay that is incomplete. The Isle of Wight main bay TMDL is currently being established. Herring Creek and Turville Creek have previously established TMDL's. (engineering staff). Since Assawoman Bay has no TMDL, the suitability of receiving waters cannot be determined at this time.~~

Liquid and solid wastes leave the plant after treatment. Treated secondary effluent (liquid) is pumped from the treatment plant to the Atlantic Ocean through a 30" diameter pipeline. Treated Class "A" biosolids (solid) are transported to local farms by OC tractor trailers for land application on a daily basis during the summer season and less frequently during the winter months. Any solid waste that does not meet Class "A" criteria is transported to the Worcester County Landfill for final disposal. Ocean City does have the capacity to continue these practices through the planning period.

We are in the process of renewing our NPDES permit for operating the plant through MDE. Our current permit is good through January, 2011, and the next permit is good for five years from it's issuance. We do not anticipate any changes to the new permit.

### Septic Systems

Ocean City has no septic systems in use at the present time.

### Future Land Use and Capacity

Future land use patterns will involve redevelopment throughout the Town as existing uses are re-evaluated and replaced. This development will have very little impact on resources as the Town's wastewater treatment capacity will remain sufficient to handle the projected increase.

Wastewater treatment capacity limits are currently and will continue to be set in anticipation of maximum peak summer populations through the planning period. There will be sufficient wastewater treatment capabilities to handle projected population increases to the year 2032~~5~~.

The Municipal Growth Element ([Chapter 10](#)) contains a more detailed discussion of future growth and needs.

#### Wastewater Treatment Milestones

- Reach 11.2 MGD (80% of rated capacity) –Triggers planning for future growth
- Reach 12.6 MGD (90% of rated capacity) – Triggers construction for future growth
- At 16 MGD – Probable maximum month capacity –With planned improvements
- At 14 MGD - treatment plant MDE - rated capacity

#### **Section 4**

##### **Stormwater and Non-Point Source Pollution**

The Ocean City Stormwater Management Ordinance, Article III, Section 30-141 of the City Code was adopted ~~June 18, 2001~~[May 17, 2010](#): “The purpose of this article is to protect, maintain and enhance the public health, safety, and general welfare by establishing minimum requirements and procedures to control the adverse impacts associated with increased stormwater runoff. Proper management of stormwater runoff will minimize damage to public and private property, reduce the effects of development on land, ~~control stream channel erosion~~, reduce local flooding, and maintain after development, as nearly as possible, the pre-development runoff characteristics.”

Non-point source pollution comes from many sources. This pollution is caused by rainfall moving over and through the ground. As the runoff moves, it picks up and carries away natural and human-made pollutants, finally depositing them into wetlands, coastal waters, and even our underground sources of drinking water. Non-point source pollution is the leading cause of water quality problems. The effects of non-point source pollutants on specific waters vary. These pollutants have harmful effects on drinking water supplies, recreation, and wildlife.

To a large extent, the amount of non-point source pollution is determined by a municipality's land use. Impervious surfaces are an environmental concern because runoff amounts increase as impervious surfaces increase, causing a strain on existing stormwater control systems. Ocean City's annual rainfall averages forty-nine inches, which translates to approximately 200,000 gallons per acre or 23,000 gallons on a 5,000 square foot lot. Depending on the land cover, it either percolates into the soil or becomes runoff. The more land that is covered by impervious surface, the more runoff results.

Impervious surface coverage can be limited by restricting land use density or increasing requirements for pervious cover. Restricting density causes land elsewhere to be developed to accommodate the growing population (see Figure 4-1). In a designated growth area such as Ocean City, construction practices and open space requirements can decrease runoff while still allowing sufficient development within the coastal area limitations of shallow depth to water table and tidal influence.

It is desirable to maximize infiltration of rainwater. This water serves to replenish the groundwater, thereby helping to hold back the salt water wedge. Also, less runoff reduces nuisance flooding and the adverse impacts of stormwater on water quality. The original sandy soils of Ocean City can absorb about eight times as much water as normal Eastern Shore soils. Such soils lend themselves to the use of infiltration practices for stormwater management.

The efforts of the Town of Ocean City to minimize impervious surfaces and control stormwater runoff are vital to our goals of decreasing polluted stormwater from reaching the coastal bays. The coastal bays and the Atlantic Ocean are and will remain the primary receiving waters for stormwater run-off. The best management practices we are using in these efforts will significantly reduce the impact of future development. Our practices are listed in the Isle of Wight Subwatershed section below.

Ocean City has no septic systems or agricultural activities. The Town does not operate under NPDES Permit MS4 for stormwater management due to the Town not being a Phase II community ~~(engineering staff)~~.

#### Isle of Wight Bay Subwatershed (from Worcester County Comprehensive Plan)

This subwatershed includes Ocean City, Ocean Pines, some of West Ocean City, and most of the Route 50 commercial corridor. The headwaters are near Selbyville, Delaware, north of Bishopville, and contain agricultural lands and a planned industrial area. This area has been the traditional focus of population growth and development in Worcester County because of employment opportunities and access to Ocean City and the near-by state and national parks.

In the Isle of Wight Subwatershed, development and redevelopment should be located in the priority funded/smart growth area. Ocean City is completely within these designations. Allocations of pollutant loads should be designated first to these areas. In determining water quality impacts to the watershed resulting from development and redevelopment in Ocean City, the Town ~~uses the WRE non point source spreadsheet to assess the impacts.~~ maintains a database of all BMPs and requires periodic maintainance. Ocean City is virtually completely urban and developed. Most development activity is and will remain re-development.

Redevelopment activities in Ocean City are subject to Stormwater Management and ~~adopted~~ the Critical Area Program regulations. Thus, all development is subject to improving water quality per MDE and DNR guidelines as adjusted for Ocean City. Environmentally Sensitive Design is recommended in treating the Water Quality volume. These designs include Bio-swale, rain gardens, infiltration trenches, rooftop gardens, pervious paving material, cisterns for water re-use, and/or reducing impervious surfaces. The overall post construction pollutant loads will be 10% below pre-construction loads with a minimum 50% reduction of impervious surface. With only 496 acres (Table below) of developable land in the town, current

regulations and required stormwater management practices will continue to help protect our groundwater resources.

### Ocean City Non-Point Source Loading

Pollution by nutrients causes many problems, such as algal growth and oxygen reduction. Aquatic life is directly affected by this type of pollution. Total loadings are calculated below by land cover types.

The calculations for future loading are the same for the current loadings because future development of Ocean City will primarily be redevelopment of existing, already developed properties. Even so, we anticipate that efforts to require more open space, increased pervious land coverage, and improved stormwater management, together with Coastal Bays Critical Areas Program ~~restrictions implementation on~~ along with future redevelopment projects, will reduce nutrient loading in the future.

### **Conclusion**

In order for Ocean City to remain a viable and successful community, adequate infrastructure must be available. Meeting the demand for high quality potable water, properly treating wastewater, and protecting water quality by managing stormwater runoff are essential for our future. The Town is committed to achieving these mandates as evidenced by the continual monitoring of the systems, by the periodic updating of the *Comprehensive Water Supply Study*, and rigorous enforcement of environmental regulations.