

2025 Ten Year Review

COMPREHENSIVE PLAN

Town of Ocean City, Maryland

Planning Commission Draft
June 2025

Town of Ocean City Maryland Comprehensive Plan

Acknowledgments

Planning Commission

Joe Wilson, Chair
Joel Brous, Secretary
Palmer Gillis
Kevin Rohe
Pam Robertson
Janet Hough
Mike Quade
Maureen Howarth, Attorney

Town of Ocean City Staff

Department of Planning and Community Development

George Bendler, Director Bill Neville, City Planner Chase Phillips, Planning Analyst Nate Morton, GIS Coordinator

Town of Ocean City Maryland 2025 Comprehensive Plan Update

Table of Contents

Page Number

| <u>Introduction</u> | |
|--|------|
| Required Elements | 1 |
| Comprehensive Plan Overview | |
| Strategic Plan | |
| New Trends and Changes | |
| Chapter 1: Population Characteristics and Trends | |
| Goal and Objectives | 1-1 |
| Population Size and Characteristics | |
| Resident Population | |
| Seasonal / Visitor Population | |
| Population Projections | 1-16 |
| Strategies | 1-18 |
| Chapter 2: Economic Development | |
| Goal and Objectives | 2-1 |
| Economic Profile | 2-4 |
| Employment / Workforce | 2-9 |
| Tourism | 2-11 |
| Sports | 2-15 |
| Special Events | 2-16 |
| Conference Center | 2-18 |
| Municipal Airport | 2-19 |
| Heritage | |
| Accommodations | 2-22 |
| Dining / Amusements | 2-24 |
| Golf | 2-25 |
| Fishing | 2-26 |
| Water Recreation | 2-27 |
| Downtown Development | |
| Future Economic Development/Regional Trends | 2-29 |
| | 2-32 |

Chapter 3: Land Use and Community Character

| | Goal and Objectives | 3-1 |
|------------|--|------|
| | Growth History | |
| | Existing Land Use | 3-7 |
| | Residential | |
| | Commercial | 3-11 |
| | Open Space | 3-13 |
| | Industrial | 3-16 |
| | Multi Use | 3-17 |
| | Future Land Use Plan | 3-19 |
| | Strategies | 3-24 |
| | Land Use Map / Descriptions | 3-26 |
| <u>Cha</u> | npter 4: Transportation | |
| | Goal and Objectives | 4-1 |
| | Ocean City's Transportation System | |
| | Regional Network | |
| | Town Street System | 4-10 |
| | Parking | 4-13 |
| | Public Transportation | 4-16 |
| | Bicycle Movement | 4-21 |
| | Pedestrian Movement | 4-25 |
| | Waterways | 4-27 |
| | Airport | 4-28 |
| | Strategies | 4-30 |
| Cha | npter 5: Community Facilities and Public Safety Services | |
| | Goal and Objectives | |
| | Water System | |
| | Wastewater Treatment | |
| | Stormwater Management | |
| | Solid Waste Management and Recycling | |
| | Recreation and Parks | |
| | Public Safety Services | |
| | Strategies | 5-30 |
| <u>Cha</u> | npter 6: Housing | |
| | Goal and Objectives | |
| | Housing Supply | |
| | Housing Unit Occupancy | |
| | Housing Affordability | |
| | Fair Housing | 6-12 |

| | Housing Types6- | 12 |
|-------|--|--|
| | Workforce Housing6- | 14 |
| | Transient Housing 6- | |
| | Homelessness 6- | 16 |
| | Strategies 6- | 16 |
| Chap | er 7: Environment | |
| | Goal and Objectives | -1 |
| | Sensitive Areas | -3 |
| | Beach7 | -4 |
| | Coastal Bays7 | -8 |
| | Special Flood Hazard Area7- | |
| | Future Conditions7- | |
| | Wildlife7- | 19 |
| | Climate and Air Quality7-2 | |
| | Solid Waste/Recycling/Energy Conservation7-2 | |
| | Energy Conservation and Environmental Impacts | |
| | Built Environment7-2 | |
| | Summary/ Strategies | |
| CHAID | ter 8: Downtown Development Redevelopment/Reinvestment | |
| СПир | | 1 |
| СПир | Goal and Objectives | |
| СПИР | Goal and Objectives | 3-3 |
| | Goal and Objectives | 3-3 3-7 |
| | Goal and Objectives | 3-3 3-7 11 |
| | Goal and Objectives | 3-3 3-7 11 |
| | Goal and Objectives | 3-3 3-7 11 |
| | Goal and Objectives | 3-3 3-7 11 12 |
| | Goal and Objectives | 3-3 3-7 11 12 |
| | Goal and Objectives | 3-3 3-7 11 12 3-1 3-3 |
| | Goal and Objectives | 9-1 9-3 9-4 |
| | Goal and Objectives 8 Overview of Issues 8 Current Status/Projects 8 Redevelopment/Reinvestment 8- Strategies 8- Strategies 9 Strategic Plan Implementation 9 Capital Improvement Plan 9 | 9-1 9-3 9-1 9-3 9-4 9-6 |
| | Goal and Objectives 8 Overview of Issues 8 Current Status/Projects 8 Redevelopment/Reinvestment 8- Strategies 8- Strategies 9 Strategic Plan Implementation 9 Capital Improvement Plan 9 Land Use Regulations 9 | 3-7 11 12 2-1 2-3 2-4 2-6 3-9 |
| | Goal and Objectives 8 Overview of Issues 8 Current Status/Projects 8 Redevelopment/Reinvestment 8- Strategies 8- Strategies 9 Strategic Plan 9 Capital Improvement Plan 9 Land Use Regulations 9 Design Criteria, Standards, and Review Process 9 | 9-1 9-3 9-1 9-3 9-4 9-6 9-9 |
| | Goal and Objectives | 3-3 11 11 12 2-1 2-3 2-4 2-6 2-9 10 |
| | Goal and Objectives | 9-1 9-1 9-3 9-4 9-6 9-9 110 |
| | Goal and Objectives 8 Overview of Issues 8 Current Status/Projects 8 Redevelopment/Reinvestment 8- Strategies 8- Strategies 9 Strategic Plan Implementation 9 Capital Improvement Plan 9 Land Use Regulations 9 Design Criteria, Standards, and Review Process 9 Economic Development 9- Environmental Resource Management 9- Transportation 9- Transportation 9- | 3-3 3-7 111 12 2-1 2-3 2-4 2-6 2-9 10 11 12 |

Chapter 10: Municipal Growth Element

| | nd Objectives | |
|---------------|---|-----------------|
| | able Growth Act | |
| - | ion | |
| | Se | |
| | ut and Projections | |
| - | eses | |
| Strategi | es | 10-15 |
| Chapter 11: V | Vater Resources Element/ Mineral Resources Element | |
| | | |
| | nd Objectives | |
| | Geology and Groundwater Use | |
| | se Plan / Growth Projections | |
| | Supply | |
| | vater Treatment | |
| | rater Management | |
| | Coastal Bays Watershed | |
| | Atlantic Ocean | |
| | Resources [Sand] | |
| | unity Resilience | |
| Strategi | es | 11-20 |
| | | |
| | | |
| Appendices | | |
| Appendices | | |
| Appendix A: | Maryland Economic Growth, Resource Protection, and Plan (2025) – 8 Planning Principles | nning Policy |
| Appendix B: | Lower Eastern Shore / Regional CEDS - Strengths, Weakne Opportunities and Threats (SWOT Analysis 2023) | esses, |
| Appendix C: | List of Current and Historical Rare, Threatened and Endan Worcester County (2021) | gered Species – |
| Appendix D: | Ocean City Strategic Plan (2024), Tourism Strategic Plan (2 | 019) |
| Appendix E: | Comprehensive Plan Update Public Comment Summary (20 | 025) |

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, 2009 and 2017.

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 Principles (from 2025) created 8 Principles which reflect the State's overall goal to create sustainable communities and to protect the environment utilizing active public participation, and advancing sustainable economic growth. The principles focus on optimizing land productivity, prioritizing development within existing infrastructure, creating energy-efficient transportation networks, enabling diverse housing options, supporting adaptive economic development, ensuring community equity by engaging all population sectors, integrating resilience measures to address unexpected threats, providing public spaces that encourage social interaction, and protecting ecological systems.

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 Local jurisdictions are required to include the planning principles in the local comprehensive plan and implement them through zoning ordinances and regulations.

- 1. Land
- 2. Transportation
- 3. Housing
- 4. Economy
- 5. Equity
- 6. Resilience
- 7. Place
- 8. Ecology

The current 10-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 and beach resort in 1875. Today, the Town has over 6,915 permanent residents, with over 7,159 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 promote tourism and publicize the vacation and leisure opportunities in Ocean City, increasing from \$2.1 million over a decade ago to \$11 million in 2025.

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 works as a part of building a strong Town
- ✓ how it has changed over time, and
- ✓ what trends or needs must be addressed in the future

The plan will include goals, objectives and strategies 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 gradually during the next 10 years. The purpose of this 10-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 the first-choice place to live, play, and invest in the future. The Comprehensive Plan will be evaluated and updated again in 2032 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 94th Street and 118th 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 the 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.

2017 Plan – Maintaining a steady course with incremental improvements was the planning approach of the current Comprehensive Plan. As the community reached full 'build out', investment continued with infill, renovations and adaptive reuse of commercial structures. Public investment in tourism promotion with a new marketing brand, capital facilities, and road safety/utility improvements were a part of many successful projects completed.

Strategic planning

In the spring of 2024, the Mayor and City Council renewed 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 - 2039

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 / New ways to measure Growth
- ❖ Next Generation of Family Demographics
- Environmental Change and Resilience

- ❖ Adaptive management of the Tourism based economy
- Meeting Housing Needs
- Advocacy for public investments that build the local economy and against those that will damage it

CHAPTER 1: Population Characteristics and Trends

Ocean City has experienced consistent, and in some time periods, remarkable growth. As the community has built out, the number of both daily and seasonal visitors has remained steady over the years. The year-round population, in particular, has remained stable within the past 20 years even during a national economic recession and global pandemic. U.S. Census estimates of the permanent resident population in April are 7,172 (2000), 7,102 (2010) and 6,844 (2020) with a 3.6% reduction in the last 10-year period. This chapter reviews trends 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 community planning.

MD Sustainable Growth Principle 5 – Equity

Engage all sectors of the community in plan development to ensure diverse voices are heard and the needs of underserved populations are prioritized

MD Sustainable Growth Principle 7 – Place

Provide for public spaces that encourage social interaction and value cultural, historical, and natural resources

New information for this 10-year cycle review will be the addition of data for each of Ocean City's census tracts (9500 Downtown, 9501 Midtown, and 9503 North OC), and comparison data for Ocean City zip code area that incorporates portions of West OC in Worcester County representing a community of interest.

U.S. Census (2020) and American Community Survey (2022 ACS) data is an important static view of Ocean City, Maryland as a home town for the year-round resident population, and may also be representative of non-resident property owners. For seasonal visitors and vacationers to Ocean City, Maryland as a resort town, a more dynamic view of population characteristics and trends is described in Chapter 2 Economic Development/Tourism.

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 U.S. 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 Recognize the connections between OC (Town) and West OC (County) to encourage cooperative land use planning which benefits both communities.

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 of the stable base of year-round residents.

Applicability of U.S. Census data to the peak season resort town population has traditionally considered that population statistics are shared by two groups: year-round residents and seasonal visitors. Best available information will be included from many sources to provide a basis for understanding and meeting present and future planning needs. This Chapter is organized in three parts, each providing discussion of:

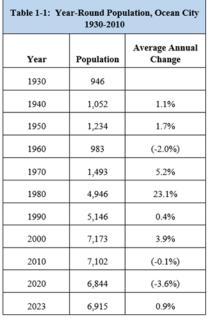
| ш | <u>Population size and characteristics</u> . Population size serves as the benchmark for |
|---|--|
| | planning the physical needs of the community. It provides the basis for estimating overall |
| | land and facility needs. Analyzing the characteristics of the population assists |
| | policymakers in making informed judgments regarding how the needs and service |
| | demands of the present population can best be met. |
| | <u>Population projections</u> . 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 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 useful for estimating future demand for community facilities and services. |
| | Recommendations. The recommendations 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. |

Population Size and Characteristics

Year-round Resident Population

It is common practice for a comprehensive plan to reference the U.S. Census as a consistent way to analyze the various characteristics of a community's population, such as age, sex, race, income and education. Selected data from both the 2020 U.S. Census and the 2022 American Community Survey (5-year) 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 Comprehensive Plan. While resident population (7,000/2.6%) can serve to inform many actions related to future planning, the size and characteristics of the community's visitor population (263,000/97.4%) will continue to be of greater import for planning purposes due to its much greater size and much greater demand for public facilities and services.

Growth in the Town's resident population accelerated during the period 1990 to 2000 and then stabilized over the last 20 years near 7,000 residents. This stable rate of growth in the resident population is expected to continue. 2020 U.S. Census measurement of the resident population is 6,844 persons, with ACS 5-year projections in 2023 showing a small increase to 6,915 persons.



Ocean City MD Year Round Population

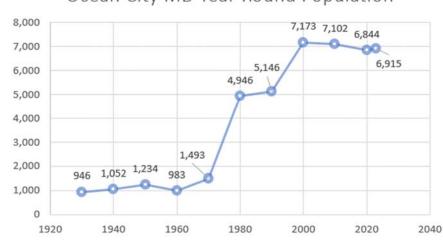


Figure 1-1: Change in Year-Round Population, Ocean City, 1930-2020 Source: U.S. Census for years 1930 through 2020, ACS 2023

Table 1-2 compares the growth of Ocean City's permanent population to that of the 21842-zip code area, Worcester County, Eastern Shore Region and the State of Maryland. 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 2 to 7 percent annual average increase. The slight decline of year-round population in Ocean City in 2020 is trending back up with 2022 ACS 5-year estimate of 6,915.

| | Table 1-2 Population Change in Ocean City and Selected Jurisdictions 1980-2020 | | | | | | | | | | |
|---|--|-------------------|-----------|-----------|-----------|---|--|--|--|--|--|
| | 1980 | 1990 | 2000 | 2010 | 2020 | Average Annual Change - 2000 - 2020 | | | | | |
| Ocean City | 4,496 | 5,146 | 7,173 | 7,102 | 6,844 | -3.6% | | | | | |
| 21842 Zip Code | | | 10,274 | 11,089 | 11,104 | 0.1% | | | | | |
| Worcester County | 30,889 | 35,028 | 46,543 | 51,454 | 52,460 | 1.95% | | | | | |
| Lower Eastern Shore (w,w,s,s,oc) | 145,240 | 163,043 | 186,608 | 214,102 | 220,562 | 3.0% | | | | | |
| State of Maryland | 4,216,933 | 4,780,753 | 5,296,486 | 5,773,552 | 6,177,224 | 7.0% | | | | | |
| Sussex County, Delaware | 98,004 | 113,229 | 156,638 | 197,145 | 237,378 | 20.4% | | | | | |
| | Source: 2020 | U.S. Census Quick | Facts | | | | | | | | |

For planning purposes, the number of permanent residents has been identified as an important indicator of stable residential neighborhoods, as a baseline 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. In many ways the permanent resident population is a secondary measure compared with the total maximum number of people in the Town, including both the permanent and transient population as illustrated by housing occupancy data.



Figure 1-2 Housing Occupancy Types

Source: 2020 US Census

Table 1-3 compares population change by Census Block

| Table 1-3 | | | | | | | | |
|-----------------------------|---------|---------|---------|-------|--|--|--|--|
| Population by Census Block | | | | | | | | |
| 9500 9501 9503 Total | | | | | | | | |
| 2010 | 2,080 | 1,728 | 3,294 | 7,102 | | | | |
| 2020 | 1,917 👢 | 1,845 👚 | 3,156 👢 | 6,844 | | | | |



Race and Ethnicity

Standardized data from the 2020 Census is used to describe and compare community population characteristics for race and ethnicity in Table 1-4. The relative size of different racial and ethnic groups within a population is generally referred to as a measure of diversity. As noted previously, Census data only represents a small portion of Ocean City's total annual population of over 8 million seasonal residents and visitors. The visitor population is more diverse than the resident population, and is more closely represented by the profiles of the State of origin, with significant variation by month or scheduled special event. No significant changes have occurred in the last decade.

| RACE and ETHNICITY | Marylai | nd | Worcester Co | ounty, MD | Ocean City town, MD | |
|--|-----------|---------|--------------|-----------|---------------------|---------|
| RACE and ETHNICITY | Number | Percent | Number | Percent | Number | Percent |
| One race | 5,695,323 | 92.2 | 49,818 | 95 | 6,450 | 94.2 |
| White | 3,007,874 | 48.7 | 41,845 | 79.8 | 5,994 | 87.6 |
| Black or African American | 1,820,472 | 29.5 | 6,236 | 11.9 | 140 | 2 |
| American Indian / Alaska Native | 31,845 | 0.5 | 136 | 0.3 | 21 | 0.3 |
| Asian | 420,944 | 6.8 | 753 | 1.4 | 124 | 1.8 |
| Native Hawaiian / Other Pacific Islander | 3,247 | 0.1 | 8 | | 2 | |
| Some other race | 410,941 | 6.7 | 840 | 1.6 | 169 | 2.5 |
| Two or more races | 481,901 | 7.8 | 2,642 | 5 | 394 | 5.8 |
| White (alone or in combination) | 3,421,858 | 55.4 | 44,336 | 84.5 | 6,368 | 93 |
| Black (alone or in combination) | 1,977,453 | 32 | 7,050 | 13.4 | 207 | 3 |
| American Indian / Alaska Native (alone or in combination) | 128,650 | 2.1 | 859 | 1.6 | 127 | 1.9 |
| Asian (alone or in combination) | 502,173 | 8.1 | 1,065 | 2 | 169 | 2.5 |
| Native Hawaiian / Other Pacific Islander (alone or in combination) | 11,440 | 0.2 | 36 | 0.1 | 6 | 0.1 |
| Some other race (alone or in combination) | 660,179 | 10.7 | 1,918 | 3.7 | 384 | 5.6 |
| HISPANIC OR LATINO AND RACE | Number | Percent | Number | Percent | Number | Percent |
| Hispanic or Latino (of any race) | 729,745 | 11.8 | 2,078 | 4 | 409 | 6 |
| Not Hispanic or Latino | 5,447,479 | 88.2 | 50,382 | 96 | 6,435 | 94 |

Source: 2020 U.S. Decennial Census, Missouri Census Data Center (2024) Selected Census 2020 Profiles

- · White (alone or in combination)
- Black (alone or in combination)
- = American Indian / Alaska Native (alone or in combination)
- Asian (alone or in combination)
- Native Hawaiian / Other Pacific Islander (alone or in combination)
- Some other race (alone or in combination)

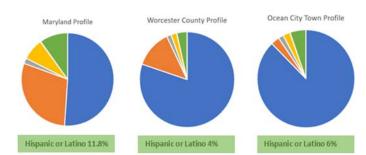


Table 1-4
Race and Ethnicity Comparisons, 2020

Age Distribution

Median age of the population is often used for planning and comparison purposes for both the resident and visitor populations. U.S. Census Bureau reports that 'America is Getting Older' as a result of the aging 'baby boomers' generation, and now their children – sometimes called echo boomers - who are approaching the nation's median age of 38.9 years.

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

- The general population remains evenly divided between males (49.9%) and females (50.1%). Within the seniors age group (65 and older) representing 33.9% of the population, there is a larger difference between males 45.9% and females 54.1%.
- The school-aged population, in the age group 5-19 years of age, makes up only 6.6 percent of the total population as compared to the County school age population which represents 15.5% of the total County population.
- The median age of the Town's population is 56.3 years of age. This is substantially higher than the median age of the Worcester County population (50.5) and the State (38.8). Comparison data demonstrates the general aging of the existing population and the attractiveness of Ocean City for seniors and retirees.
- The most important observation of the analysis of the age characteristics of the Ocean City resident population may be the increasing percentage of the population over 55 years of age. In Ocean City, 52.3% of the year-round population is over 55 years of age, compared to 43.9% in the County and 29.5% in the State as a whole. (Table 1-10).

| | Table 1-5 | | | | | | | | |
|--|--------------------------|------------------|------------------|--|--|--|--|--|--|
| Trend Growth in Resident Population Age 55 and Older | | | | | | | | | |
| Year | Persons Age 55 and older | Total Population | Percent of Total | | | | | | |
| 1970 | 418 | 1,493 | 28.0% | | | | | | |
| 1980 | 1,401 | 4,496 | 28.3% | | | | | | |
| 1990 | 1,919 | 5,146 | 37.3% | | | | | | |
| 2000 | 2,879 | 7,173 | 40.1% | | | | | | |
| 2010 | 3,450 | 7,102 | 48.6% | | | | | | |
| 2020 | 3,577 | 6,844 | 52.3% | | | | | | |

Source: 2020 U.S. Census

Population pyramids can help to visualize the overall size of the resident population, and the distribution of age and sex characteristics. Ocean City's demographic balance of males (49.9%), and females (50.1%) in the 2020 Census are not as evenly separated by age. The shape of the pyramid shares characteristics of retirement communities at the top, along with a strong younger resident workforce below. A higher percentage of households with children in the middle age brackets are located outside of the Town boundary in West Ocean City and Worcester County (Source: 2020 Census H2 Households by Type).

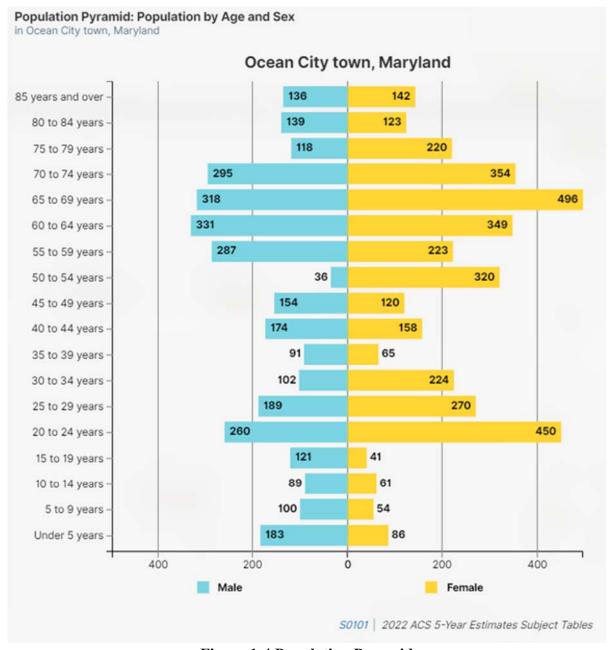


Figure 1-4 Population Pyramid
Source: data.census.gov/profile/Ocean_City_Town,_Maryland

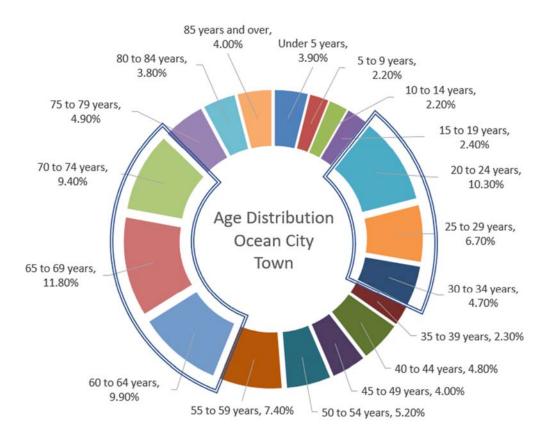


Figure 1-5 Age Distribution

Source: 2022 ACS 5-year Estimates

Selected age groups are highlighted from 20 to 29 years, and 60 to 79 years for further study, and referenced in other sections of the Comprehensive Plan. Older population groups provide valuable business leadership and volunteer contributions in the community, and may require additional public services, or specialized emergency response in severe climate events.

| C-1 | Mai | Maryland | | Worcester County | | Ocean City, town | |
|--------------------------------|-----------|----------|--------|------------------|--------|------------------|--|
| Selected Population Comparison | Number | Percent | Number | Percent | Number | Percent | |
| Total population | 6,177,224 | | 52,460 | 1 | 6,844 | | |
| AGE | | | | | | | |
| Persons 20 to 34 | 1,237,581 | 20 | 7,656 | 14.6 | 1,104 | 16.1 | |
| Persons 65 and older | 986,315 | 16 | 14,441 | 27.5 | 2,322 | 33.9 | |
| Persons 85 and older | 112,252 | 1.8 | 1,567 | 3 | 241 | 3.5 | |
| Median age | 38.8 | | 50.5 | | 56.3 | | |

Table 1-6 Selected Population Comparison

Source: 2020 US Census

Educational Attainment

Measurement of educational achievement on the Eastern Shore of Maryland includes more than just the linear advancement that is documented with the Decennial Census. Training for a wide range of trades and professions is met through both schools and colleges, as well as transfer of generational knowledge through work experience. For the purpose of comparison, Table 1-7 highlights local increases in achievement over the last 10-year period.

| AGE BY EDUCATIONAL ATTAINMENT | Mary | /land | Maryland Mar | | ity town, yland | |
|---|-----------|-----------|--------------|--------|--------------------|-------|
| | 2020 | 2010 | 2020 | 2010 | 2020 | 2010 |
| Population 18 to 24 years | 532,160 | 544,400 | 3,420 | 3,416 | 766 | 571 |
| Less than high school graduate | 60,531 | 78,938 | 485 | 529 | 98 | 21 |
| High school graduate (includes equivalency) | 164,489 | 172,575 | 965 | 1,202 | 192 | 126 |
| Some college or associate's degree | 229,254 | 223,204 | 1,687 | 1,093 | 389 | 186 |
| Bachelor's degree or higher | 77,886 | 70,227 | 283 | 591 | 87 | 238 |
| Population 25 years and over | 4,164,698 | 3,789,931 | 39,612 | 38,188 | 5,749 | 6,131 |
| Less than 9th grade | 161,130 | 166,757 | 883 | 1,145 | 204 | 110 |
| 9th to 12th grade, no diploma | 231,898 | 295,614 | 2,187 | 3,284 | 345 | 398 |
| High school graduate (includes equivalency) | 1,006,008 | 1,000,542 | 12,216 | 12,869 | 1,509 | 1,662 |
| Some college, no degree | 779,586 | 731,457 | 9,228 | 7,752 | 1,264 | 1,453 |
| Associate's degree | 282,898 | 238,765 | 3,294 | 3,131 | 625 | 503 |
| Bachelor's degree | 907,523 | 750,406 | 7,399 | 6,606 | 1,167 | 1,429 |
| Graduate or professional degree | 795,655 | 606,389 | 4,405 | 3,360 | 635 | 582 |
| High school graduate or higher | 3,771,670 | 3,327,559 | 36,542 | 33,758 | 5,200 | 5,622 |
| Bachelor's degree or higher | 1,703,178 | 1,353,005 | 11,804 | 9,967 | 1,802 | 2,011 |

Table 1-7 Education Attainment

Household Size

Comparison of household size estimates over the last decade shows minor changes and a reduction in the average number of persons per household. There may be a practical correlation between housing size (number of bedrooms), and the location of families with children that is illustrated in Table 1-8. This would help to explain the age gap in the population pyramid, if families with school age children seek larger homes, properties and proximity to schools in Worcester County.

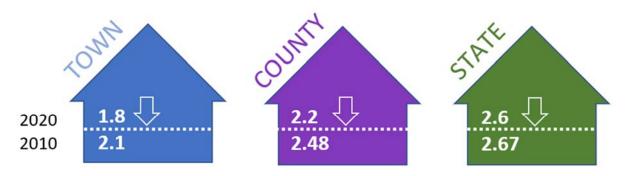


Figure 1-5 Average Household Size

Source: ACS 5-year data 2018-2022, 2010-2014

| TENURE BY PRESENCE AND AGE OF CHILDREN UNDER 18 YEARS BY HOUSEHOLD TYPE | Worcester County, Maryland | % of total | Zip Code 21842 | % of total | Ocean City town, Maryland | % of total |
|---|----------------------------------|---------------|----------------|---------------|------------------------------|---------------|
| Total Households: | 22,871 | | 5,683 | | 3,820 | |
| With children under 18 years | | 23% | | 14.8% | | 11.1% |
| Owner occupied: | 17,241 | 75.4 | 3,979 | 70 | 2,576 | 67.4 |
| With children under 18 years: | 3,505 | 15.3 | 530 | 9.3 | 199 | 5.2 |
| Renter occupied: | 5,630 | 24.6 | 1,704 | 30 | 1,244 | 32.6 |
| With children under 18 years: | 1,749 | 7.6 | 311 | 5.5 | 225 | 5.9 |

| BEDROOMS | Worcester (| | Zip Code 21842 | | Ocean City town, Maryland | |
|---------------------|-------------|-------|----------------|-------|---------------------------|-------|
| Total housing units | 56,485 | | 32,909 | | 30,073 | |
| No bedroom | 1,314 | 2.3% | 1,164 | 3.5% | 1,164 | 3.9% |
| 1 bedroom | 6,270 | 11.1% | 5,387 | 16.4% | 5,235 | 17.4% |
| 2 bedrooms | 18,259 | 32.3% | 13,628 | 41.4% | 13,140 | 43.7% |
| 3 bedrooms | 22,605 | 40.0% | 10,248 | 31.1% | 8,823 | 29.3% |
| 4 bedrooms | 6,518 | 11.5% | 1,872 | 5.7% | 1,309 | 4.4% |
| 5 or more bedrooms | 1,519 | 2.7% | 610 | 1.9% | 402 | 1.3% |

Table 1-8 Households with Children

Source: 2020 U.S. Census Table HCT3

Occupied Households by Bedrooms

Source: 2020 ACS 5-year data profile

Population Density

Total land area within the Town of Ocean City is approximately 4.5 square miles or just under 2,880 acres. Table 1-9 presents the population density (persons per square mile) for the resident population (1,510 persons per square mile) and for the average weekend resident and visitor population by season (16,746 to 62,316 person per square mile, depending on the season). By way of comparison, the population density of Baltimore City is approximately 7,236 persons per square mile and the density within the City of Annapolis is approximately 5,664 persons per square mile.

| Table 1-9 Population Density– 2020 | | | | | |
|------------------------------------|------------|--------------------------------------|--|--|--|
| Population type | Population | Density (persons per square mile) | | | |
| Year-Round Population | 6,844 | 1,521 | | | |
| Winter (Average Weekend) | 74,690 | 16,746 | | | |
| Spring (Average Weekend) | 125,781 | 28,202 | | | |
| Summer (Average Weekend) | 277,932 | 62,316 | | | |
| Fall (Average Weekend) | 140,174 | 31,429 | | | |

Seasonal and Visitor Population

Seasonal populations have different characteristics and impacts on the community depending on their length of stay: monthly, weekly, or weekend only. Over the last 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. Emphasis on scheduled special events, concerts and performances, and sports competition is working to make Ocean City a year-round resort community.

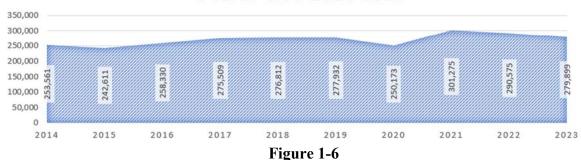
Current trends toward internet-based reservation systems, short term rental of single family housing in established neighborhoods, and new hotel construction and competition from national flagship corporations demand new approaches. This demographic change of short-term visitors will have positive and 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.

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 volume of flow through the sewage treatment system. Average seasonal estimates over a 30 year period include:

- Average Weekend- 150,000 to 160,000 with a 5% to 8% annual variance
- **Peak Summer Day** 326,658 with a maximum annual variance of 6%.
- Average Summer Population An alternate reference for summer population is provided by Town of Ocean City Tourism based on several sources including reported residential occupancy, adjusted annually based on room tax growth. This has been tracked from 2014 to 2023 as demographic data in the Annual Comprehensive Financial Report, with an average of 270,678 person estimate.
- **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.

ANNUAL COMPREHENSIVE FINANCIAL REPORT AVERAGE SUMMER POPULATION ESTIMATES OCEAN CITY 2014-2023



Estimating the visitor population using the Demoflush methodology may overestimate the population. To illustrate, comparing the 30-year average summer population estimate (326,658 less about 10 percent day visitors), to the number of housing units (30,028 as reported by the 2020 Census plus about 10,000 hotel units) results in an average of 7.3 persons per unit. It seems more likely that, if the average unit contains 2 bedrooms, up to six people (6) would occupy the average unit in the summer.

A population estimating methodology based upon persons per unit indicates that up to 240,168 people are in Ocean City at any time during the peak season. Several adjustments may include an assumed 85% occupancy for average conditions, plus 10 percent to account for day visitors who are not staying overnight, and an estimated 5,000 non-resident employees) to yield a maximum of about 229,851 as a total average summer population (about 70 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, higher estimates should continue to be utilized as a basis for long term planning to assure adequate water supplies and satisfy wastewater treatment capacity needs until another methodology is tested and approved.

Visitor Population Characteristics

Since 1987, each summer, the Ocean City 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.

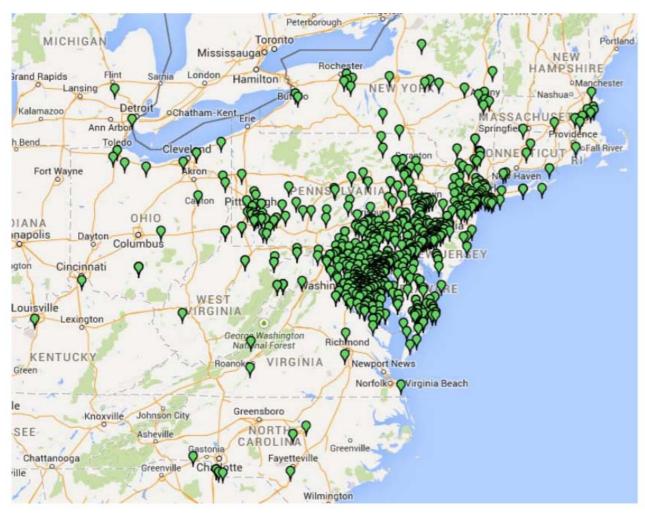
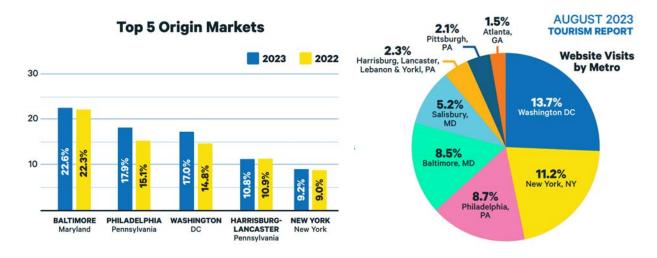


Figure 1-7 Visitor Survey Zip Codes

In Recent years there has been an emphasis on directed marketing to specific geographic regions including the top 5 origin markets identified in the OC Visitor Profile, and the top 8 metro areas determined by website visits (ococean.com/media/metric-reports).



Population characteristics for Ocean City, MD visitors go beyond those surveyed by the U.S. Census to include experience-based and lifestyle criteria typically referenced by destination marketing organizations. Tourism outreach begins with a strong place identity (Maryland's Coast / Naturally Cool), and builds on local experiences and lifestyles for a leisure audience attracted to a premier beach and boardwalk vacation. In addition, Ocean City's Tourism Strategic Plan seeks to attract visitors as:

- Demographic Age Groups (Gen Z, Millennials, Gen X, Baby Boomers, etc.)
- Families
- Experience Seekers
- Sports Tournament Participants
- Conference Attendees
- Special Even Attendees
- Golf Groups

Seasonal Property Owners

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. The zip code map (Figure 1-7) also generally illustrates the typical geographic location of existing non-resident property owners who consider Ocean City to be their second home.

Seasonal Workforce

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 3,000 to 4,000 young adults join the local population as both visitors and workforce. Seasonal workforce (12,000 per year) also includes resident employees that meet the needs of both private and public sector employers. Meeting housing needs of this seasonal workforce is discussed in Chapter 6.

Population Projections

The projection of permanent and seasonal population rely on 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. 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 maximum visitor population.

Seasonal population projections present their own challenges. 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 forces. Finally, Ocean City's physical capacity 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.

Year-round Population Projections

Population projections from Maryland Department of Planning for Maryland jurisdictions (December 2022) incorporate historic and projected populations for the Baltimore Region and the Washington Suburban Region using an established methodology. Worcester County has not met previous projections by 2020, and the current projections have been reduced to 0.86% in 2035 and 0.32% by 2050.

Table 1-10 presents both the historic and projected year-round population for Worcester County, Maryland. Population projections for Ocean City 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), (15.4% in 2,000), (13.8% in 2010) and (13% in 2020)] will remain relatively constant at 13% of the County population in the future.

| | P | | - | | | | | |
|---------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|------------------------------|
| | Census 2010 | Census 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 |
| Worcester County | 51,454 (1.01% increase) | 52,460 (0.19% increase) | 54,910 (0.92% increase) | 57,110 (0.79% increase) | 59,610 (0.86% increase) | 60,770 (0.39% increase) | 61,910 (0.37% increase) | 62,910 (0.32% increase |
| Ocean City* | 7,102 | 6,844 | 7,138 | 7,424 | 7,749 | 7,900 | 8,048 | 8,178 |

Table 1-10 Population Projection

Source: Maryland Department of Planning - State Data Center 2022 Preliminary, PCD calculation

Total (Seasonal) Population Projections

The projection of future total, or seasonal, population is also important to planning efforts in Ocean City. It is the total number of people in the city that impact the environment and demand for public services and facilities. A maximum carrying capacity for Ocean City will be maintained in the foreseeable future for planning purposes, 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.

Table 1-11 includes adjusted population figures which are 85 percent of the 'Demoflush' population estimates, verified with a separate method of estimating average summer population contained in the Annual Comprehensive Financial Report (CFR) prepared by the Ocean City Finance Department. These projections assume that there is no major change in local policy, or regulation of development, and that new hotel construction and/or redevelopment will continue to occur through the 2020-2040 period that will increase capacity to attract visitors during peak weekends.

| Table 1-11 Estimated Recent and Projected Peak Summer Seasonal Population | | | | | |
|---|--|-----------------------------|--|--------------------------------------|--|
| Year | Peak Weekend Population* (Demoflush) | Annual Percent Change | Peak Population Adjusted** (85% Demoflush) | Average Summer Population (CFR 2023) | |
| 2000 | 331,755 | 0.7% | 281,992 | | |
| 2001 | 311,330 | -6.2% | 264,631 | | |
| 2002 | 339,309 | 9.0% | 288,413 | | |
| 2003 | 340,344 | 0.1% | 289,292 | | |
| 2004 | 345,671 | 1.6% | 293,820 | | |
| 2005 | 322,308 | -6.8% | 273,961 | | |

| Table 1-11 continued Estimated Recent and Projected Peak Summer Seasonal Population | | | | | |
|---|--|-----------------------------|--|--------------------------------------|--|
| Year | Peak Weekend Population* (Demoflush) | Annual Percent Change | Peak Population Adjusted** (85% Demoflush) | Average Summer Population (CFR 2023) | |
| 2010 | 332,547 | 3.2% | 282,665 | 2010 – 257,479 | |
| 2015 | 318,840 | -4.1% | 271,014 | 2015 – 242,611 | |
| 2020 | 323,622 | 1.5% | 275,078 | 2020 – 250,173 | |
| 2025 | 328,476 | 1.5% | 279,204 | 2023 – 279,899 | |
| 2030 | 333,403 | 1.5% | 283,392 | | |
| 2035 | 338,404 | 1.5% | 287,643 | | |
| 2040 | 343,480 | 1.5% | 291,958 | | |

Strategies - Based on the historic data and projections presented in this Population Element, the following strategies are proposed

1) Place

- a. Continued growth in year-round population should be encouraged in order to provide / maintain the critical mass for expanded offerings of economic, social and cultural goods and services and to reflect the 8 Principles of Maryland's State Economic Growth, Resource Protection, and Planning Policy which call for growth to be directed to existing population centers.
- b. The Town's ability to provide park facilities and health, safety, and other vital services should be coordinated with peak seasonal population growth over time.
- c. Projections of the resident and seasonal population should be reviewed and updated every five years since characteristics 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, and coordinated with Worcester County.
- d. 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.
- e. Intentionally program and promote use of public spaces such as the Boardwalk,

Beach, Parks, Convention Center, Inlet Parking/Special Event Areas to meet the needs of both resident and visitor populations.

2) Equity

- a. 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.
- b. 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.
- c. Track and meet changing needs of year-round residents by Census Tract
- d. Build and sustain resident population percentage at approximately 3.5 to 5%
- e. Survey and support the 2 primary population age groups identified in the Population Pyramid
- f. Engage the international visitors, particularly the business workforce who choose to establish businesses and raise their families in the Ocean City community

CHAPTER 2: Economic Development

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 grouped into four categories: 1) accommodations (hotels, motels, and condominium rentals), 2) restaurants and nightclubs, and 3) retail shops and malls, and 4) amusements. In support of the tourism-based economy, Ocean City is supported by a vibrant real estate/construction industry, and government services that go beyond community management to expand recreational and special event opportunities for both visitor and resident populations.

Over eight million people are estimated to 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 is updated with new strategies each year to provide organization and direction to the adaptive marketing and branding efforts of many public and private partners in economic development. By reference it is incorporated as a part of this Comprehensive Plan.

MD Sustainable Growth Principle 5 – Economy

Allow for adaptive reuse, mixed-use, and context appropriate new development that responds to changing markets and innovations

MD Sustainable Growth Principle 1 – Land

Optimize productivity of working landscapes, ... and prioritize development within population centers that are in proximity to existing infrastructure and facilities

MD Sustainable Growth Principle 7 – Place

Provide for public spaces that encourage social interaction and value cultural, historical, and natural resources



Goal: To maintain a healthy and growing economy that supports the quality of life of residents and tourists, and encourages reinvestment.

Economic development efforts 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 of new businesses; and growing the economy to provide goods and services that match the needs of the community.

Ocean City's Tourism Strategic Plan creates additional goals to 1) Stay Centered on core resources and values; 2) Become Maryland's Amateur Sports Destination; 3) Enhance the Ocean City Experience; and 4) Expand Tourism

Town Economic Development Principles:

- Strong Local Government leadership, management and tourism marketing, including partnerships with State and County governments, the business community and community organizations, provides benefits to everyone
- Increasing Tourism spurs economic growth and provides revenue to make strategic public investment in infrastructure, provide community services and promote private investment
- Natural resources and cultural history of the community are enhanced through a sustainable tourism-based economy
- Local entrepreneurship and small business growth are stimulated by the influx of visitors, while local residents enjoy an abundance of restaurants, retail stores and entertainment venues
- The Ocean City Department of Tourism & Business Development leads, strengthens
 and supports Ocean City as a premier year-round destination by proactively developing
 experiences, events and products; forging partnerships and cooperative business
 initiatives; and creating compelling, measurable marketing campaigns to position our
 classic coastal community as the Mid-Atlantic's best beach resort for families, friends
 and groups.

Objectives:

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

Policies and Actions

- 2.0 Build a Tourism Marketing Team led by the Tourism and Business Development Director with support from specialized consultants to advance new community branding strategies, special event planning, and increase destination tourism market share
- 2.1 Organize, monitor and encourage multiple segments of the tourism-based economy for a sustainable future, and identify a measurement metric for each segment
- 2.2 Maintain a priority emphasis on the public beach, amusement parks and iconic boardwalk shopping district, as they are essential to the success of the resort

- 2.3 Continue to support downtown revitalization and reinvestment, including the bayside boardwalk extension, retail attractions and parking improvements
- 2.4 Align new economic development with resiliency goals (Hazard Mitigation Plan) and infrastructure management capacity (Capital Improvement Program)



Economic Development

- 2.5 Advertise and promote a family friendly beach and boardwalk experience, enhanced by area attractions and special events to maintain or expand market share in the Mid Atlantic tourism economy
- 2.6 Expand year-round cultural activities in the Town and the County, with increasing use of the Performing Arts Center, and activities sponsored by the OC Art League.
- 2.7 Expand the range of tourist attractions to include entertainment venues, quality restaurants, and boardwalk activities. Include opportunities to explore the natural environment and provide a framework for volunteer experiences.
- 2.8 Continue expansion of 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.
- 2.9 Complete regular analysis of the tourism market in order to identify trends and specific gaps in the range of attractions presently available. Promote and develop strategies for sports marketing to complement traditional beach recreation.

- 2.10 Build on the successful Maryland's Coast 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 coordinated brand and message.
- 2.11 Support bayside marine and natural area recreational use for expanded tourist activities in locations with adequate facilities and where residential neighborhoods are protected from adverse impacts.
- 2.12 Promote orderly real estate development that enhances the Town and generates taxes to support required services.
- 2.13 Promote redevelopment of properties and locations that are underdeveloped or obsolete.
- 2.14 Promote mixed-use projects that integrate commercial and residential development.
- 2.15 Support small local businesses that offer unique goods and services and provide jobs and revenue for the resident population.
- 2.16 Encourage and promote quality restaurants with a broad range of cuisines and options for live music and family entertainment.
- 2.17 Promote opportunities for job development in technical and other skilled employment sectors within the Town. Support technical education at the Worcester County Public School system, the Worcester Technical High School and Wor-Wic Community College to meet needs for tourism industry workforce training and other requirements.
- 2.18 Support non-profit sponsors of seasonal workers by promoting additional workforce housing, public transportation support services, training and legal assistance.

Economic Profile

As an indicator of the local economy, the Town government's fiscal position, as described in the Annual Comprehensive Financial Report, remains strong based on reported revenues and expenditures in the General Fund. Impacts from the National Economic Recession beginning in 2008, and COVID pandemic in 2020 have generally been offset by a strategy of increased marketing and public investment in expanded recreational opportunities in Ocean City. Net growth in General Fund revenues from 2010 to 2020 was \$1,398,685 average per year over the 10-year period.

Another indicator of strong financial management is the recent AA Bond Rating and the associated commentary by Fitch Ratings in 2023. The analytical conclusion reflected 'the Town's high fundamental financial flexibility, supported by strong reserve levels, solid expenditure flexibility, high revenue-raising ability, ... low long-term liability burden and expectations for revenue growth in line with inflation through economic cycles.'

Table 2-1 summarizes General Fund revenues and expenditures in 2000, 2005, 2015 and 2020.

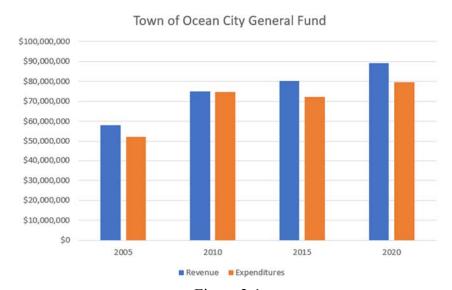
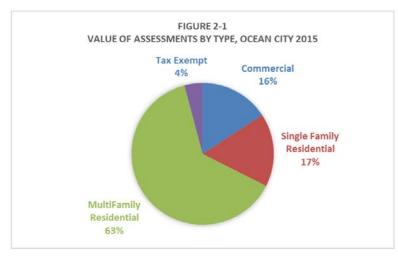


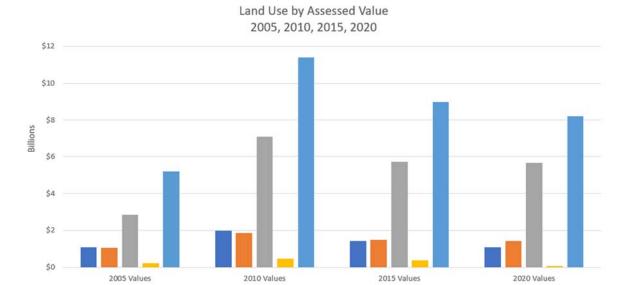
Figure 2-1
Source: Town of Ocean City Annual Comprehensive Financial Report

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 2023 reassessment of property in Ocean City also recognizes significant increases in land value and cost of construction leading to an increased tax base.

Property tax revenues are the largest single revenue source for the Town, and the importance of residential property in the overall distribution of land use is apparent; residential properties make up 80 percent of the total value of taxable real estate. Figure 2-2 shows the relative values of residential and commercial real estate assessments from 2005 to 2020.



Source: Department of Planning, Town of Ocean City



■ Commerical ■ Single Family Residential ■ MultiFamily Residential ■ Exempt ■ Total Figure 2-2

The continued growth trend in new hotel construction and renovation has increased the real estate tax base and provided additional impact fee revenue and room tax revenue. Expansion of short-term property rentals through online digital platforms, such as AirBnB and VRBO has also increased rental license room tax revenue.

New development and reconstruction typically drives an increased level of real estate assessments. Figure 2-3 shows the trend in terms of value of building permits issued in the period 2006-2023. Previously there was a growth spike in 1996 and then steady growth from 1999-2002 with a large 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 2-3 is the steady number of permits for commercial renovation under new ownership and single-family home construction projects that continued through the COVID period.





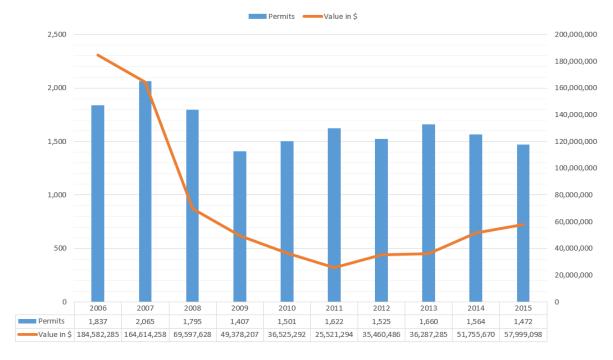


Ashore Resort 2022 Renovation - \$3M

Hilton Garden Inn 2022 Renovation - \$11M

Fenwick Inn

Value of Building Permits Issued



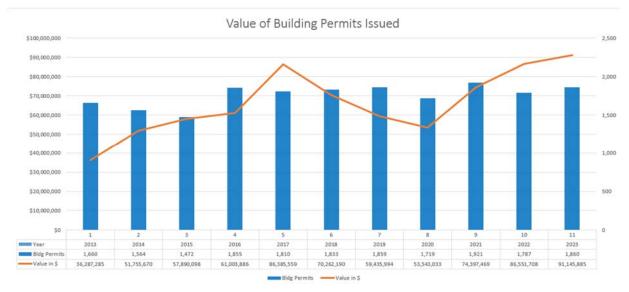


Figure 2-3

The long-term trend in property assessments also tells a positive story (Figure 2-4 and Table 2-2), based on the stable property values and indication of sustainable increases over the last 10 years. Assessed value of taxable property was \$ 9.7 billion for fiscal year 2023,

Assessed Value of Taxable Property (\$ millions)

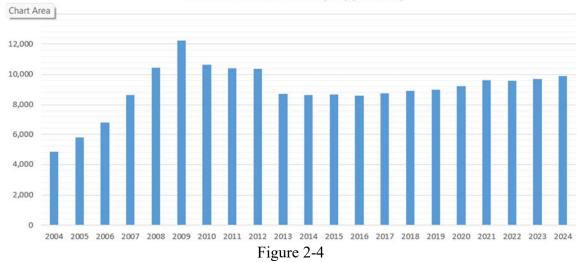


Table 2-2

Town of Ocean City, Maryland
Assessed Value and Estimated Actual Values of Taxable Property
Last Ten Fiscal Years

| Fiscal Year | Real Property | Personal Property | Corporate Property | Total | Total Direct Tax Rate * | Estimated Actual Taxable Value | % Change |
|----------------|------------------|----------------------|-----------------------|-----------------|----------------------------------|---|-------------|
| 2024 | \$9,618,420,159 | \$ 6,200,112 | \$208,726,676 | \$9,833,346,947 | \$0.4526 | \$9,833,346,947 | 1.3 % |
| 2023 | 9,480,575,996 | 9,339,519 | 216,472,050 | 9,706,387,565 | 0.4526 | 9,706,387,565 | 1.1 |
| 2022 | 9,383,818,766 | 8,795,575 | 205,737,482 | 9,598,351,823 | 0.4561 | 9,598,351,823 | -0.1 |
| 2021 | 9,367,774,293 | 9,860,133 | 228,098,369 | 9,605,732,795 | 0.4559 | 9,605,732,795 | 4.0 |
| 2020 | 9,001,284,772 | 11,502,803 | 221,649,499 | 9,234,437,074 | 0.4656 | 9,234,437,074 | 2.7 |
| 2019 | 8,793,778,022 | 12,319,881 | 181,216,509 | 8,987,314,412 | 0.4656 | 8,987,314,412 | 0.7 |
| 2018 | 8,742,711,658 | 13,116,744 | 167,325,116 | 8,923,153,518 | 0.4656 | 8,923,153,518 | 2.0 |
| 2017 | 8,574,801,497 | 15,043,721 | 160,689,225 | 8,750,534,443 | 0.4727 | 8,750,534,443 | 1.8 |
| 2016 | 8,430,184,989 | 13,595,814 | 156,230,465 | 8,600,011,268 | 0.4780 | 8,600,011,268 | -1.0 |
| 2015 | 8,526,614,796 | 13,646,124 | 147,557,519 | 8,687,818,439 | 0.4704 | 8,687,818,439 | 0.7 |

^{*} Real property tax rate per \$100 of assessed value

Source: Uniform Financial Report of the Town of Ocean City to the Maryland Department of Fiscal Services, 2015 - 2024

The following elements of this chapter are key drivers of success and represent a full community approach to meeting strategic goals for a regional tourism-based economy.

Employment / Workforce

Service, retail sales, and tourism-based businesses are traditionally the major employers, creating the majority of the Town's year-round jobs (Table 2-5). Approximately 6,986 jobs are estimated in the Town of Ocean City by the U.S. Census - OnTheMap application in 2022, which does not typically include over 10,000 seasonal jobs each year.

The main activities that generate employment are:

- Hotels, motels and condominiums
- Restaurants and nightclubs
- Retail Shops and Malls
- Real Estate, Construction, and Property Services
- Public Sector (government, health and non-profit)

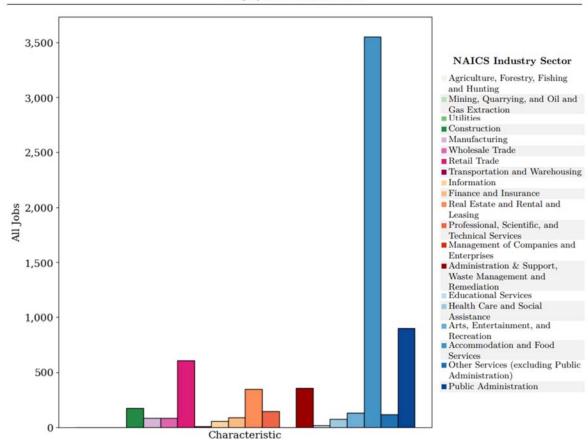


Table 2-3 Employment Sectors

Source: US Census Bureau OnTheMap 2020

[Note: Census data from April 1st does not track seasonal peak employment data]

The ten major employers in Ocean City (2024) are generally grouped in local government, tourism and property management/development industries:

| Employer | Employees | Percentage of Total County Employment | | |
|--------------------------------------|-----------|---|--|--|
| Town of Ocean City | 1,211 | 4.81 % | | |
| Harrison Group | 975 | 3.87 | | |
| Bayshore Development | 600 | 2.38 | | |
| OC Seacrets, Inc. | 500 | 1.98 | | |
| Fagers Island, Ltd. | 325 | 1.29 | | |
| Carousel Resort Hotel & Condominiums | 300 | 1.19 | | |
| Ashore Resort and Beach Club | 300 | 1.19 | | |
| KTG LLC | 275 | 1.09 | | |
| 91st Street Joint Venture, LLC | 250 | 0.99 | | |
| Trimpers Rides, Inc. | 250 | 0.99 | | |
| Total | 4,986 | 19.78 % | | |
| Total Worcester County employees | 25,201 | | | |

Table 2-4
Source: Ocean City Finance Department 2024 CFR

Real estate business remains a major economic force. There are approximately 79 real estate agencies listed on Realtor.com for Ocean City, MD and 1,190 active licensed realtors/brokers in the Coastal Association of Realtors.

The U.S. 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 84% of workers who live outside of Ocean City, and over 65% of jobs in the Accommodations/Food Service/Retail/Entertainment sectors.

Figure 2-5 captures several key metrics which describe the local economy and may present measurable areas for change and implementation of strategies.

Ocean City's fully developed economy maintains an equilibrium through active management to meet current market trends and conditions. The established pattern was unsettled during the

COVID pandemic, and has adjusted to reductions in seasonal workforce under the J-1 and H2b visa programs, and competition from other tourist-based communities.

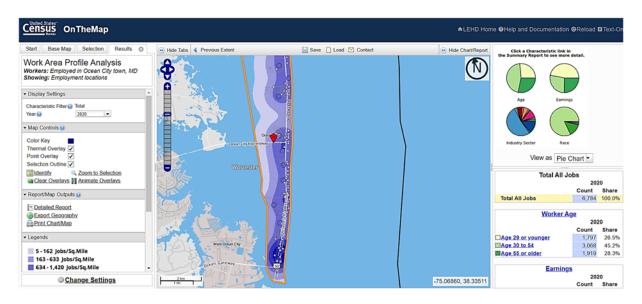
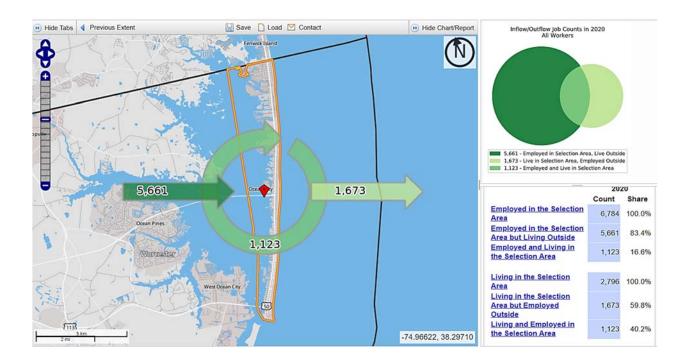


Figure 2-5 U.S. Census On the Map 2021 data

| Work Area Profile Analysis | | | Jobs by NAICS Industry Sector 2021 | | | Jobs by Worker Race | 20 | 2021 | |
|---|---------|-----------------|---|-------|---------------------------|---|-------------------|-------|--|
| Workers: Employed in Ocean City town, MD Showing: Employment locations | | | Count | Share | | Count | Share | | |
| | | Manufacturing | 91 | 1.3% | White Alone | 5,659 | 81.0% | | |
| Total All Jobs | | Wholesale Trade | 87 | 1.2% | Black or African American | 4 004 | 44.70 | | |
| 101111111111111111111111111111111111111 | 20 | 021 | Retail Trade | 755 | 10.8% | Alone American Indian or Alaska | 1,024 | 14.7% | |
| | Count | Share | Transportation and | | | Native Alone | 19 | 0.3% | |
| Total All Jobs | 6,987 | 100.0% | Warehousing | 14 | 0.2% | Asian Alone | 173 | 2.5% | |
| lobs by Worker Age | | | Information | 49 | 0.7% | Native Hawaiian or Other | | | |
| | 20 | 21 | Finance and Insurance | 77 | 1.1% | Pacific Islander Alone | 4 | 0.1% | |
| | Count | Share | Real Estate and Rental and | | | Two or More Race Groups | 108 | 1.5% | |
| Age 29 or younger | 1,920 | 27.5% | Leasing | 288 | 4.1% | Jobs by Worker Ethni | | | |
| ige 30 to 54 | 3,060 | 43.8% | Professional, Scientific, and | 7244 | | | | 21 | |
| Age 55 or older | 2,007 | 28.7% | Technical Services | 176 | 2.5% | V. III | TOTAL PROPERTY OF | Share | |
| lobs by Earnings | | | Management of Companies | 2 | 0.0% | Not Hispanic or Latino | 411 | 94.1% | |
| | 20 | 21 | and Enterprises | 2 | 0.076 | Hispanic or Latino | | | |
| | Count | Share | Administration & Support, Waste Management and | | | Jobs by Worker Educa Attainment | tional | | |
| 1,250 per month or less | 1,842 | 26.4% | Remediation | 407 | 5.8% | Mannen | 20 | 21 | |
| 1,251 to \$3,333 per month | 2,752 | 39.4% | Educational Services | 26 | 0.4% | | Count | Share | |
| fore than \$3,333 per month | 2,393 | 34.2% | Health Care and Social | | | Less than high school | 779 | 11.1% | |
| lobs by NAICS Indust | ry Sect | tor | Assistance | 109 | 1.6% | High school or equivalent, no | | | |
| | 20 | 21 | Arts, Entertainment, and | | | college | 1,659 | 23.7% | |
| | Count | Share | Recreation | 187 | 2.7% | Some college or Associate degree | 1.497 | 21,4% | |
| Agriculture, Forestry, Fishing and Hunting | 2 | 0.0% | Accommodation and Food Services | 3,734 | 53.4% | Bachelor's degree or advanced degree | | 16.2% | |
| Mining, Quarrying, and Oil and Gas Extraction | 0 | 0.0% | Other Services (excluding | 4.40 | 0.00/ | Educational attainment not | | | |
| tilities | 0 | 0.0% | Public Administration) | 142 | 2.0% | available (workers aged 29 or younger) | 1 020 | 27.5% | |
| Construction | 190 | 2.7% | Public Administration | 651 | 9.3% | younger) | 1,920 | 21.5% | |
| | | | | | | Jobs by Worker Sex | | | |
| | | | | | | Journal Dea | 20 | 21 | |
| | | | | | | | Count | Share | |
| | | | | | | Male | 3,582 | 51.3% | |
| | | | | | | Female | 3.405 | 48.7% | |



Tourism

As 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 City, provides business opportunities and strongly influences household incomes.

Issues associated with tourism are complex. Visitation has been stable at approximately 6.3 to 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). 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.

Typically, one measure of success in Tourism is an increase in visitor numbers. A visitor is defined as someone who has come from 50 miles from their common evening location, who stayed for more than two hours in the destination and visited at least one place of impact. Visitor volume alone does not provide enough information for future planning. Ocean City also measures multiple factors such as room tax, food tax, average daily room rates (ADR), and revenue per available room (RevPAR-occupancy) as indicators for the tourism economy.

New tools allow for additional research into visitor origin markets, local destinations, and categories of spending with the goal to increase visitors who support local business and create sustained employment for the community through destination marketing.

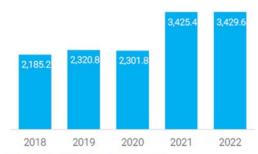
Ocean City Tourism Impact

The Town of Ocean City partners with the State of Maryland Office of Tourism and serves as a Destination Marketing Organization (DMO). By monitoring the visitor economy, local decisions are better informed with regard to funding and prioritization of different tourism sectors. Tourism impacts and benefits are summarized in the following data published in October 2023. The *Tourism Economics* model details the far-reaching impacts of the travel sector in terms of direct visitor spending, as well as the total economic impacts, jobs, and fiscal (tax) impacts in the broader economy.

OCEAN CITY HIGHLIGHTS



Ocean City visitor volume Amounts in thousands of visitors



Source: D. K. Shifflet, Tourism Economics

VISITOR VOLUME

Source: D. K. Shifflet, Tourism Economics

Visitor volume in 2022 in Ocean City has grown to nearly 150% of 2019 levels.

Ocean City visitor volume

Amounts in thousands of visitors

| | 2018 | 2019 | 2020 | 2021 | 2022 |
|-----------------------|---------|---------|---------|---------|---------|
| Visitors | ***** | | | | |
| Day | 1,154.1 | 1,234.0 | 1,183.9 | 1,817.5 | 1,869.9 |
| Overnight | 1,031.1 | 1,086.8 | 1,117.9 | 1,607.9 | 1,559.7 |
| Total Visitors | 2,185.2 | 2,320.8 | 2,301.8 | 3,425.4 | 3,429.6 |
| Growth rate | | 6.2% | -0.8% | 48.8% | 0.1% |

Source: D. K. Shifflet, Tourism Economics

OCEAN CITY VISITOR SPENDING

Visitor spending grew 5% in Ocean City to reach \$2.3 billion in 2022.

Ocean City visitor spending and annual growth

Amounts in \$ millions, 2022 % change, and % recovered relative to 2019

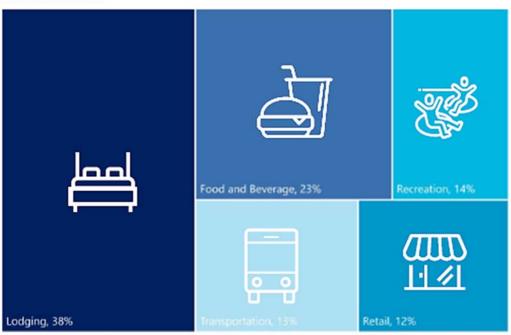
| | | | | | | 2022 | % relative |
|------------------------|-----------|-----------|-----------|-----------|-----------|--------|------------|
| | 2018 | 2019 | 2020 | 2021 | 2022 | Growth | to 2019 |
| Total visitor spending | \$1,675.2 | \$1,751.9 | \$1,538.5 | \$2,149.3 | \$2,251.8 | 4.8% | 128.5% |
| Lodging* | \$659.0 | \$692.2 | \$613.6 | \$833.6 | \$860.7 | 3.2% | 124.3% |
| Food & beverage | \$342.1 | \$363.3 | \$355.6 | \$491.3 | \$516.8 | 5.2% | 142.2% |
| Retail | \$203.4 | \$210.5 | \$199.1 | \$260.2 | \$272.8 | 4.8% | 129.6% |
| Recreation | \$221.1 | \$223.8 | \$192.1 | \$282.1 | \$306.2 | 8.5% | 136.8% |
| Transportation** | \$249.6 | \$262.2 | \$178.1 | \$282.0 | \$295.3 | 4.7% | 112.6% |

^{*} Lodging includes 2nd home spending

Source: D. K. Shifflet, Tourism Economics

Visitor spending by category

Percent of total



Source: D. K. Shifflet, Tourism Economics

^{**} Transportation includes both ground and air transportation

OCEAN CITY ECONOMIC IMPACTS

Ocean City visitors supported more than 13,200 jobs and provided \$246 million to state and local governments, an increase of \$3 million.

Visitor impacts in Ocean City

Employment in units, income and taxes in \$ millions

| | 2018 | 2019 | 2020 | 2021 | 2022 | 2022 Growth | % relative to 2019 |
|----------------|---------|---------|---------|---------|---------|----------------|-----------------------|
| Employment | | | | | | | |
| Direct | 9,401 | 9,457 | 8,465 | 9,852 | 9,951 | 1.0% | 105.2% |
| Total | 12,383 | 12,512 | 11,720 | 13,221 | 13,183 | -0.3% | 105.4% |
| Share of State | 5.47% | 5.53% | 7.06% | 7.61% | 7.04% | | |
| Labor Income | | | | | | | |
| Direct | \$316.7 | \$327.4 | \$320.5 | \$407.6 | \$421.1 | 3.3% | 128.6% |
| Total | \$431.2 | \$446.6 | \$454.4 | \$555.2 | \$562.8 | 1.4% | 126.0% |
| Share of State | 4.18% | 4.20% | 5.61% | 6.36% | 5.81% | | |
| Tax revenues | | | | | | | |
| Federal | \$109.2 | \$113.2 | \$102.6 | \$128.0 | \$132.2 | 3.3% | 116.8% |
| State & Local | \$200.8 | \$210.5 | \$201.4 | \$242.8 | \$246.5 | 1.5% | 117.1% |
| Hotel | \$15.9 | \$17.0 | \$14.7 | \$23.3 | \$25.3 | 8.7% | 148.7% |
| Total | \$325.9 | \$340.7 | \$318.7 | \$394.1 | \$404.0 | 2.5% | 118.6% |

Source: Tourism Economics

Figure 2-6 Economic Impact of Tourism in Maryland – 2022 Maryland Office of Tourism

Sports Marketing – Economic Impacts of Sports Tourism

Ocean City is actively promoting the development of Maryland's Coastal Sports Complex as a catalyst for growth, development, recreation and prosperity in Ocean City and Worcester County. This effort will meet the future of how families vacation, and build on a robust local sports program to advance regional youth sports tournaments, championships and events that will draw thousands of athletes, spectators, and their families to a resort area ready to accommodate and entertain. A proposed indoor and outdoor sports complex can help to extend the tourist season into off-peak months, and support a healthy, active community through youth development, senior wellness, community events and facilities for all abilities.

With assistance from the Maryland Stadium Authority, a proposed Sports Complex is undergoing feasibility review and site section for a 10-field outdoor sports complex and a 125,000 square foot indoor fieldhouse, located in proximity to all the best that Worcester County and Ocean City have to offer. Estimated annual economic impacts are significant.

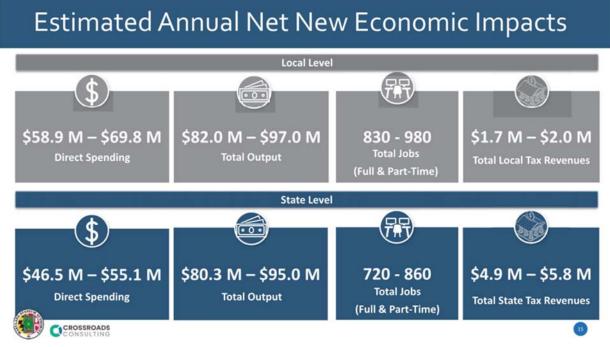


Figure 2-x
Source: Crossroads Consulting – Market and Economic
Analysis of proposed new Sports Complex (September 2023)

Special Events

The Town government, in conjunction with local businesses and non-profit organizations, has sought increase off-season visitation with 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 15 courses in the area); these two markets contribute significantly to visitor attendance in the spring, fall, and winter months.

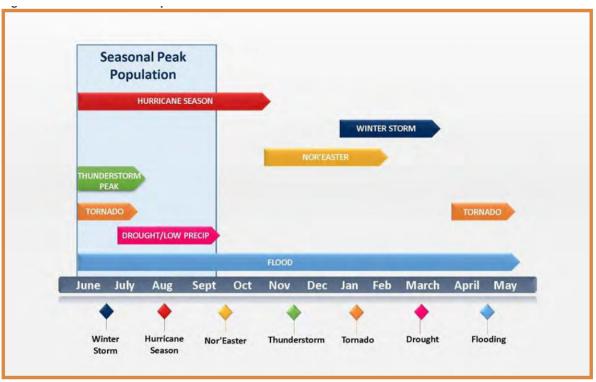


In addition to the expansion of special event programming, the local economy is growing to include added value tourism activities that expand a beach visit to include: organized sports, nature-based exploration, heritage/cultural sites, brewery tours, art instruction, and concerts/performing arts. Many 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.

Special Event planning is guided by the current Tourism Strategic Plan (Appendix _) with strategies to expand year-round special events, market the Ocean City brand to target audiences, and schedule events based on economic impact analysis, with an effort to grow and train sponsor organizations.

As the number and scale of special events extend into all seasons, the 2022 Hazard Mitigation Plan and Nuisance Flood Plan can provide information regarding risk management and seasonal variations in weather conditions for planning outdoor events.



Source: Smith Planning and Design

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, a focal point for economic development, and it serves as Maryland's major convention facility on the Eastern Shore.

Convention Center Amenities

















Source: https://www.ococean.com/convention-center/

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 to include a second-story ballroom and performing arts center, and a third phase expansion was completed in 2022. The OCCC currently offers approximately 90,000 square feet of exhibit space, 19,000 square feet of ballroom space, 35,000 square feet of meeting space, a 1,200 seat Performing Arts Center and 1,320 parking spaces. Based upon the 2024 Crossroads Market and Economic Analysis including the Phase 3 expansion:

- The OCCC hosted 145 total events in FY '24, representing 626,100 attendees
- These events generated \$115 million in direct spending to Worcester County, and \$125 million to Maryland

- The facility supported about 2,600 full-time jobs, and generated \$13.8 million in state and local taxes for FY'24
- Programs in the 1,200 seat Performing Arts Center has greatly enhanced the range of
 events and activities with indirect benefits to support hotel occupancy and provide
 shoulder season activity for non-resident property owners.

Ocean City and the 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 has been extended to allow for phased expansions of the facility. The operational deficit (negative cash flow in FY24 \$4.0 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.

Municipal Airport

Ocean City Municipal Airport (KOXB), is a public use general aviation airport owned by the Town of Ocean City. The Airport is located approximately 2 miles southwest of Ocean City on Sinepuxent Bay. The Airport features two intersecting asphalt runways, a 4,074-foot-long grooved primary, and a 3,204-foot-long crosswind, both are 75-foot wide with non-precision markings. All runway ends are served by non-precision approaches, REIL's and pilot-controlled lighting. Runway 14/32 has a full-length North parallel taxiway.

Ocean City Municipal Airport is included in the FAA's national Plan of Integrated Airport Systems (NPIAS), and as such, is eligible to receive federal funds. Its role, as a General Aviation Airport, is to accommodate the basic needs of the general aviation flying public. Flyers can obtain full- and 24-hour self-service 100LL fuel, as well as gravity and pressure fill-Jet A Premix fuel. The Airport Terminal Building hosts rental cars, a conference room, pilots' lounge, and other crew and passenger amenities. Aircraft parking and storage is available on paved tie downs and corporate box and T-hangars. The Airport supports all types of general aviation activity including flight instruction, aircraft rental/sales, and charter flights. There are 64 based aircraft at the Airport ranging from multi engine turbine to small piston GA and helicopters.



The Airport serves the business, recreational, and flight training needs of the community through a wide range of commercial tenants. **Ocean Aviation** (https://www.flyoceanaviation.com/) offers a Part 141 flight school, Part 135 flight charters, aircraft maintenance, aircraft rentals, a pilot shop, as well as aircraft sales and acquisitions. **Ocean City Plane Rides** (www.oceancityplanerides.com/) offers aerial sightseeing tours in vintage biplanes. For a Tandem Skydiving adventure, **Skydive OC** jumps May-October (http://www.skydiveoc.com/). During Summer months **My Flight helicopter Tours** can take passengers over the beach and nearby National Seashore https://www.myflighttours.com/ocean-city-helicopter-rides/

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 2024 study, the Ocean City Municipal Airport had the following positive impacts on the economy including both onsite and visitors:

BUSINESS REVENUE: \$72,865,000

JOBS: 409

PERSONAL INCOME: \$23,079,000 TAXES: \$8,385,000 LOCAL PURCHASES: \$7,005,000

American Airlines serves the Salisbury/Ocean City/Wicomico Regional Airport, which is located just 30 miles to the west on Route 50. Breeze Airways will offer service to Orlando, FL from Salisbury Airport beginning October 1, 2025.

Heritage Tourism

Heritage Tourism can have a significant positive impact on economic development through strong planning policies which preserve, maintain and enhance community character defining resources. 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 along with promotion of scenic byways recognizes the unique heritage and heritage tourism destinations within these areas and offers an opportunity for coordinated and enhanced tourism activity.

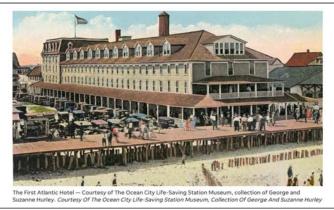
The Lower Eastern Shore Heritage Area Management Plan is hereby incorporated, by reference, in The Comprehensive Plan for Ocean City.

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





Ocean City, Maryland is celebrating a 150th Anniversary from its founding as a beach resort beginning with the opening of the Atlantic Hotel in 1875. Telling the story of Ocean City is an important part of the visitor experience and the tourism economy. A downtown walking tour is a great start with OCDC.org.





Henry's Hotel survives as one of the oldest structures in downtown Ocean City. Previously known as "Henry's Colored Hotel," the enterprise was a full-service facility catering to visiting African-American tourists and entertainers. The Henry Hotel Foundation is working to restore the hotel with a focus on transforming it into a museum and learning center about African American history. It will become a place where people can learn about African American history in Maryland and on the Eastern Shore, and where people can come to understand the African American contribution to the town's development.

Maryland Governor Wes Moore has been actively involved in supporting the restoration of the Henry Hotel in Ocean City through a Maryland Historical Trust grant for \$250,000. The restoration of the Henry Hotel will be done in stages. These funds will allow the existing structure to be lifted and to build a foundation. The next stage in the restoration will be the exterior of the building including the roof, windows and siding. The final stage of the restoration will be to accomplish the mission to a museum and learning center.

Accommodations

The hotel/motel and condominium rental industry is a very large part of the Town's economic picture. Overnight accommodations generate roughly \$25.4 million per year (2024) for the general fund from a 5 percent room tax. Room occupancy and room rates have been steadily increasing in the past 10 years, using the room tax increase as evidence.

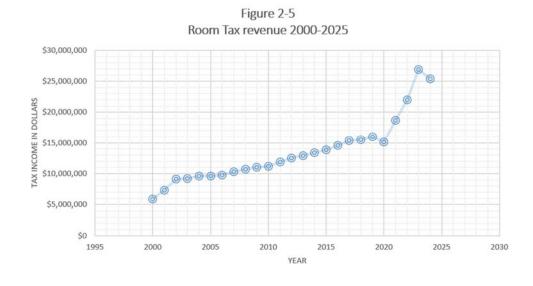


Figure 2-5 shows steady growth in room tax revenue with dramatic growth from 2020 to 2024 which was partially due to an increase in the room tax to 4.5% in 2008, and 5% in 2020.

Tourism Metrics are 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 2-6 illustrates the variety of measures used by the Town Tourism Commission to evaluate performance of the economy and trends for the future.

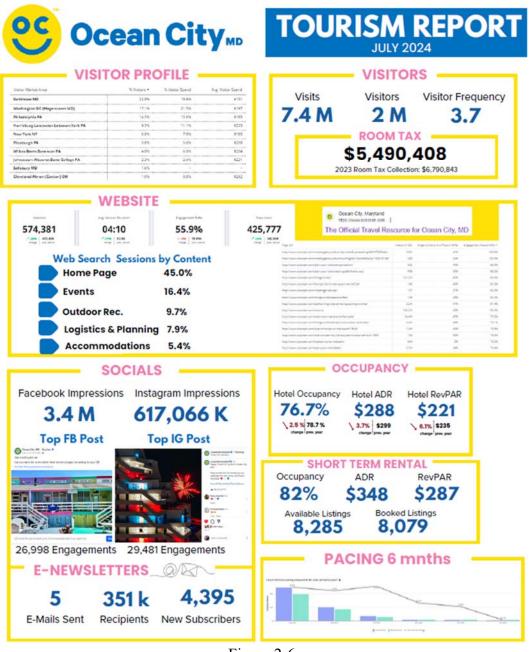


Figure 2-6

Accommodation Industry challenges continue to include the following:

- Short term rental of housing with new online third-party rental businesses raises concerns regarding licensing, room tax collection, and neighborhood impacts while providing for expansion of housing opportunity for families, increase in room tax through online rental platforms/licensing, and encouraging renovations and rebranding of existing hotels.
- Fair weather, short notice reservations, and multiple online tools to market and capture visitors
- Industry partners with Tourism marketing for special events and competition sports
- New hotel/condo rooms in the development pipeline
- Meeting the need for workforce housing

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. Shared Tax Revenues to Ocean City including food and beverage taxes have remained strong through the period 2014 through 2024, and have increased by over 70% in the last 10 years. Typically over 50% of the revenues derived from food and beverage taxes are generated during the summer months.

Recent trends toward locally crafted beer has resulted in 1 brewery 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 expanded on the tradition of indoor and outdoor seating with family friendly entertainment and playgrounds, and rooftop dining experiences are increasing in popularity.

Ocean City at Night

Live entertainment and music are provided at a large number of business establishments in Ocean City and through sponsored special events. 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 continues to compete effectively in the resort golf market with Eagles Landing Golf Course, recognized as one of the best municipal golf courses in Maryland. 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.

The 2022 American Golf Industry Coalition Impact Report updates the national benefits of Golf as an incredibly popular recreational activity (roughly 1 in every 7 people participated in 2022) with an economic footprint comprising multiple layers of economic activity, and serving as a vehicle for fundraising/charitable giving that delivers value beyond dollars and lifestyle. Golf is a community asset, providing natural open space benefits, and adding value to adjacent residential communities. Source: www.ngf.org

GOLF OPERATIONS DIVISION Golf Enterprise Fund Total Projected Revenue is \$3,173,083 An increase of \$226,944 over FY25 GREEN FEES INCREASE BY \$136,689 CART FEES INCREASE BY \$1,808 CULUB RENTALS INCREASE BY \$4,288 CONCESSION SALES INCREASE BY \$14,946 BEVERAGE SALES INCREASE BY \$14,726 INTEREST, PRO SHOP, OTHER/MISC INCREASES \$53,987 Projected to play 35,152 rounds in FY26

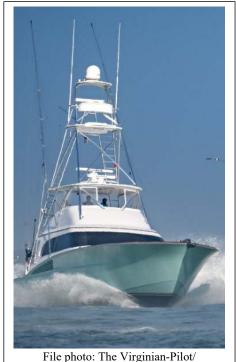
Figure 2-7 Eagles Landing 2025 Budget Report

The Sport Fishing and Commercial 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 \$6.2 million awarded in 2023 for the top individual prize. Anglers competed for \$10.5 million in prize money, however following established conservation practices, 602 of the 605 billfish caught were released during the 5-day event.

Source: www.whitemarlinopen.com



File photo: The Virginian-Pilot The Baltimore Sun

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. Regular maintenance of federal navigation channels through the Ocean City Inlet, into the West Ocean City Harbor, and throughout the coastal bays with the assistance of the US Army Corps of Engineers, the National Park Service, and Worcester County, supports one of the critical infrastructure elements of the local and regional economy.



A current proposal by US Wind for development of offshore energy resources with the construction of 114 wind energy turbines, has identified the West Ocean City Harbor as the location of an operations and maintenance facility that will replace one or more of the commercial fishing fleet businesses for offload of their catch. The Ocean City, MD port is estimated to generate between \$4.6 to \$7.3 million in annual revenue, derived from the US Wind Lease Area, based on commercial fishery landing data. Source: 2021 US Wind Fisheries Assessment Report (https://www.boem.gov/renewableenergy/state-activities/maryland-offshore-wind-constructionand-operations-plan)



Figure 2-8 Offshore Wind Energy Source: Maryland Energy Administration website

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 benefits natural resource management and local economy.

Tourism officials join with volunteer organizations and private industry to offer outdoor experiences unique to the seaside environment.





Downtown Development

In recent years Ocean City has made downtown areas the focus of economic development efforts. The 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 often expresses the views of the business community in seeking economic development and growth. Key issues for the Chamber include the following:

• There is a need for more **skilled work force**. With tremendous retail growth in West Ocean City, the work force will be the key to healthy economic development. Development of a vocational school in Worcester County offers 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. As a year-round place, 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 **wide range of business and professional services**. Chain retailers recognize the buying power of the population: Walmart and Home Depot are joined by other new big box stores along the Route 50 gateway corridor to serve Berlin, Ocean Pines and Ocean City.

Future Economic Development/Regional Trends

Worcester County partners with the Town and the Ocean City Development Corporation in economic development matters. 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 corridor 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, workforce housing, room tax, and grants to equitably balance tax revenues and budget expenditures.

Broadband connectivity and 5G cellular service is increasingly important as seasonal visitors create peak demand and social media provides new tools to drive the local economy. Ocean City's 2015 award as one of America's eCities by Google recognizes

the strongest online business community in each state. Innovation continues with shared infrastructure improvements for a 5G distributed network along with security cameras and webcams.

Google's eCity Awards recognize the strongest online business community in each state.

These cities' businesses are using the web to find new customers, connect with existing customers and fuel their local economies.



Offshore Energy Development

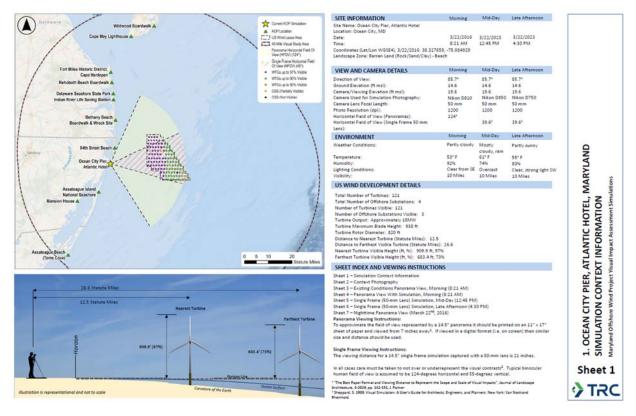
Offshore Wind Energy

The Maryland Offshore Wind Project proposed by US Wind Inc, includes construction and installation, operations and maintenance, and conceptual decommissioning in its Construction and Operations Plan (COP). The proposed Project described in the COP and the Final Environmental Impact Statement would have a capacity of up to 2,200 megawatts (MW) and would be sited within 10 miles offshore from Ocean City. The Project is designed to serve demand for renewable energy on the Delmarva Peninsula, including Maryland. US Wind's goal is to develop a commercial-scale, offshore wind energy project in the Lease Area.

The Project comprises 114 wind turbine generators, up to 4 offshore substations, up to 4 offshore export cables, and 1 meteorological tower, distributed across the Lease Area. The offshore export cables are planned to make landfall in Sussex County, Delaware. The Project will be interconnected to the onshore electric grid by up to four new 230 -275

kilovolt export cables to new US Wind onshore substations, with an anticipated connection to the existing Indian River substation near Millsboro, Delaware.

Economic impacts to Maryland's Atlantic Coast Resort Community have not been fully evaluated or fairly considered. Ocean City's Mayor and City Council have opposed the Project by resolution and litigation based on the "substantial threat" of industrializing the ocean with offshore wind farms, cumulative impacts to the tourism economy as well as on commercial fishing, marine life, and safety related concerns for marine traffic and military radar.





Offshore Oil/Natural Gas

Exploration off the coast of Maryland was opposed by resolution of the Mayor and City Council due to its potential for 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.

Strategies - Ocean City is in good fiscal condition, as a result in part, from strong local government management, steady appreciation in real estate values and positive tourism activity. Trends over the past decade will be monitored and implementation strategies modified

1) Economy

- a. Expand special activities and marketing promotions to encourage increased visitation in the shoulder seasons and year-round.
- b. Monitor tourist visitation and modify the marketing efforts and actions of all partners in the local economy to maintain and enhance economic activity.
- c. Evaluate the trend in online rentals, and new/redeveloped hotel room construction which has responded to market demand for long weekend vacations with over 1,000 rooms recently developed or in the development process. Study complementary activities such as weddings, conferences, group events, etc. that may combine with large sponsored special events.
- d. Adopt clear definitions of 'short term rental' as a distinct land use, with appropriate code modifications to manage adverse impacts on established single family neighborhoods.
- e. The Town has adapted to business and real estate cycles which may affect different sectors of the economy. Development activity should be monitored to identify trends such as the shift from new condominiums to new hotel rooms in recent years. Expansion of retail uses in West Ocean City and regular turn over in small business ventures on the Boardwalk should be studied to identify opportunity for innovation to meet market demand, including healthy food options.
- f. The Ocean City Development Corporation (OCDC), established to lead the downtown redevelopment process, has good support from the Town and the business community and it has made significant progress on its agenda. Support updates to the work plan with additional priorities and projects will likely be the focus of the next planning period.
- g. The competitive environment related to resort area conference and convention activity is always changing and the Town should continue to

- reevaluate its spending on marketing and business development. Maintain current levels of spending on tourism marketing in the face of increasing competition from other locations in the Mid-Atlantic region.
- h. Storm readiness and public safety are priorities to a strong and resilient local economy. Implement projects and recommendations contained in the adopted Hazard Mitigation Plan.

2) Land

- a. Encourage property renovations and redevelopment to maintain and improve the level of real estate assessment value
- b. 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. A coordinated effort with Worcester County is recommended to address mutual transportation and housing needs for the seasonal workforce.
- c. Continue to partner with Worcester County in its regional economic development efforts which benefit Town residents and visitors.
- d. Identify working waterfront areas and review supporting land use policies. Consider designated areas to support commercial and recreational use along public access waterfronts.

3) Place

- a. Continue to promote tourism as the #1 economic force that supports a level of community benefits and services unique to Maryland's 'family friendly' ocean resort community.
- b. Continue to expand special events at the Convention Center, including the 1,200-seat performing arts center as one of the top attractions in Ocean City, generating a significant level of visitation and spending. Prepare a current fiscal impact study to evaluate the benefits of the PAC with Phase 4 addition (structured parking)
- c. Continue to encourage new entertainment venues and better quality restaurants so that returning tourists will find something new each year along with favorite destinations
- d. 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. Encourage the development of regional facilities in the centralized areas between Berlin, Ocean Pines, and Ocean City, so that all residents benefit from increased social and medical services.
- e. 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.

- f. Encourage partnerships to promote expansion of the Ocean City Life Saving Museum in the downtown district.
- g. Maximize the benefits offered by participation in the Lower Eastern Shore Heritage Management Plan and location along the Blue Crab Scenic Byway as well as the Cape-to-Cape Scenic Byway which travels through 3 states from Cape Henlopen, DE to Cape Charles, VA. In Maryland it runs along Coastal Highway to 9th Street, then Baltimore Ave to Route 50.

CHAPTER 3: Land Use & Community Character

Introduction

The Land Use Chapter should be considered the most important element of this Comprehensive Plan. It establishes the relationship of Ocean City's existing patterns of growth and development to 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 Chapter provides the means to integrate various planning goals and objectives into a comprehensive whole and incorporate public participation as the plan is updated. Ocean City's Comprehensive Plan and its land use principles are 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, State legislation and the effect of land use changes surrounding the Town of Ocean City.

Goal:

To foster a 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 to respect the Town's seaside character.

Land Use Principles:

- A mixed-use development pattern is encouraged by pyramidal zoning which allows multiple land uses in the same zoning district, and market forces which establish 'highest and best use' of the land.
- Nonconforming uses, when redeveloped, should be required to reduce their level of nonconformity
- Parking standards for residential uses should meet minimum requirements to encourage visitors to 'park where you stay and then ride the bus'.
- Ocean City's 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.

MD Sustainable Growth Principle 1 – Land

Optimize productivity of working landscapes, including farms and forests and fisheries, and prioritize development within population centers that are in proximity to existing infrastructure and facilities

MD Sustainable Growth Principle 4 – Place

Provide for public spaces that encourage social interaction and value cultural, historical and natural resources

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

- 3.1 Mixed Use Development Plan for infill and redevelopment that is context sensitive to land use districts or neighborhoods and is consistent with the mix of uses and character/scale of development that is currently established in each district or neighborhood.
- 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. Encourage sustained investment in residential properties to maintain property value and attractive, safe neighborhoods that are appropriate for the zoning district and surrounding land uses.
- 3.3 Residential Mitigate impacts to residential neighborhoods from incompatible traffic and encroachment by commercial activities, short term property rentals, and excess demand for street parking.
- 3.4 Residential Affirm Fair Housing standards by encouraging a variety of housing types and densities, including accessory or multiple dwelling units within the existing pyramidal zoning framework, and allowing for innovative solutions for affordable workforce housing.
- 3.5 Commercial Encourage a full array of commercial services that meet the daily and seasonal needs of the Town and its residents and visitors. Encourage new

- development and re-development of commercial properties to maintain a mixeduse commercial element with any conversion to residential use.
- 3.6 Commercial Study the potential for expanding freestanding commercial zoning and uses in selected locations on the Oceanside to reduce vehicle trips and encourage pedestrian safety.
- 3.7 Environment Minimize the environmental impacts of development and redevelopment on the Coastal Bays and ocean, dunes, and beaches. Advocate for the protection of ocean resources and the Town's tourism-based economy from adverse impacts of offshore energy development.
- 3.8 Municipal Services Enhance building standards and practices for environmental resiliency. Coordinate land use standards with elements of the adopted Hazard Mitigation Plan, FEMA Community Rating System program, and Maryland Sustainable Communities Plan.
- 3.9 Municipal Services Expand guidelines for development design that encourage quality in architectural design, and a mix of uses. Continue to support the OCDC with emphasis on architectural design review and redevelopment opportunities in the Downtown and Upper Downtown districts.
- 3.10 Municipal Services Review existing zoning district standards and site plan review criteria to propose incentives for mitigating the potential impacts of differing uses under pyramidal zoning, including setbacks, open space, landscaping, and off-street parking.
- 3.11 Economic Development Encourage infill and redevelopment of existing vacant or underutilized sites. Maintain opportunities to grow the tourist economy and support a viable diversified economic base.
- 3.12 Economic Development Continue to support downtown revitalization in partnership with OCDC, to strengthen the Boardwalk business districts, and promote new solutions to meet off-street parking demand.

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 7th Street (now part of Assateague Island) north to 33rd Street and platted the land into lots, blocks and streets. The Towns corporate limits were extended from South 7th Street to North 15th 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 2nd Street and South 7th Street. Pound fishing grew 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. The storm also knocked out the railroad bridge resulting in more and more tourists traveling by car. 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.

Downtown Plan after 1933

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 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.

1968 Comprehensive Plan

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 periods of rapid growth occurred during the last three decades. The first occurred from the late 1960's into the early 1970s 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.

1989 Comprehensive Plan

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.

2009 Comprehensive Plan

In 2009, 95% or more of the land located within Ocean City had been developed. Recent growth was 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. 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 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 considering the quality of development and redevelopment that will occur over the next planning period.

2017 Comprehensive Plan

Completing a full review of the Comprehensive Plan in 2017 reaffirmed the traditional land use goals and objectives for the Town of Ocean City, with incremental changes and updates. The Plan was realigned with a new Introduction, incorporation of 2010 Census data, 2015 FEMA RiskMAP flood hazard mapping, and Mayor and City Council Strategic Plan/Capital Improvement Plan/Tourism Master Plan priorities. Land Use Maps and area tabulations were replaced with digital data from the Town Geographic Information System (GIS)

Accomplishments of the Ocean City Development Corporation in downtown revitalization, working in partnership with the Town and Maryland DHCD through the Sustainable Communities Program were recognized. Priorities for the Planning Commission work plan were identified through the public hearing process and detailed in Chapter 9 Plan Implementation. Working with the Maryland Department of Planning, the 2017 Comprehensive Plan was updated to include adoption of the Tier 1 Map in Chapter 10 designating the municipal boundary as an approved sustainable growth area.

During this planning period, the COVID pandemic forced several outcomes: increased outdoor dining/carryout service, ongoing home renovations with contractors identified as essential workforce, property value increase/transfer of wealth and investment to second homes, online rental platform expansion (AirBnB) with short term rentals, and a reduced J1 international student workforce.

Ocean City's Comprehensive Plan and development regulations were also tested with a significant loss of commercially zoned property as whole city blocks were converted to residential use, Town Council adopted Workforce and Rental Housing code amendments, including a Primary Residence Incentive Program as a pilot housing affordability measure, and the State of Maryland considered housing policy legislation to encourage 'missing middle' housing and accessory dwelling units.

EXISTING LAND USE

Existing Land Use is illustrated on Map 3-1at the end of this chapter. The present land use pattern contains a thorough mixing of residential housing types and substantial commercial strip and shopping center development along Coastal Highway. Industrial development is limited to a few locally specific examples, and the majority of community open space is located along the Atlantic Ocean public beach. This traditional mixed-use development pattern is built upon several unique factors:

- Ocean City has a large proportion of absentee property owners. The orientation of these owners is both as an investor and as a member of the traditional community.
- In the past, seasonal visitors tended to overlook development aspects which in their home community might be unacceptable. As the year-round residential population became more established, and with increased expectations of 2nd home owners, 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 single use neighborhoods. The exception are areas along the bayside, zoned R-1 single family residential and several single use commercial centers.
- A strong demand exists 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.
- Pyramidal zoning has allowed commercially zoned property to develop as residential use, often creating the intended mix of uses, but without transitional open space or buffers.

Now established, Ocean City's land use pattern and variety of neighborhoods will continue into the future. Visitors seek out favorite places to stay, landmark commercial establishments, and new attractions each year. The recently completed Sunset Island community on the bayside at 67th 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.

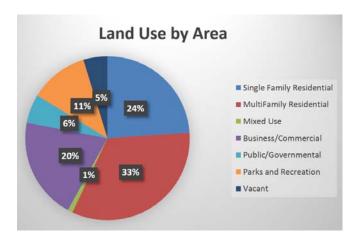
In recent years the ocean side's residential diversity has tended to decrease as single family homes are rebuilt and converted into higher density rental units. Infill and redevelopment has largely involved multifamily structures in condominium forms of ownership. Therefore, the character of the ocean 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 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 virtually all land in Ocean City is developed. Thus, the potential for brand new development, other than redevelopment, is limited.



| Land Use | Acres |
|----------------------|---------|
| Single Family | 483.0 |
| Residential | |
| Multi-Family | 669.4 |
| Residential | |
| Mixed Use | 19.9 |
| Business/Commercial | 405.4 |
| Public/Governmental | 114.6 |
| Parks and Recreation | 233.3 |
| Vacant | 95.7 |
| | 2,021.3 |

Figure 3-1 illustrates the percentage of land use types by area

Several trends have resulted in an increase of interim surface parking lots particularly in the downtown areas. Market demand can encourage property owners to seek reduction 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 parking. Both actions tend to cause a temporary reduction in assessed value, and change the traditional architectural character of downtown.

Parking deficiency remains a challenge for many areas of Town due to historic development patterns, impacts of new development, and increased competition for public street parking.

Residential Land Uses

Ocean City's residential land uses include a variety of housing types and sizes. Mobile homes, rooming houses, motels, hotels, single family residential units, duplexes, townhomes, mid-rise apartments, and high-rise condominiums have met Ocean City's housing needs. In several sections of the Plan, hotel/motel rooms are also considered as a residential land use.

Residential development is distributed throughout the town. The lack of a major industrial area or other 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 individual landmarks along the beach.

West of Coastal Highway, a variety of residential and commercial development 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 three. Some vacant lots remain, but many of these subdivisions are built-out.

Several Mobile Home 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. CO-OP ownership of small lease parcels which do not meet current lot standards has been addressed with alternative code provisions in the MH zoning district.

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.

Established single family neighborhoods have experienced adverse impacts of this increased commercial activity.

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 and include pyramidal uses. Ocean City has adopted additional (non-pyramidal) districts when necessary to establish unique areas to further control permitted land uses and bulk regulations along with supplemental zoning regulations for specific uses.

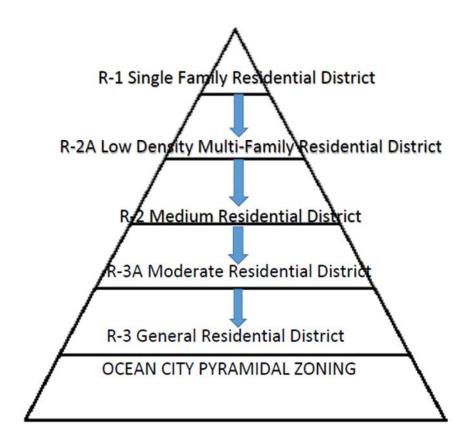


Figure 3-2 illustrates pyramidal zoning that permits a more restricted residential zone classification in a less restricted zone.

Commercial Land Uses

Several main types of commercial development exist in Ocean City:

- Boardwalk businesses
- Freestanding retail, office and service operations; convenience markets, gas stations, 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 new and hybrid uses include: microbreweries, distilleries, entertainment dining, outdoor dining, expanded accessory uses with Hotel

Commercial development occurs predominantly along Coastal Highway. Current land use policy encourages the greatest concentrations to occur on the bayside in order to reserve proximity to the ocean for residential use. Redevelopment of major commercial centers at Gold Coast Mall, and Ocean Plaza Mall (94th Street) sites is anticipated during the timeframe of this Plan cycle.

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.

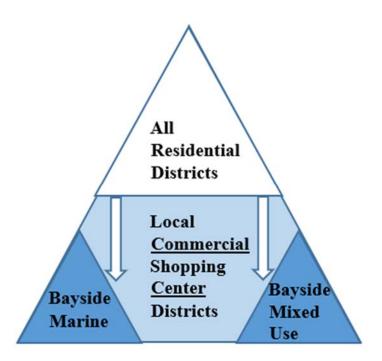
All areas of the Town fall within the trade area of a convenience market or grocery store. This indicates that, for the most common needs of vacationers, existing commercial developments adequately serve the market. Land use policies should continue to support retail uses such as grocery, clothing, pharmacy and others which provide 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. Coastal Highway improvements with medians to limit turning movements, synchronized traffic signals 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. For those commercial zoning districts which are included in the pyramidal zoning structure, opportunities to maintain or encourage development of ground level commercial uses and/or to promote mixed use development have been explored to maintain such uses as an important component of the Town's tax base.



[Non-pyramidal commercial districts: DM, DMX, B-1, BC-2, M, DR and I-1] Figure 3-3 illustrates pyramidal zoning for commercial districts

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.

Clear objectives and strategies are necessary regarding preferred redevelopment for mixed use development, and limiting conversion of commercially zoned land to single use residential. Established commercial areas should be considered during site plan review to identify acceptable incentives that would avoid conversion to a single residential use.

Big box retail establishments, such as Walmart, Home Depot and Factory Outlets have located in West Ocean City because of available land and 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 and employment opportunities to our residents and visitors that are not available in town.

Both development of mixed use projects and 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 open space areas, landscaping, 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 that will enhance its character and qualities as an iconic image of the Town.

A bay front boardwalk along specific reaches of the Town's bayside should be developed together with subsequent street system and walkway improvements that improve and strengthen the vehicular, bicycle and pedestrian connections between the Ocean and 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 bicycle and pedestrian traffic to support a broader mix of commercial uses within the downtown area and provide an important tourism and mobility asset.

Parks and Open Space

Ocean City's 10-mile-long public Atlantic Ocean beach remains the number one attraction, park, and recreational open space. Most public open spaces are carefully managed and programmed for multiple uses and special events. The beach is no exception with outdoor recreation activities including but not limited to 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 other 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). Northside Park is the premier community park facility

out of some 15 locations used for recreation purposes, and its 58 acres of land represent the second largest area after the 300+ acre ocean beach.

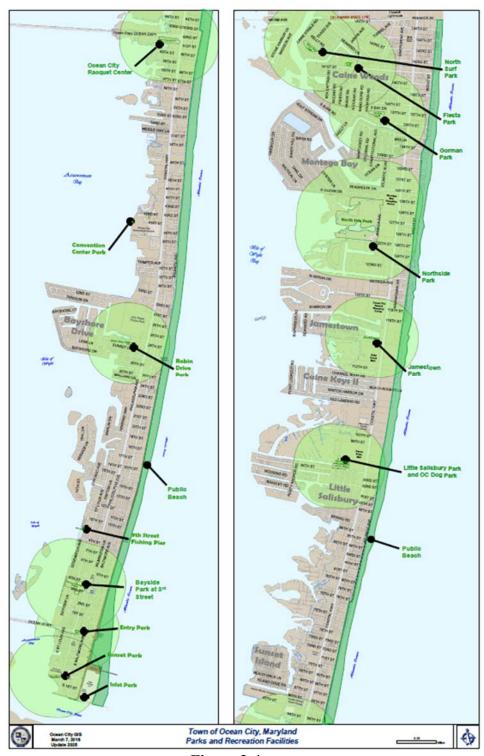


Figure 3-4

Note: Proximity to public parks is evaluated by a ¼ mile radius/5-minute walk service area. All areas of the Town are located within an easy walk from the public beach (radius not shown)

The re-imagined Bayside Park at 3rd Street opened in 2024 as a shining example of cooperative design and funding to create a recreational and special event venue for the next generation.

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. Modest building setbacks, and minimum standards for pervious surface on each parcel are largely taken up by stormwater management and required landscape plantings.

Design standards are needed to assure that the development and re-development of property maintains or creates more usable open space area to offset demand for public open space created by increased density of development and creation of new residential units.

Although not within the town limits, two major open space resources, Assateague Island and the Isle of Wight are also available to the public. Figure 3-4 illustrates the number of parks and open space areas in Ocean City, including a service area radius from each park of ½ mile or 5-minute walk. All areas of town enjoy proximity to the Ocean Beach and the park system is linked by a public transit system providing easy access.

Recreational Boating / Working Waterfronts

Use of the coastal bays for recreational boating provides a variety of experiences for Ocean City visitors in addition to traditional ocean beach recreation. Many private commercial waterfront businesses offer boat and jet-ski rentals, parasail rides and fishing trips and adventure boat tours. Kayak and paddle board rentals have expanded opportunities for low impact tours of bayside wetlands and coves.

The Town of Ocean City expanded public water access through the construction of a new bayside boat ramp at 64th Street and providing pedal boat and paddle board rentals at Northside Park. Extensive individual property docks, bulkheads and piers are permitted annually by the Ocean City Board of Port Wardens to allow and encourage marine waterfront use.



Industry, Utilities, and Municipal Services

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 ice cream, salt water taffy, caramel corn, and crab cakes that are marketed 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.

As a component of the coastal tourism economy, the fishing industry (both commercial and recreational) serves as a key employment base and a source of cultural history. Waterfront land uses including working waterfronts are an important land use with shared management responsibility. Important utility services include recent investment in electric power systems, natural gas service, 5G wireless communication, and a variety of Ocean City public works facilities.

Due to Ocean City's resort and residential nature, many industrial or manufacturing uses are inappropriate. Smoke, noise, and major truck traffic would have an adverse effect on year-round and vacationer populations. 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.

Recent federal and state actions have proposed to **industrialize the Atlantic Ocean coast** with the development of offshore wind turbines, and use of the West Ocean City commercial fishing harbor as an operations and maintenance facility.

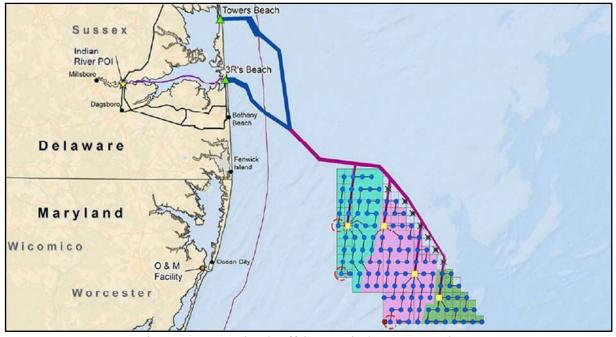


Figure 3-5 Maryland Offshore Wind Energy Project

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 460 acres, which is about 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 system, and therefore continually require improvements to transit facilities and redevelopment forms that promote non-motorized transportation options and pedestrian movement.

Safe travel accommodations for bicyclists provides both an economic development and tourism benefit. For new road construction (or resurfacing), adding marked bicycle lanes and promoting bicycle and pedestrian safety programs provides a low cost option to creating separate pathways.

Vacant and Redevelopment Land

In general, widely dispersed small parcels make up most of the Town's vacant land. In addition to vacant land, certain 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; while redevelopment sites north of 33rd Street are more dispersed.

Several larger parcels of land offer special opportunities. Their development has aesthetic as well as traffic consequences when located near the entrances to the city. Special consideration should be given to these sites so they are developed in harmony with the community's mixed-use development strategy.

One measure of where maintenance, renovation and redevelopment may occur at a town-wide scale has been to track the age of structures. No specific objectives are identified at this time; however, the mapped locations will help to illustrate data also provided in the 2020 Census for housing units.



Figure 3-5 Age of Structures Map Source: Ocean City GIS, Maryland SDAT assessment data

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 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, 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 section. With future Plan updates, 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 future Comprehensive Plan reviews and updates.

Existing Land Use Summary

Ocean City's 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.

Balancing commercial and residential uses through new mixed-use development not only serves the resident's needs, but also helps to maintain a compact and walkable urban design that is consistent with reducing automobile use and building on existing community character.

Existing land use principles 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 active cooperation with Worcester County, State and Federal agencies. Responding to rapid residential growth in Sussex County, DE, offshore energy development, and planning for shared community infrastructure such as Route 90/Racetrack Road improvements and a regional sports complex are identified to be a part of the Ocean City Comprehensive Plan moving forward.

FUTURE LAND USE PLAN

Future development will follow a proven approach that continues valued traditions and the established land use pattern, while encouraging incremental redevelopment to offer new experiences each year.

Looking to the past for indications of future trends, land use plans should 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 through public/private partnerships
- The natural environment surrounding Ocean City is resilient, and with proper management it can withstand challenging weather conditions
- 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, 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.

Mainland development in Worcester County and Sussex County, DE will place additional demands on Ocean City's facilities and services. Police protection, sanitation, water and sewer service and public transportation will also serve an increasing number of nonresident visitors and day trip visitors. The costs of providing these services should be borne by all users.

The Future Land Use Plan recognizes Ocean City's existing development pattern with essentially all of the buildable land now developed. Zoning districts are generally consistent with the planned land use, however the characteristics of 'pyramidal zoning' allows for a range of residential densities and commercial uses by-right, often creating an un-planned mix of uses in the commercial corridor along Coastal Highway/Philadelphia Avenue.

In general, major changes in planned land uses and densities are not recommended. Revisions to development regulations however, may be necessary to implement updated priorities of the Comprehensive Plan, and may be phased in over time to avoid unreasonable financial burdens to existing property owners.

Priorities identified in other Plan elements, such as the State mandate to address affordable and workforce housing in Chapter 6, may have an effect on the Future Land Use plan. Additional commercial development in the Route 50 corridor and a potential regional sports complex will have a direct impact on Ocean City's local economy and accessibility.

The following land use changes are identified for consideration and further development through public review, Planning Commission recommendation, and future action by the Mayor and City Council.

Residential

• Zoning overlay district for short term residential rental and workforce housing use in established single family residential neighborhoods to reduce 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, parking standards for short term rentals, and supplemental zoning regulations are solutions that require further consideration.

• Specific recommendations from Chapter 6 Housing regarding diversity of housing types, workforce and affordable housing incentives, accessory dwelling unit standards, Fair Housing affirmation and strategies

Commercial

- Conversion of commercial zoning districts to residential use will be considered in context of maintaining the mixed-use and varied architectural character of Town, and continuing to provide essential services to residential neighborhoods.
- Modify R-3 use list for small, neighborhood serving commercial uses permitted to operate in selected locations on both sides of Coastal Highway to better serve the residential population in all areas.
- Align Town Code for licensing and zoning to address new business startups that are increasingly proposed as additional layers of an existing business, and in some cases operated on-line without a 'storefront'. This innovation and adaptation to a changing economy challenges existing land use and zoning standards.
- Shared parking criteria for Hotel accessory uses requires re-evaluation to recognize additional parking demand for destination restaurants and special event use.

Industrial / Manufacturing

- Limit industrial and manufacturing uses in district use lists. Moderate and heavy industrial uses, and their by-products, are incompatible with the Town's resort nature and have traditionally located on the mainland. Light food processing and craft industries are provided for in the commercial areas.
- Offshore energy resource development is not compatible with community scale infrastructure and land uses. Adverse impacts must be minimized and mitigated.

Office / Municipal / Marine

- The Ocean City Convention Center is a key component to support and promotion of tourism as the essential industry of the community. Expansion of this facility is supported to assure it can grow and meet community needs over time.
- Office use is an important component of the commercial zoning districts and is encouraged where it supports other complimentary business and residential use. Home based office use criteria to be evaluated for successful implementation.
- 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 will incorporate marine-related retail and services to meet the purpose and intent of State Code Section 66B 3-05(a)(7) that requires the Planning Commission to identify areas on tidal waters suitable for loading, unloading and processing finfish and shellfish as well as docking and mooring for commercial fishing boats and vessels. These areas are meant to facilitate commercial and recreational fishing by assuring reasonable access to the waterways of the State by commercial watermen.

Downtown

- The Ocean City Development Corporation 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 17th Street. Alternate design standards are proposed for large scale redevelopment projects.
- Planned Overlay District minimum size reduced in the Downtown area to align with average block size and dimension to encourage lot consolidation and redevelopment projects.
- Begin pilot program for a Downtown Parking District to implement a fee-in-lieu parking option for certain land uses to allow expansion or redevelopment. The future land use plan for downtown revitalization is described in more detail in Chapter 8.
- Adopt standards for waterfront boardwalk connections from the Inlet Parking Lot to bayside properties

Master Planned Areas

- Designate key parcels with unique development opportunities as eligible for planned development to ensure consistency with the Comprehensive Plan. Generally, these properties are large vacant or redevelopment parcels held in single ownership. Mixed use developments integrating special attractions are encouraged.
- Identify neighborhoods or districts which may 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.
- Parking studies may define certain areas of Town, due to existing parking deficiency, that
 would support the need for investment or management strategies to offset the impacts of
 redevelopment

Conservation and Protection of Sensitive Areas / Open Space

- Ocean City will continue to advocate for active natural system management and partner with the USACE and Maryland DNR to complete projects for beach renourishment, inlet dredging, navigation channel maintenance, and sediment management/sand bypass to Assateague Island.
- Ocean City will continue to 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.
- Propose additional Open Space standards for all new development or redevelopment so that perimeter setbacks and required pervious areas are supplemented with usable open spaces either onsite or through a fee-in-lieu contribution to the Town's Recreation and Parks system.

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 context with the 10-year comprehensive plan review, 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 Summary

Ocean City faces important challenges over the next 10 years. The local economy, even more than in the past, will rely on a carefully managed tourism resort community as its economic generator. Real estate investment and land development shares in this role. A focus on resiliency will be an important theme to address the risk of severe climate events, the unexpected impacts of offshore wind energy development, and the new ways that families choose to vacation in the future.

Ocean City is always 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, supporting successful business districts and celebrating favorite landmarks with the goal of redevelopment to provide continued investment and new recreational opportunities for our seasonal visitors. Significant efforts to address needed workforce housing will continue to rely on a 'whole community' approach that extends beyond municipal boundaries.

Based on an extended period of strong but stable demographic and economic performance over the last 20 years, along with strategic investments in municipal infrastructure and tourism marketing, only incremental changes to the future land use strategies are proposed with this update.

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 10-year review, the 2017 adopted Future Land Use Plan will remain in effect to promote consistency in land use planning decisions. Individual parcel land use designations may not be updated, in part due to the pyramidal nature of several zoning districts that permit multiple land uses. Where there is a difference in land use category between existing and future land uses, Map 3-2 will correspond with the Map 3-1 Existing Land Use Plan as follows:

| SINGLE FAMILY | Single Family, Mobile Home, Townhouse |
|-----------------------|--|
| MULTI-FAMILY | Low Density, Medium Density, Moderate Density, |
| | High Density, Hotel |
| MIXED USE | Mixed Use, Amusement Mixed Use, Overlay Districts |
| BUSINESS / COMMERCIAL | Boardwalk, Bayside Marine, Local Commercial, |
| | Shopping Center |
| PUBLIC/GOVERNMENTAL | Civic, Municipal, Parks, Utilities, Transportation |
| OTHER | Non-Buildable (Beach and Bayside Wetlands), Street |
| | Right-of-way, Temporary Uses (not mapped) |

Strategies - The following priorities are identified as the most significant elements in the future land use plan for Ocean City, Maryland. These are the outcome of planning staff analysis and review by the Planning and Zoning Commission. Refinement and revision of the land use strategies is anticipated throughout the Comprehensive Plan 10-year review process.

1) Land

a. Capital Improvement Plan Projects

Building on the principle that public investment in infrastructure spurs private investment to improve the community, provide employment, and maintain a strong market economy, these major CIP projects with have a multi-generational benefit.

- Baltimore Avenue Streetscape
- Sports Complex

b. Conversion of Commercial to Mixed Use

Construction of new housing in commercial districts, as allowed by Ocean City's pyramidal zoning, has been a concern in prior versions of the Comprehensive Plan to address non-compatible land use conflicts with infill development. The introduction of a new housing type by area builders (garage townhouse condominiums) to meet market demand has advanced beyond infill/redevelopment principles with conversion of multiple city blocks in the LC-1 commercial district. Non-conformance with Comprehensive Plan land use strategies must be resolved.

c. Downtown Revitalization

Land Use Plan support is needed for next generation projects proposed for Downtown Ocean City that may include:

✓ parcel consolidation and road realignment

- ✓ creation of a pilot program for fee in lieu of parking district (FILOP) that may fund a shared use parking garage
- ✓ reduced area for Planned Overlay District zoning that corresponds with downtown block sizes to encourage redevelopment, and
- ✓ other projects in partnership with OCDC and the Sustainable Communities Program

d. Housing

Clearly stated housing policies and strategies are called for in Chapter 6, and may need to be reflected in the Land Use chapter.

e. Resiliency

As a recurring theme, each element of the Comprehensive Plan should incorporate findings from the Hazard Mitigation Plan regarding risk preparedness and action plans for recovery from sudden change events.

2) Place

a. Offshore Wind Energy

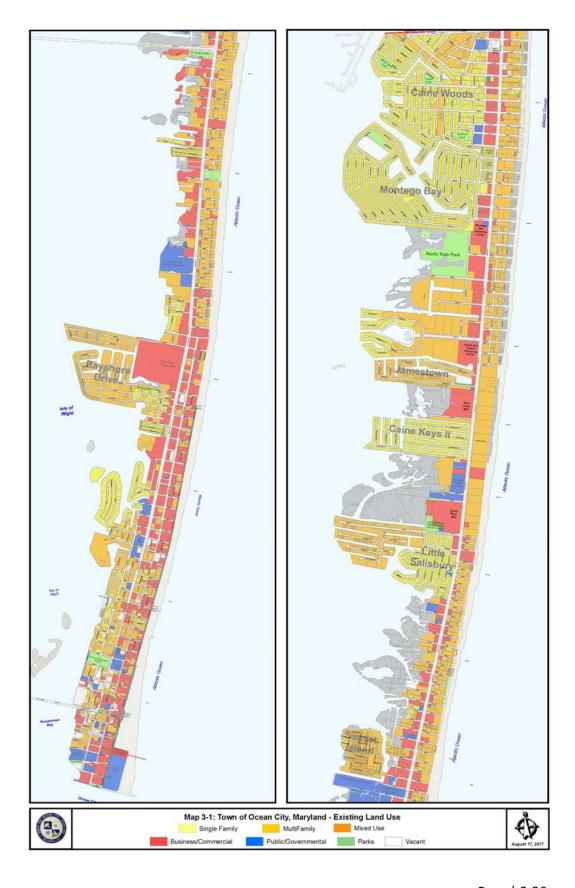
Severe and lasting adverse impacts are anticipated from the proposed industrialization of Maryland's Atlantic Coast as a result of constructing offshore wind energy systems. The full strength of local government, and the tourism industry must have an effect on mitigating these impacts.

b. Open Space

With future infill and redevelopment, current development standards should encourage site design that provides more than meeting the minimum requirements for setbacks and 15% critical area program open space. As building density, height and bulk increases a corresponding increase in useable* open space is needed. (*in addition to stormwater management, required landscaping, and lost area due to permitted setback encroachments)

.

[Note: the following land use maps may not reflect parcel level changes that have occurred since the last Plan Update in 2017. Public comment will be received through the public hearing process for consideration of potential updates]





Residential Land Use Designations

- <u>Single Family</u> Includes single family detached, and areas of existing mobile home parks; uses and densities established by the R1 and MH zoning districts*; building heights of one to three stories; yard requirements providing landscaped open spaces particularly along major roadways.
- <u>Low Density Multifamily</u> Includes areas of mixed residential types; uses and densities established by the R2-A zoning district*, building heights of five stories or less; yard requirements providing landscaped open spaces.
- <u>Medium Density Multifamily</u> Includes a variety of single family, duplexes, townhouses, motels/hotels, and multifamily residential types; uses and densities established by the R2 zoning district*; building heights of five or less stories; landscaped open space used to break long expanses of buildings; bayside marina facilities would be encouraged.
- Moderate Density Multifamily Includes areas of generally mid and low rise
 construction appropriate for moderate levels of density; the areas of this designation are
 either ocean block areas east of substantial bayside development or serve as an
 intervening area between the ocean block and Coastal Highway; uses and densities
 established by the R3-A zoning district*; building height of five or less stories.
- <u>High Density Multifamily</u> Includes areas of generally mid to high rise construction appropriate for maximum levels of density; the areas of this designation are ocean block areas; uses and densities established by the R3 zoning district*; building height up to 12 stories based on lot size, setback, parking and other criteria.
- Hotel/Motel Includes residential areas zoned R2 or higher, usually including or
 adjacent to local and shopping center districts developed with mixed commercial and
 residential uses at relatively high densities. These existing use, density, and height
 characteristics are encouraged to continue with adequate provision for safe pedestrian
 access to recreational amenities and the beach.

Business/Commercial Land Use Designations

- Boardwalk 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 side yards) on the first floor should be encouraged to eliminate small, dark vacant spaces. Residential uses and hotel development are appropriate with uses and density established by the B1 and BC2 zoning districts.
- <u>Bayside Marine</u> 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 development should be integrated into the neighborhood context.

- <u>Local Commercial</u> Includes individual businesses and neighborhood shopping centers
 offering services and retail goods which conveniently meet the daily needs of residents
 and vacationers. Uses and densities established by the LC-1 zoning district. Mixed
 commercial and residential development should be integrated into the neighborhood
 context.
- <u>Shopping Center</u> Includes major existing community-scale shopping center. Such areas have traffic concentration impacts and should be located with sufficient buffers from residential areas. Uses and densities established by the SC-1 zoning district. New community shopping centers are not encouraged.

Mixed Use/Overlay Districts

- <u>Downtown Mixed Use / Marine</u> Includes the area of the Downtown which has developed with a mix of commercial, boardwalk, residential and bayside water orientation uses. This area's existing character contains a variety of uses of relatively high intensity and primarily pedestrian access. This character is encouraged to continue and redevelop under the mixed use 'model block' concept. Uses and densities established by the DMX, DM, DR and I-1 zoning district, and building height of five stories.
- Overlay Districts Three overlay districts have been identified to address special needs
 and add flexibility to the zoning regulations. Each overlay district has its own unique
 standards 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.

• Amusement — This overlay designation implements 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 are part of the review process. Consideration of traffic and compatibility with

existing development are also be part of the review process for new amusement areas.

- <u>Planned</u> This overlay district applies to designated areas which present special development opportunities and are important to the orderly development of Ocean City. Special development review procedures are established to add design flexibility and increase public input into site and architectural design. Sites other than those identified on the land use plan could apply for the Planned Overlay designation.
- <u>Commercial Marine</u> 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.

Public/Governmental

- <u>Public Buildings/Parks</u> Both existing and future proposed public buildings, municipal facilities and parks are designed and maintained to provide a positive image of the Town and set an example for private property owners. The city will plan, construct and maintain adequate public facilities to meet the needs of community residents and visitors.
- <u>Pier</u> 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 All2 of the Code of the Town of Ocean City) which supersedes any conflicting ordinances, including the Zoning Ordinance.

Other Uses

• <u>Open Space/Sensitive Areas</u> — Ocean beach and bayside wetland areas are identified which should be preserved and managed for their recreational and ecological benefits to the community. These areas act as buffers protecting property from natural hazards and are critical to the tourism industry and the sportfishing industry.

(* Pyramidal zoning extends to higher districts as noted with additional uses and permitted densities.)

CHAPTER 4: Transportation

Ocean City's transportation system has evolved over many years into a multi-modal system. The transportation system is still designed for and reliant on the automobile with regular city blocks, interconnected streets and a comprehensive sidewalk system. 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, Ocean City builds on this this network with transit and transportation alternatives serving all residents and visitors.

Alternative modes of public transportation including bus, trolley, bike and pedestrian means of transport will continue to be prioritized to augment the fixed capacity of the Town for accommodating automobile transport via highways and street systems. Autonomous vehicular traffic may be expected to affect both parking and vehicular traffic within the next decade. Changing patterns of land use and traffic flow may require policy decisions and design elements to adapt to new vehicular requirements such as alternative fuels and EV charging stations.

MD Planning Vision 6 – Transportation

A well-maintained, multimodal transportation system facilitates the safe, convenient, affordable, and efficient movement of people, goods, and services within and between population and business centers.



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. Special event planning, emergency response and pre-disaster mitigation add to the complexity of transportation management. The following goal and objectives document core responsibilities and future direction to meet expected ongoing transportation system needs and demands.

Goal:

To maintain and improve the Town of Ocean City transportation system, in partnership with MDOT/SHA, and to accommodate the movement of people and goods as efficiently as possible, with minimum congestion and maximum safety.

Key Principles:

- Provide a variety of transportation alternatives to support the land use principle of park where you stay, then walk/bike/ride the bus or ride-share, and take a water taxi
- Manage transportation solutions to meet year-round community needs, support the peak season tourism economy, and provide solutions for special events
- Focus on public safety including land use controls for private enterprise transportation solutions

Objectives:

In order to achieve the transportation goal for a balance of auto, transit, bicycle and pedestrian mobility, including air and water access, the following objectives are adopted.

- 4.1. Identify and implement opportunities for short and long-term improvements to the thoroughfare system along the Route 50 and Route 90 access corridors, Coastal Highway and Baltimore Avenue
- 4.2. Continue to adapt public transportation system alternatives to and on the island to its maximum potential to minimize automobile congestion and impact to air quality.
- 4.3. Continue successful coordination with MDOT State Highway Administration and Worcester County to identify local priorities for maintenance and construction.
- 4.4. Support the Bicycle Pedestrian Advisory Committee to implement an improved bikeway system using alleys, secondary streets, the Boardwalk, bay front and ocean block connections.
- 4.5. Develop additional public bike storage (racks) and lockers to encourage additional bike use, and implement recommendations of the 2023 Bicycle Friendly Community report card.
- 4.6. Continue to improve bicycle and pedestrian safety and accommodate non-motorized circulation throughout town, and prepare an updated bicycle study to support planned improvements.

4.7.

- 4.8. Decrease reliance on automobile use by continuing to increase transit ridership.
- 4.9. Encourage walking activity by enhancing the pedestrian environment through the use of pedestrian signals, pedestrian pushbuttons, and location of crosswalks in appropriate location.

- 4.10. Facilitate use of Boardwalk Tram by improvements to ticketing and reduction of pedestrian safety /tram conflicts along the boardwalk.
- 4.11. Encourage private sector business to operate a bay-side ferry service, and support use of bayside water-taxis as an alternate mode of transportation.
- 4.12. Continue to upgrade and improve the Ocean City airport to meet future demand for air transportation.
- 4.13. Continue to cooperate with Wicomico County in the operation and improvement of the Wicomico/Ocean City Regional Airport.
- 4.14. Ensure adequate off-street parking for new and existing land uses.
- 4.15. Support traffic system management (TSM) techniques to preserve street capacity, promote smooth traffic flow, and maximize safety.
- 4.16. Coordinate with County, State and Federal agencies to maintain and improve long-range local and regional transit options along with demand and financing requirements.
- 4.17. Enhance pedestrian and bicycle connections between the Oceanfront and bay front to foster greater pedestrian activity, particularly within the downtown.
- 4.18. Investigate improvements to the Route 90-Coastal Highway and Route 50-Philadelphia Avenue intersections to increase traffic flow through the intersection and raise above flood elevation.
- 4.19. Identify areas with acute parking deficiencies and develop financing mechanisms to provide necessary parking, such as: parking districts, fee in lieu of parking, and other methods of development and financing should be considered.
- 4.20. 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.
- 4.21. Encourage cooperation with the State of Maryland and Worcester County to improve the flow of traffic on the Rt. 50 corridor gateway into Ocean City.
- 4.22. Implement best practices of the adopted 2018 'complete streets' policy in planning and management of the existing street system.

Ocean City's Transportation System



Figure 4-1 – Social Media Post 2024

Ocean City's transportation system includes a hierarchy of highways, streets, alleys and sidewalks with an overlay of public and private transportation options. Access to and within the community is still dominated by the automobile, which serves as the most viable means of access from major population centers to the resort community. Traditional rail access, national bus service and airline flights no longer provide direct connections to Ocean City and are located from 30 minutes to a 3 hour 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. Components of the transportation system are described below.

Regional Network

Ocean City has developed as a major tourist destination over time in tandem with important regional access corridors along US Route 50, Route 13/113, and Route 90 in Maryland, and Route 1/54 in Delaware. Other major transportation assets for the Lower Eastern Shore of Maryland include several regional airports, fixed route public transit service, and a variety of water access points.

Future improvements are guided by the Maryland Consolidated Transportation Program (2024) including local Worcester County priorities such as: MD 90 Ocean City Expressway for additional lanes and intersection improvements; US 50 Ocean Gateway improvements to maintain and replace the bridge over Sinepuxent Bay; MD 589 Racetrack Road widening to four lanes with sidewalks and bike lanes; MD 611 bicycle and pedestrian shared use path; and other safety and paving projects.

MDOT is currently completing a MD 90 Planning and Environmental Linkages Study Report to evaluate the need for improvements based on factors including: high seasonal traffic volumes combined with rapid development in southern Delaware, traffic safety, pedestrian and bicyclist connectivity, and the need to plan for evacuation and flood adaptation needs.

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 direct access to Route 113, a major north-south highway.



Two additional access roads feed in from the State of Delaware. Route 54 is a two-lane secondary highway, linking Coastal Highway and meandering through several communities before reaching Route 113. The other secondary access is Route 1 which is the extension of Coastal Highway northward along the Delaware beaches and merging in Milford, DE with Route 113. Often during intense coastal storms these routes may be flooded.

Primary Access Corridors AADT Traffic Volume Trend

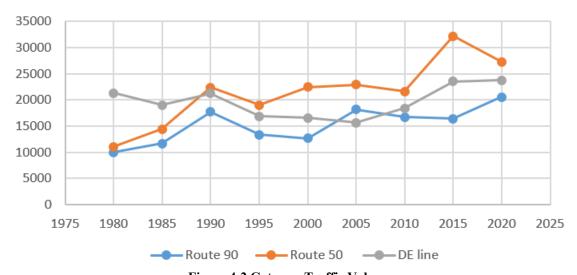
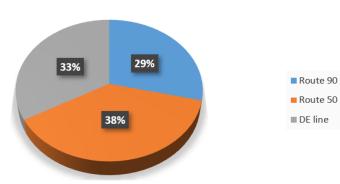


Figure 4-2 Gateway Traffic Volume
Source: Maryland State Highway Administration website 2020

Figure 4-2 identifies AADT volumes over 5-year periods from 1980 to 2020. Several locations are identified on Coastal Highway at the DE line, at the Route 90 bridge intersection as well as the Route 50 Bridge.

Primary Access Corridors 2020 AADT Traffic Volumes



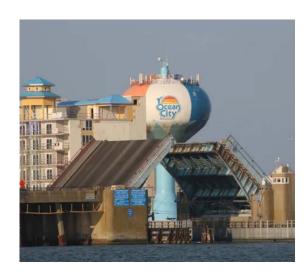


Figure 4 – 3, Photo Credit Matthew Prensky Delmarva Now

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 21,000 to 32,000 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 continues to prioritize maintenance and completes regular repairs as needed. 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.

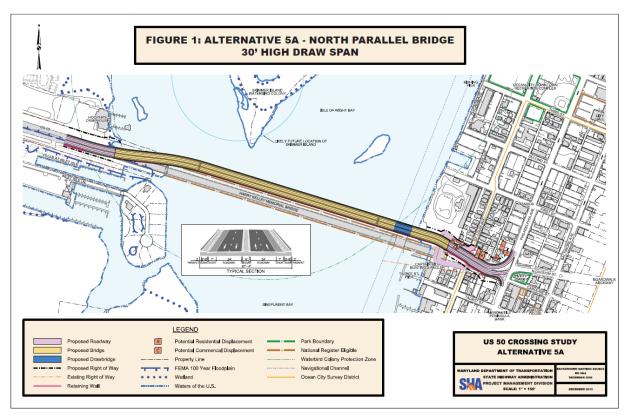


Figure 4-4 Selected US 50 Bridge replacement alternative

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 concern.

A vital part of the Route 50 access to Ocean City is the Chesapeake Bay Bridge. 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. The State began a study process for potential new Bay crossings in 2022 and has settled on improving the current alignment up to 10 lanes wide based on cost and environmental impacts of new crossing locations. Following the Tier 2 NEPA process, consideration of alternatives will continue into 2026.

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

20,561 in 2020. 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.

Ocean City has placed a priority on pursuing the Route 90 dualization project because of its many advantages: increasing capacity on Route 90 and enhancing its safety; creating improved emergency access into and out of Ocean City in the event of an accident, providing a viable means of access when Route 50 is limited by bridge construction or future development; and providing an expanded hurricane evacuation route.

The Maryland Department of Transportation State Highway Administration (SHA) recognizes that improvements to the MD 90 corridor are Worcester County and Ocean City's number one transportation priority, and has completed a <u>Planning and Environmental Linkages (PEL)</u>
<u>Study</u> for the MD 90 corridor between US 50 and MD 528 in February 2023. The PEL study identified long-term transportation needs for a 20-year horizon, including traffic operations, capacity, safety, pedestrian and bicyclist accessibility and emergency evacuations.

The project includes planning and preliminary design activities including the development of a formal purpose and need, an alternatives analysis and identification of environmental impacts and costs for each alternative being evaluated. Near term improvements under review include Concept 1-C.



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.

Like Route 90, Route 113 has experienced many serious accidents over the past several years and safety improvements are being completed as the top regional priority for State funding. In order to handle the present and future traffic volumes safety, the existing two lane sections of Route 113, Route 90 and Route 589 should be widened to four lanes.



Figure 4-5 OC Access corridors

Town Street System

Ocean City's local street system is simple in layout. One major median-divided 6-lane arterial, Coastal Highway (MD Rt. 528), accommodates the bulk of north-south movement. North-south movement in the Downtown area is also accommodated on Baltimore Avenue, Philadelphia Avenue and St. Louis Avenue. Short east-west streets provide property access and connections between the Ocean and Bayside. This modified grid pattern, with a comprehensive sidewalk system, adapts well to both local and seasonal traffic and often provides alternate routes around obstructions or special events.

Arterial roads such as Coastal Highway, portions of Baltimore Avenue (S. 1st Street to 15th Street), and several cross streets (1st, 9th, 15th) are owned and maintained by the Maryland State Highway Administration (SHA). Altogether, 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 \$9.6 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.

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.

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 41,000 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

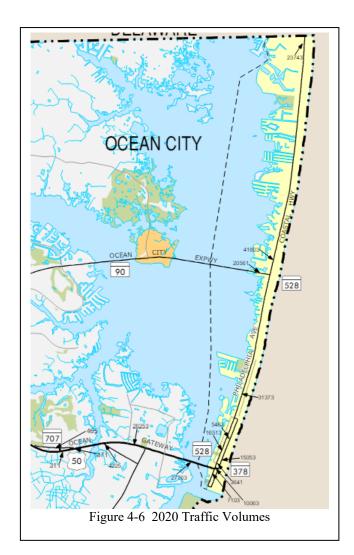
peaks heading north. Also, rainy weather causes a peak in traffic conditions. As a rainy day alternative to the beach, many go shopping, thereby causing congestion.

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 has completed 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.

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 eight-block corridor an Philadelphia Avenue, from North 1st Street to South 1st Street. Improvements included new sidewalks, concrete pavers, street lighting, landscaping, and patterned pedestrian crosswalks.

Average Annual Daily Traffic counts for 2020 in the vicinity of 22th Street indicate an annual average daily traffic flow of 31,373vehicles per day. As in the case of State maintained portions of the route, inseason traffic volumes along the route can exceed 35,000 vehicles daily.



Baltimore Avenue

Baltimore Avenue extends from South 2nd Street to 33rd Street between the Boardwalk and Philadelphia Avenue. From South 2nd Street, north to 33rd 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 North Division Street to 15th 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.



View of Existing Entry Corridor

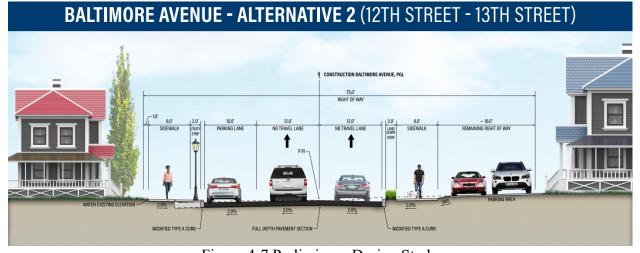


Figure 4-7 Preliminary Design Study

Ocean City Baltimore Avenue Streetscape Improvements were added to the regional Comprehensive Economic Development Strategy (CEDS) in 2021 as an important project supporting economic growth and Goal 3 – Infrastructure. Preliminary design and cost estimates were completed including community outreach. In March of 2023, the Mayor and City Council voted to suspend work on the Baltimore Ave project in order to allow for time to explore alternative funding sources including federal and state grant opportunities.

Other Road Improvements

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

In 2014, St. Louis Avenue improvements were completed from 1st Street to 17th 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.

Parking

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

Code compliant off-street parking is required for new development; however, redevelopment and infill projects often rely on non-conformity provisions of the Zoning Ordinance, incentives for mixed use development, and consideration of parking exceptions by the Board of Zoning Appeals. To meet the need for additional parking in high



demand locations, both private and public sector solutions have been developed.

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.

Table 4-2
Public Parking Facilities, Town of Ocean City, MD

| Location | Number of Parking Spaces |
|----------------------------------|--------------------------|
| Inlet parking lot | 1,271 |
| Worcester Street lot | 206 |
| Whiteside lot | 63 |
| Dorchester Street lot | 27 |
| North Division Street | 14 |
| 5 Baltimore Street lot | 44 |
| Model Block lot (OCDC) | 70 |
| St. Louis Ave and bridge | 4 |
| 4th Street and Baltimore Ave lot | 112 |
| 61st Street bayside lot | 34 |
| 64th Street Boat Ramp | 31 |
| Convention Center lot | 1,021 |
| 100th Street lot | 285 |
| West Ocean City Park and Ride | 695 |
| Total public parking spaces | 3,877 |

Downtown Parking conditions present challenges of available parking and traffic movement at the Inlet Parking lot, especially during special events. Advance notification to drivers by remote sign panel indicating the lot is full or has only a limited number of spaces has improved this condition. Replacement of the single point ticket booths at the Inlet with distributed ParkMobile App ticket stations and a Pay-by Plate system has also been successful in managing peak period use.

Purchase of property and development of public parking lots continues to be a practice of the Mayor and City Council when the need and opportunity exist. Expansion of the successful 4th Street public parking will be possible through purchase and relocation of the downtown Post Office site. The Worcester Street parking lot has been expanded by the removal of a Town water tower, and relocation of the Boardwalk Tram facility to 3rd Street has allowed the conversion of the Whiteside property for additional public parking spaces.

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. Completion of a land swap with Delmarva Power at this location allows for future consolidation of public parking adjacent to the Worcester County public library.

The parking district concept and use of existing parking lots for parking decks or garages should continue to be studied to determine their cost-effectiveness for use in Ocean City, particularly in the downtown area. It is 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. A pilot program is underway in partnership with OCDC, and two potential parking districts have been proposed at Worcester Street and 4th Street. A fee-in-lieu parking advisory committee was established in 2023.

Auto sharing services and increasing use of on demand transportation alternatives such as Uber and Lyft, has the effect of reducing parking demand, and provides an alternative to public transit. Other peak demand reduction strategies may include fluctuating parking fees for public parking lots, street parking, and remote sign information panels to direct drivers to available parking.

In 2015 Ocean City implemented a program for EV charging stations at three public parking lots (Convention Center, Northside Park and 4th Street). 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. Recent State legislation includes new building standards for installation of EV stations.



In support of all these solutions, the Mayor and City Council approved the creation of a new Parking Division in 2023, organized under the Public Works Transportation Department. The new division includes a parking manager that supervises part time enforcement staff, Inlet Lot ambassadors, parking system vendors and all parking operations, planning and procurement.

Public Transportation

Investments in public transportation services in Ocean City provide an effective means of moving a greater number of people throughout the community given the restriction 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 Town of Ocean City has completed a current Transit Development Plan (TDP) dated January 2024, which assesses current transit services and serves as a guide for implementing changes, improvements and/or potential expansion. The current TDP is referenced as an element of the Town's Comprehensive Plan within this Chapter.

Public Works Transit Facilities

The Town of Ocean City's Hal O. Adkins Public Works Complex, located along 65th Street bayside, was completed in 2021. OC Transportation staff are located in two buildings within this complex that also includes a bus storage facility, expanded service bays, a new administration building, a stock room, the bus dispatch center, a new bus wash facility, and new fuel pumps. The transit system also relies on additional infrastructure including:

- South Division Street Transit Center
- North End Transit Center
- West Ocean City Park and Ride Lot and Transit Facility
- Bus Stop Shelters
- Tracking technology



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. Operational and system wide review and recommendations are included in a Transit Development Plan last prepared in 2024.

Transportation Services

- Coastal Highway Beach Bus (year-round, with seasonal adjustments)
- West Ocean City Park-N-Ride Beach Bus (seasonal)
- Express Beach Bus Shuttle for Special Events (seasonal)
- ADA paratransit (year-round, with seasonal adjustments)
- MEDTRN medical transportation for ADA-eligible customers
- Boardwalk Tram (seasonal recreation rather than public transportation)

From a total of 69 vehicles in 2017, the continually adapting bus fleet in 2024 includes 51 active revenue vehicles and 7 non-revenue vehicles. The fleet includes 37 forty-foot buses (reduced from 64), 11 sixty-foot articulating buses (increased from 2, with 2 additional in 2025), and 3 para-transit vans. The Ocean City Transportation Service schedule is posted on the Town website and may be adjusted to meet seasonal demand.

Future opportunities to adapt and improve the public transit system are reviewed in the 2024 TDP, and 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
- Improved West OC Park and Ride system performance with possible service to a future downtown loop, and possible extension to the Berlin Walmart to facilitate daytime shopping trips for seasonal workers
- Continued coordination of private shuttle services from expanding campground facilities in the County, with improved Somerset Street drop off location.
- 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
- Evaluate future impact of residential development surrounding the north end transit station
- Potential conversion of bus fleet to CNG fuel, or Zero Emission Vehicle Fleet to improve efficiency and provide environmental benefits
- Implement an electronic fare payment system
- Improve and maintain bus shelters and benches
- Review of fare schedule, staffing requirements and long-term capital needs

Coastal Highway Beach Bus

South Division Street Transit Station to/from 144th Street Transit Station FARE: \$4 Ride-All-Day; Exact Cash Fare Required; Higher frequency of service is provided during select special events.

| WINTER Oct. 28, 2024 - Apr. 20, 2025 | | 6:00 a.m. – 1:00 a.m. / Approx. every 30 min. |
|--------------------------------------|-------------------------------|---|
| MINIER | Oct. 20, 2024 - Apr. 20, 2025 | 1:00 a.m. – 6:00 a.m. / No Bus Service |
| SPRING | Apr. 21 - May 22, 2025 | 6:00 a.m. – 2:00 a.m. / Approx. every 30 min. |
| SPRING | SPRING Apr. 21 - May 22, 2025 | 2:00 a.m. – 6:00 a.m. / No Bus Service |
| SUMMER | May 22 Sant 44 2025 | 6:00 a.m. – 3:00 a.m. / Approx. every 15 min. |
| SUMMER May 23 - Sept. 14, 2025 | | 3:00 a.m 6:00 a.m. / No Bus Service |
| FALL Sept. 15 - Oct. 26, 2025 | | 6:00 a.m. – 2:00 a.m. / Approx. every 30 min. |
| FALL | Sept. 15 - Oct. 26, 2025 | 2:00 a.m. – 6:00 a.m. / No Bus Service |

West Ocean City Park-N-Ride Beach Bus

South Division Street Transit Station to/from West Ocean City Park-N-Ride at 12848 Ocean Gateway, Ocean City, MD 21842

FARE: Free (except on designated special event dates; fare is \$4 Ride-All-Day; exact cash fare required).

| SPRINGFEST | April 24 - 27, 2025 | |
|-----------------|------------------------|--|
| BOARDWALK ROCK | May 17 - 18, 2025 | |
| SUMMER | May 23 - Sept. 1, 2025 | |
| BIKEFEST | Sept. 10 - 14, 2025 | |
| OCEANS CALLING | Sept. 26 - 28, 2025 | |
| COUNTRY CALLING | Oct. 3 - 5, 2025 | |
| SUNFEST | Oct. 23 - 26, 2025 | |

- \$4 Ride-All-Day Beach Bus fare applies during Springfest, Boardwalk Rock, OC Air Show, July 4, Oceans Calling, Country Calling and Sunfest
- Frequency of service is approx. every 20 minutes 6:00 a.m. to 11:00 p.m.
- Service ends at 10:00 p.m. on Sunday of Springfest, Bikefest and
- When Beach Bus service is not in operation, transportation to/from the Park N Ride and South Division Street Transit Station is provided by Shore Transit. Please refer to Shore Transit service schedule for arrival/departure times and applicable fares.

Express Beach Bus Shuttle for Special Events

FARE: \$4 Ride-All-Day. Exact Cash Fare Required.

| | | Transport to/from 40 th St. South Convention Center parking lot and Sunfest fair grounds. Service is approx. every 20 minutes. Thursday thru Saturday 9 a.m. to 10 p.m. & Sunday 9 a.m. to 7 p.m. | | |
|------------|--------------------|--|--|--|
| OC AIRSHOW | June 14 - 15, 2025 | Transport to/from the West Ocean City Park N Ride & 17th Street and Baltimore Ave. Service is approx. every 20 min. Sat. & Sun. 9 a.m. until 1 hr. after show end. | | |
| | | Transport to/from 40 th St. South Convention Center parking lot & 18 th Street and Baltimore Ave. Service is approx. every 20 min. Sat. & Sun. 9 a.m. until 1 hr. after show end. | | |
| SUNFEST | Oct. 23 - 26, 2025 | Transport to/from 40 th St. South Convention Center parking lot and Sunfest fair grounds. Service is approx. every 20 minutes. Thursday thru Saturday 9 a.m. to 10 p.m. & Sunday 9 a.m. to 7 p.m. | | |

Boardwalk Tram

Atlantic Avenue (Boardwalk) South 1st Street Tram Station to/from 27th Street Tram Station

| CLOSED UNTIL FURTHER NOTICE | |
|-----------------------------|--|
|-----------------------------|--|

FARE: \$5 Per-Person, Per-Boarding, One-Way; Exact Cash Fare Required; Credit Cards Accepted; Weather Permitting.

As shown in Table 4-1, ridership has been stable over the last 5 years with around 2.7 million rides per year. Efforts to improve the bus experience, reliability and customer service included increased bus deployment by 24 percent in 2015 resulting in a 3% increase in passenger count. On July 4th 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 and OC Transportation Division)

1.8.25

| Ocean City Transit Bus Ridership By Calendar Year | | | | | | |
|---|-----------|---------|-----------|-----------|-----------|-----------|
| | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
| Jan | 14,782 | 15,331 | 10,741 | 12,544 | 15,608 | 14,310 |
| Feb | 15,581 | 17,943 | 9,605 | 15,105 | 15,383 | 15,134 |
| Mar | 38,648 | 23,815 | 17,168 | 22,957 | 26,390 | 28,802 |
| Apr | 40,870 | 6,472 | 19,119 | 40,393 | 37,627 | 30,007 |
| May | 213,184 | 15,578 | 86,115 | 137,772 | 123,981 | 117,583 |
| Jun | 575,582 | 97,150 | 247,089 | 317,916 | 307,986 | 291,727 |
| Jul | 528,904 | 98,753 | 277,627 | 328,366 | 307,320 | 281,775 |
| Aug | 500,363 | 88,510 | 234,971 | 304,006 | 277,667 | 251,744 |
| Sep | 295,435 | 62,630 | 156,845 | 176,429 | 203,125 | 200,118 |
| Oct | 65,030 | 31,024 | 60,294 | 66,867 | 83,223 | 107,874 |
| Nov | 20,632 | 12,827 | 17,921 | 19,013 | 18,435 | 18,147 |
| Dec | 18,717 | 11,189 | 16,619 | 17,702 | 19,134 | 16,801 |
| TOTAL | 2,327,728 | 481,222 | 1,154,114 | 1,459,070 | 1,435,879 | 1,374,022 |

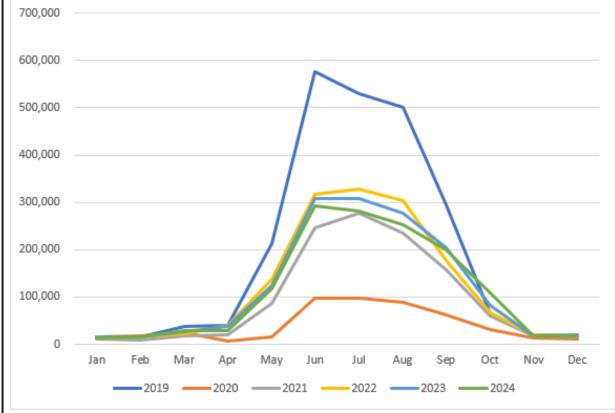


Table 4-1 Ridership

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.

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. Relocation of Tram operational facilities to the DPW South facility at St. Louis Avenue and 3rd Street, in combination with additional boardwalk security improvements, has required access and circulation changes.

Funding

As the Ocean City transit system has grown, federal and state funding has remained relatively constant resulting in Ocean City contributing a larger share of the operating cost of its non-urban 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 operational funds that an urban system would receive. Federal and State agencies have worked with the City to provide additional support in capital costs of new and shared use buses to meet local seasonal needs, including the addition of new articulated buses capable of carrying 100 passengers.

Bus Operations

The attractiveness of bus service to riders has been significantly improved by the addition of articulated buses, regular service due to frequent scheduled stops, and shorter waits due to regular spacing between buses. During special events, additional contracted bus service has met peak demand. Continued evaluation will remain a consideration in planning future service improvements.

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 such as the Town website, smart phone apps, and social media will meet this objective.

Service Extensions and Coordination with Other Systems

Service extensions to West Ocean City, to connect with a growing number of commercial services and retailers suggests the need and demand for linking residents to these shopping opportunities. The West Ocean City Park and Ride was developed in 2002 and County system service to the nearby factory outlet stores has been met recently with Shore Transit service connections.

Current planning for a Sports Complex, in partnership with the Maryland Stadium Authority, on a site located west of Ocean City may require seasonal transit service expansion from Ocean City to provide connections with Hotels, Restaurants, and family vacation opportunities.

Partnership with Shore Transit (a service provided by the County) should be enhanced to improve service system connections and scheduling where possible.

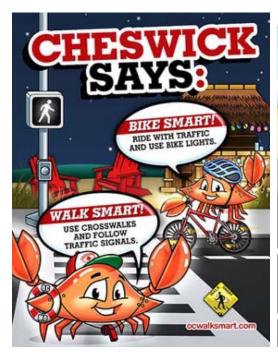
The most effective improvement for attracting additional bus riders from Delaware would be developing a park and ride lot near the northern end of the bus route. A North End Transit Center has been constructed by the Town and may serve as the first step toward developing such a facility with the addition of parking.

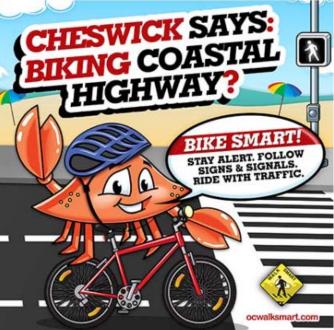
Bicycle Movement

The Town of Ocean City joined 506 communities nationwide in the movement for safer streets and better bicycling for everyone by achieving a Bronze-level Bicycle Friendly Community designation in 2023. The award recognizes the Town of Ocean City's commitment to creating transportation and recreational resources that benefit its residents and visitors of all ages and abilities while encouraging healthier and more sustainable transportation choices.

Ocean City has a continued partnership with the Maryland State Highway Administration to promote bicycle and pedestrian safety through the Walk Smart Bike Smart campaign. Cheswick the Crab leads the way with community outreach, particularly during Senior Week at the beginning of the summer season.

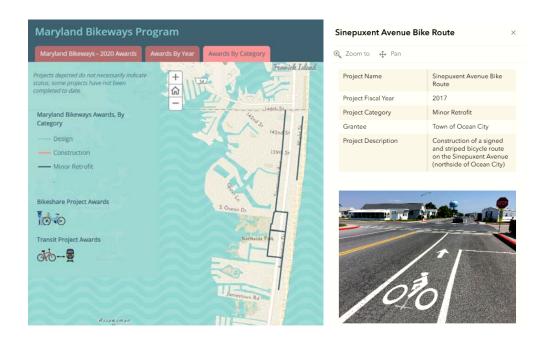
Monthly meetings of the OC Bicycle and Pedestrian Advisory Committee organize recommendations to Town officials and actions of committee members on all matters relating to the use of bicycles as a means of transportation and recreation in Town. Recent work has concentrated on working toward a connected bikeway system, preparation of a Bicycle Strategic Plan with grant assistance, increasing bike racks at beach street ends, and land use controls for E-bikes, and other personal mobility devices such as Segways, Onewheels, Hoverboards, powered Skateboards and Scooters.





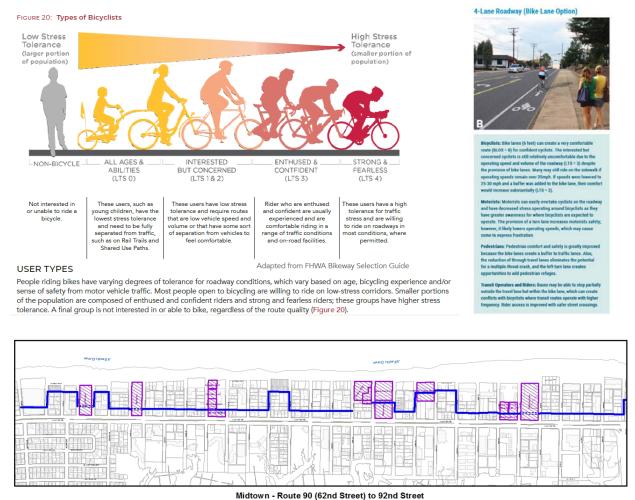
The Ocean City BPAC continues to work on a project to define a system of bicycle routes which help to connect points throughout the community and provide an alternative to the shared use of bus lanes on Coastal Highway. A mapping effort was completed to capture the typical riding patterns of both local 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.

Ocean City completed a bayside bike friendly retrofit along Sinepuxent Avenue from 130th to 146th Streets. Improvements included bicycle lane pavement markings, sharrow markings, new signage and the installation of crosswalks. This project was funded by a \$57,560 grant from the Maryland DOT Bikeways Program. The second phase was completed in the ocean block from 118th to 146th Street along Wight Street and Assawoman Drive.



Other signage and pavement marking projects have been identified and completed in several segments, private easement agreements and minor curb reconstruction are 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.

Ocean City will seek to align local bikeway planning with the 2050 Maryland Bicycle & Pedestrian Master Plan safe system approach, context driven design guidance, and complete street implementation as applicable. The FHWA <u>Bikeway Selection Guide</u> is a good reference linking design standards with anticipated user characteristics.



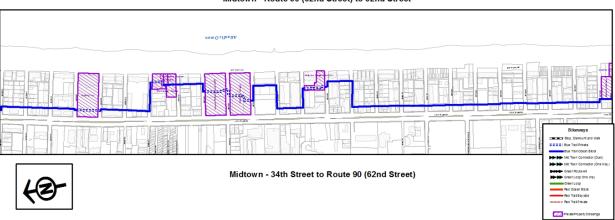


Figure 4-2 Draft Bicycle Corridor Plan (OC BPAC strategy for alternative route off Coastal Highway)

Pedestrian Movement





Pedestrian movement is a key mode of transportation in Ocean City that demands a range of solutions. Ocean City teams up with the MDOT State Highway Administration to meet pedestrian safety goals with a full range of road improvements, signalized crossing, pavement markings and public outreach programs. Improvements to the Town's comprehensive sidewalk system are under continuous management by our Public Works and Engineering staff. Special Events planning and meeting the needs of seasonal crowds adds a dynamic challenge to community pedestrian planning strategies.

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 managed through scheduling 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 3rd 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-footwide 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.

Key pedestrian urban design improvements in the downtown area 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, signs, signals, crosswalks and other pedestrian design considerations to assure vehicular traffic is less dominant in the Downtown area. Completion of Somerset Street improvements in 2023 provides a prototype project adjacent to the downtown "Model Block".

Complete streets policy encourages sidewalk widening for east west streets with signalized intersections along the north south corridors of Baltimore Avenue, Philadelphia Avenue and Coastal Highway. 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.

In 2025, a MDOT SHA initiated Pedestrian Safety Action Plan (PSAP) for MD 528 (Coastal Highway) between 15th Street and 67th Street will identify context driven improvements and safety enhancements to make travel safer for all road users. This will serve as a model for addressing other roadway corridors in the future.



Median fence along Coastal Highway – Delmarvanow.com Photo: Megan Raymond

Waterways

The Ocean City inlet serves as critical infrastructure for the Town of 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 sport fishing enthusiasts. Commercial shipping is limited to local and transient fisherman and their catch with primary access through the Ocean City Inlet to the West OC Harbor. 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.

A public boat launch facility, located at the bayside end of 64th Street, improves water access with facilities including a two-lane boat ramp, channel dredging for ramp access, a 50-space trailer parking area and a small comfort station. New opportunities for additional public water access will be considered in locations which minimize impacts to established residential neighborhoods.

The waterways will continue to provide recreational benefits and a limited amount of water transit. A bayside "water taxi" ferrying tourists from the north to locations near the inlet serves a useful dual purpose. This successful service provides relatively rapid transit and a guided tour of the bayside at the same time. The water taxi concept has expanded from Ocean City to the mainland (Ocean Pines and West Ocean City). The water taxi's impact on the overall transportation situation may be small, but it provides an interesting addition to Ocean City's recreational opportunities and becomes its own attraction. Opportunities to promote private sector water taxi service and link such services to land-based transit alternatives should continue to be explored.



Airport

Ocean City Municipal Airport (KOXB), is a public use general aviation airport owned by the Town of Ocean City. The Airport is located approximately 2 miles southwest of Ocean City on Sinepuxent Bay.

This Airport features two intersecting asphalt runways, a 4,074-foot-long grooved primary, and a 3,204-foot-long crosswind, both are 75-foot wide with non-precision markings. All runway ends are served by non-precision approaches, REIL's and pilot-controlled lighting. Runway 14/32 has a full-length North parallel taxiway. Ocean City Municipal Airport is included in the FAA's national Plan of Integrated Airport Systems (NPIAS), and as such, is eligible to receive federal funds. Its role, as a General Aviation Airport, is to accommodate the basic needs of the general aviation flying public.

Flyers can obtain full- and 24-hour self-service 100LL fuel, as well as gravity and pressure fill-Jet A Premix fuel. The Airport Terminal Building hosts rental cars, a conference room, pilots' lounge, and other crew and passenger amenities. Aircraft parking and storage is available on paved tie downs and corporate box and T-hangars. The Airport supports all types of general aviation activity including flight instruction, aircraft rental/sales, and charter flights. There are 65 based aircraft at the Airport ranging from multi engine turbine to small piston GA and helicopters.

The Airport serves the business, recreational, and flight training needs of the community through a wide range of commercial tenants. **Ocean Aviation** (https://www.flyoceanaviation.com/)

offers a Part 141 flight school, Part 135 flight charters, aircraft maintenance, aircraft rentals, a pilot shop, as well as aircraft sales and acquisitions. **Ocean City Plane Rides** (www.oceancityplanerides.com/) offers aerial sightseeing tours in vintage biplanes. For a Tandem Skydiving adventure, **Skydive OC** jumps May-October (http://www.skydiveoc.com/). During Summer months **My Flight helicopter Tours** can take passengers over the beach and nearby National Seashore https://www.myflighttours.com/ocean-city-helicopter-rides/

The Ocean City Airport offers the following services:

- Fuel sales (10OLL and Jet A)
- Major and minor power plant service
- Major and minor airframe service
- Aircraft rental
- Charter service
- Sightseeing packages
- Flight and sky-diving instruction
- Community and T-hangers
- Paved tie-downs
- Helicopter Tours

Annual aircraft activity (2024):

| Local GA | 8,300 |
|--------------|--------|
| Transient GA | 30,806 |
| Military | 500 |
| Air Taxi | 550 |
| | 39,356 |

(Source: Maryland Economic Impacts of Public Use Airports, July 2024)

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.

A master plan for the airport was completed in 1979 and recently updated in 2024. 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 built in 2005-2006 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 most recent updates to the Airport Master Plan in 2021 identify several improvements that are needed at the airport, including:

- Acquisition of clear zone and obstruction easements.
- Construction of 3-bay extension of Hanger K
- 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
- Restaurant at Terminal in planning stage

The airport can be a valuable alternative to the automobile for many vacationers. As 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 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.

Strategies

Ocean City's transportation system moves goods and people on land, sea, and in the air. By far, the primary transportation access is by private vehicles via the well-developed roadway system. Pleasure and sport-fishing boats have public access to the bays and open ocean along with the commercial fishing fleet. The airports provide rapid access for visitors from the Middle Atlantic States and someday 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 main arterial road corridors carry a seasonal burden adequately most of the time. However, at peak periods roadway capacity is stretched to the limit. Future improvements and strategic management will be needed to keep pace with the town's growth and redevelopment.

Community planning for resiliency and adaptation to changing conditions will recognize that the Town transit system relies on continued capital and operational funding from State and Federal sources. Alignment of the Comprehensive Plan extends to emergency management plans for staged evacuation routes, emergency vehicle access, and future storm flooding scenarios of area roadways.

Below are recommendations for action to improve Ocean City's transportation system that include key transportation elements listed in the Capital Improvement Plan and Hazard Mitigation Plan:

1) Highways and Street Systems

- a) 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. Include proposed state road projects such as Route 90 Dualization in Worcester County's Transportation Priority Letter which is submitted annually to MDOT Office of Planning and Capital Programming (April 1st)
 - b) Incorporate Route 90 dualization, and the SHA Route 50 Bridge Replacement project Alternate 5A into long range planning documents and evaluate potential impacts to the local street system.
 - c) Consider implementing the adopted 'complete streets' policy to provide increased transportation choices and mobility for all users, including Maryland State Highway Administration guidance.
 - d) Continue working to improve the stormwater management system on Coastal Highway by adding inlets and a conveyance system to the northbound lanes in areas of repetitive flooding.
- e) 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
- f) Implement the Baltimore Avenue streetscape improvement project between North Division Street and 15th Street with wider sidewalks, relocated utilities, etc.
 - g) Coordinate with the SHA to implement the Route 50 north parallel bridge replacement when necessary and as funds are available.
 - h) Encourage Delaware to continue improvements to Route 54 which would improve the third means of access to the north end of Ocean City.
 - i) Keep the remaining alley system open; only close alleys that have no present or potential benefit to the public.
 - j) Minimize curb cuts on Coastal Highway to maintain capacity.
 - k) Continue to monitor the structural integrity of the Route 50 Harry W. Kelley Memorial Bridge and Route 90 Bridge to ensure their safety and serviceability.
 - Coordinate with MDOT SHA to complete improvement to the Route 50/Philadelphia
 Avenue intersection including upgrade to safety bollards, and raised intersection to
 improve community access during flood conditions.
 - m) Continue to cooperate with the state to improve the safety and capacity of Coastal Highway.
 - n) Continue to implement the street system improvements identified in the 10-year capital

- plan for improvement of 78 miles of town streets and alleys.
- Coordinate special event use of the public streets for car shows, parades and short -termcontrolled access. Evaluate maximum carrying capacity of roadway system during peak periods and multiple event schedules.
- p) Support efforts to prepare a Cape to Cape Scenic Byway corridor management plan and refer to MDOT SHA Context Sensitive Solutions Guide for projects along the corridor.
- q) Consider relocation of South Transit Station, and realignment of S. Philadelphia Avenue to allow for land consolidation for development adjacent to the Inlet

2) <u>Parking</u>

- a) Provide additional public parking in the downtown area. If feasible, plan for long term parking districts and parking structures which incorporate retail stores at the ground level of the garage to enhance commercial activities at the pedestrian street level. The architectural design of the garage(s) should be attractive and compatible with the character of the neighborhood and should be constructed in a manner that reinforces or enhances the streetscape.
- b) Examine current parking standards and consider revising regulations to address offsite parking facilities, fee-in-lieu parking fund, and alternate parking minimums to encourage responsible redevelopment.
- c) 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.
- d) Continue to provide or permit public parking lots and street parking where needed throughout the town. Study downtown parking demand and potential impacts of conversion/redevelopment of interim use private parking lots.
- e) Adjust off-street parking requirements in the Zoning Code to establish minimum criteria for change of use or redevelopment in order to reduce non-conformity with current parking standards.
- f) Require compact car only parking, at corners in need of improved sight distance.
- g) 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).
- h) Incorporate electric vehicle (EV) charging stations at selected public parking lots to meet the demand of seasonal visitors. Update Town Code to align with State mandates for EV charging infrastructure.

3) Transit/Bus System

a) 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.

- b) Plan and design a dedicated bus lane extension southbound along Philadelphia Avenue from 17th Street to 9th Street.
- c) Evaluate the feasibility of express bus service to supplement current service recognizing limitations posed by available bus lanes to accommodate both.
- d) Identify express buses with a different paint scheme or markings from local buses and implement an express bus service from the North End to Downtown to serve residential neighborhoods.
- e) Study and implement a digital payment system for transit use.
- f) Study potential relocation of the southern terminus of the transit system to a location north of the Route 50 Bridge as a means of solving traffic congestion and impacts of coastal flooding.
- g) Participate in the design alternative selection process for Route 90 Dualization to consider multimodal access and/or express lane connection to an additional park and ride facility in Worcester County.
- h) Coordinate with Worcester County and Sussex County to maintain transit connections between Ocean City and new growth areas along the Route 50 and 54 corridors.
- i) Evaluate a park and ride lot near the northern end of the bus route. The North End Transit Center is currently being surrounded by new residential development. Study possible relocation in the future.
- j) Adopt an updated Transit Development Plan

4) Pedestrian and Bike Movement

- a) Prepare and adopt a Bikeway Master Plan which includes location specific Pedestrian and Bicycle recommendations, referring to NACTO urban bikeway guidelines and draft easement documents. Incorporate funding options through SHA and MDOT programs.
- b) Develop strategies and tools to address implementation of non-motorized facilities which include funding mechanisms, a 'complete streets' policy and modified development regulations for bike racks and parking space credit.
- c) Develop recreational and destination bike routes minimizing the use of Coastal Highway.
- d) Consider development of Pedestrian overpasses over Coastal Highway at locations where they may support the needs of key concentrations of bayside population.
- e) Continue to develop strategies to implement the "Bayside Boardwalk" incrementally to invite pedestrian activity to the bayside and distribute greater pedestrian activity in the Downtown area.
- f) Coordinate with MDOT SHA to monitor pedestrian signal cycle lengths, install additional pedestrian signal heads and additional pedestrian pushbuttons in key locations as needed, locate or re-locate crosswalks in appropriate locations to provide continuity and match pedestrian needs.
- g) Provide several one-way pair street segments in the Downtown area to improve traffic flow and pedestrian safety. Coordinate the location of such one-way street pairings with potential transit station locations to minimize conflicts with automobile

movement.

- h) Improve east-west pedestrian connections within the Downtown area between the Ocean boardwalk and the Bay front properties 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.
- i) 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.

5) <u>Waterways</u>

- a) Continue to conduct channel maintenance dredging. Coordinate with Maryland DNR to study the beneficial use of channel dredge spoil.
- b) Continue to coordinate with USCG and DNR to improve channel markings for inlet and bayside navigation
- c) Explore opportunities to increase the availability of and access to marina facilities and boat launching facilities in locations with adequate facilities and where residential neighborhoods are protected from adverse impacts. Encourage the provision of private marina facilities and examine potential sites for public marinas.
- d) Coordinate with all partners to balance recreational and navigation priorities with environmental management in the Coastal Bays.
- e) Restrict the use of houseboats as a commercial enterprise for short term rental housing.
- f) 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.

6) <u>Airport</u>

- a) Continue to maintain and improve the operational elements of the airport.
- b) Maintain and improve the runways for use by critical aircraft with navigational aides.
- c) Increase hangar capacity to meet demand.
- d) Improve taxiways and expand aprons for airplane parking
- e) Work with Worcester County to ensure compatible land uses in the vicinity of the airport.
- f) Support and encourage shuttle or commuter services to the airport.

CHAPTER 5: Community Facilities & Public Safety Services

Ocean City's public land, infrastructure, services and utilities are of vital importance to 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, medical and emergency management services are essential to the health, safety and welfare of the community. Adequate maintenance and expansion of community facilities is necessary to meet peak seasonal demands while allowing for incremental growth and redevelopment.

MD Sustainable Growth Principle 1 – Land

Optimize productivity of working landscapes, ... and prioritize development within population centers that are in proximity to existing infrastructure and facilities.

MD Sustainable Growth Principle 6 – Resilience

Integrate resiliency measures that will minimize the impacts of rapid and unexpected natural- and human-caused threats on communities

Goal:

To provide for the continued maintenance, operation and expansion of community facilities along with 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.

Key Town Principles:

- Build and maintain community facilities and infrastructure to accommodate current and future needs
- Adapt to changing conditions and strengthen critical infrastructure for greater resiliency
- Plan for multiple uses of public lands and manage for cost recovery from special events
- Ocean City is safe and clean, has quality neighborhoods for residents, is accessible and an easy travel destination, and is a place for enjoyable experiences for all

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 expand to meet peak seasonal demand.
- 5.4 Provide high-quality public beach, boardwalk, parks, water access, and other sport facilities 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 Board of Education to provide high quality education that is able to prepare students for a rewarding and productive future.
- 5.7 Ocean City will 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 coordinate 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.
- 5.12 Incorporate Capital Improvement Plan projects adopted by the Mayor and City Council into the Comprehensive Plan by reference.
- 5.13 Accommodate a distributed network of communications and IT infrastructure collocated on utility poles in public right of way, and enforce limits in residential neighborhoods with underground power utilities.
- 5.14 Coordinate with public utility companies to provide locally essential services, and continue to enforce zoning controls for specific uses excluded or permitted only by special exception or conditional use approval.

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

An update of the Ocean City Water Master Plan was completed by Whitman Requardt & Associates (WR&A) in 2024 in order to evaluate the plan for implementing improvements that will enable the Town's water system to meet the following primary objectives:



Credit: @marylanddroneguy

- Meeting the projected water system demands at least to the Year 2040
- 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 meets current year-round demand, and also has adequate capacity to serve the seasonal peak weekend population. Water demand projections in the master plan are based on updated population and peak seasonal visitor estimates through 2040. These projections use historical data to predict maximum daily demand, allowing the Town to prepare for both steady and peak usage patterns.

Past predictions had overestimated demand, but recent data indicate a steady decline, attributed to water conservation efforts, system improvements to reduce water loss, and increased building code requirements for water saving fixtures. Despite the reduced projections, the Town maintains conservative estimates to account for unexpected changes.

The predicted planning period (Year 2030) demand including a 20% safety factor is 14.07 MGD and predicted buildout (Year 2040) demand including a 20% safety factor is 18.0 MGD. The updated water demands utilized in this planning effort are included in **Table 5**.1

| Table ES.5 – Projected Planning Demands | | | | |
|---|------------------------------------|--|--|--|
| Year | Projected Maximum Day Demand (MGD) | | | |
| 2020 | 10.14 ¹ | | | |
| 2025 | 13.86 ² | | | |
| 2030 | 14.072 | | | |
| 2035 | 14.28 ² | | | |
| 2040 | 18.00³ | | | |

¹ Actual metered maximum day demands

Table 5.1a Projected Water Use - Million Gallons per Day (MGD)

Source: WRA Water Master Plan Final Report, November 2024

Historic and Projected Water Use Town of Ocean City

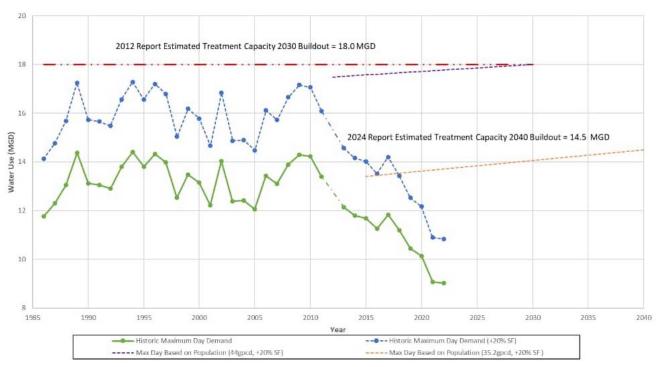


Figure 5-1b Water Use Summary

² Maximum Day Demand projection is based on 35.2 gpcd and includes a 20% safety factor.

³ Buildout demand maintained for planning consistency.

Water Supply

Ocean City sources its water from the Ocean City and Manokin aquifers, which are accessed through twenty-two (22) production wells. These aquifers provide a consistent supply of groundwater, although their salinity levels require careful management, particularly during high-demand summer months. The Town faces a unique challenge in maintaining well capacity and water quality amid seasonal fluctuations and increasing chloride levels. Monitoring is essential for identifying changes in the aquifers and maintaining sustainable withdrawal rates.

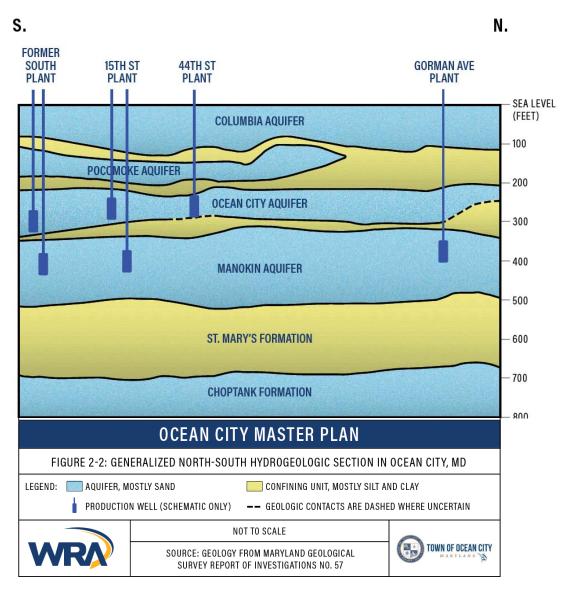


Figure 5-2 Groundwater Hydrogeology Source: Town of Ocean City Water Master Plan – 2024 Update

The location of the wells are 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 is maintained in order to ensure that the current well capacities continue to be available.

The State of Maryland requires that municipalities which pump groundwater obtain a water appropriation and use permit, which limits the pumpage to a daily average on an annual basis, and a daily average in the month of maximum use. The Town has two water appropriation permits from the Maryland Department of Environment (MDE) which permit pumpage from up to 25 wells (with 22 wells currently in operation). Both permits have an effective date of April 1, 2021, and an expiration date of March 31, 2033. The current permitted allocation (8 million gallons per day (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 2040.

Table 5-2 identifies annual average water production in million gallons per day (MGD) to serve the Town for the years 2015 through 2022. Figures shown reflect the seasonal variability of demand for water supplies in a single year.

| Table 3.4 § | able 3.4 Seasonal Fluctuation of Water Production | | | | | |
|-------------------|---|---|-----------------------|--|--|--|
| Year | Offseason Annual Avg. Day Water Production (MGD) | Peak Season Annual Avg. Day Water Production (MGD) | Peak Season Factor | | | |
| 2015 | 3.08 | 7.32 | 2.38 | | | |
| 2016 | 2.90 | 7.25 | 2.50 | | | |
| 2017 | 3.07 | 6.61 | 2.15 | | | |
| 2018 | 3.08 | 6.99 | 2.27 | | | |
| 2019 | 2.35 | 5.86 | 2.49 | | | |
| 2020 ¹ | 3.17 | 5.74 | 1.81 | | | |
| 20211 | 2.32 | 4.90 | 2.11 | | | |
| 2022 | 1.11 | 3.95 | 3.57 | | | |
| | Avg. 2.60 | Avg. 6.08 | Avg. 2.41 | | | |

¹Data from 2020 and 2021 were excluded from the calculated average due to the confounding factor of the global COVID-19 Pandemic

Table 5-2

Levels of water consumption reflect a number of factors including seasonal visitation, use of more efficient fixtures in new construction and redevelopment in recent years, and a growing use of water conservation measures.

Ocean City has developed 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.

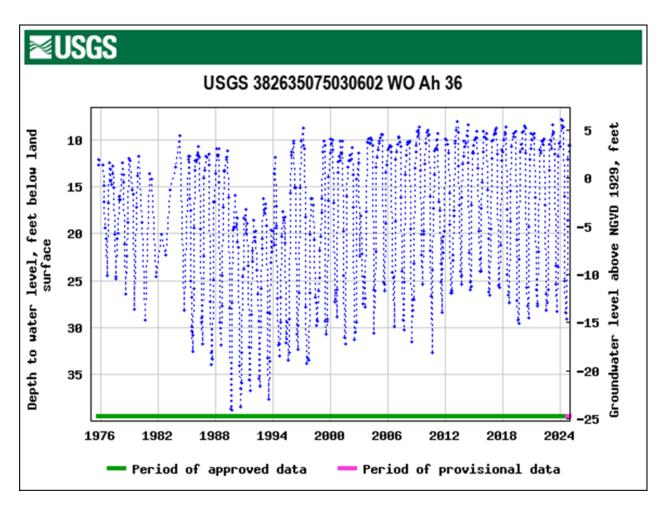


Figure 5-3 Groundwater well monitoring Source: https://waterdata.usgs.gov/nwis/inventory/

Evaluation of the Town's water demand and supply is described in the "Water Ma

Evaluation of the Town's water demand and supply is described in the "Water Master Plan Update", dated November 2024 prepared by WR&A consulting engineers, and the Town of Ocean City "Water and Wastewater Comprehensive Rate Study", dated January 19, 2024.

Capital Improvements to the water system over the next 5 years are projected to include ongoing asset maintenance projects and one-time major projects to improve and/or replace existing assets. Construction of a new Water Treatment Plan on 66th Street will be a major project when required.

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 (9 miles) and narrow (0.2 to 1.0 miles wide) configuration of service area
- Five 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 current treatment capacity is based upon the following:

| 15th Street WTP | 6 MGD* |
|-------------------|--------|
| 44th Street WTP | 4 MGD |
| Gorman Avenue WTP | 4 MGD* |
| Total | 14 MGD |

^{*}Current treatment capacity is down-rated based upon Town's concerns regarding performance at higher rates (Actual design filtering capacity for 15th Street and Gorman Avenue WTPs = $8\,MGD$)

The existing water treatment facilities are producing an excellent quality potable water meeting all regulatory requirements. Improvements completed at the water treatment plants over previous years have improved operations, improved reliability and extended the useful life of the facilities. Future construction of a WTP at 66th Street will replace the 44th Street plant and will be constructed to 8 MGD capacity with expansion to 12 MGD with desalinization treatment if necessary.

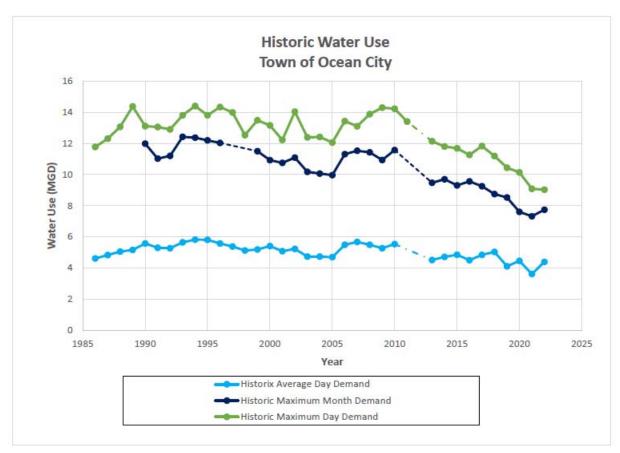


Figure 5-4 Water Use and Capacity

Historic maximum day water use values were evaluated against historic peak population values in an effort to determine projected water demands. In the 2012 Ocean City Water Master Plan Update, a maximum day water use value of 44.0 gallons per capita per day (gpcd) was used with the 2005 comprehensive plan population projections to predict a maximum day demand of 15.00 MGD for Year 2030. Based on more recent data, it is suggested that the maximum day demand factors between 2015 and 2019 be averaged. This results in a calculated maximum day water use value of 35.2 gpcd which will be utilized to project future water demands. Based on this methodology, the projected maximum day demand for Year 2040 is calculated to be 12.08 MGD (Year 2040 estimated population of 343,480 x 35.2 gpcd).

During the 2012 Master Planning effort, the Town requested that a 20% allowance be added to the projected demands to account for the fluctuations in the Town's demands and to provide a factor of safety relative to the planning of water infrastructure improvements. Continuing with that assumption, a value of 14.50 MGD is calculated as the projected maximum day demand for Year 2040.

The current design treatment capacity of 18 MGD is more than adequate to meet the projected 2040 maximum day demand of 14.50 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 2040) includes a 20% allowance for planning purposes, there is no deficit between projected water demand and deliverable treatment capacity.

| Table 3.5 – Demand Projections | | | | | |
|--------------------------------|---|---|-----------------|--|--|
| Year | Projected Maximum Day Demand 2012 Methodology (MGD) | Projected Maximum Day Demand 2022 Methodology (MGD) | % Difference | | |
| 2015 | 17.571 | 11.682 | 51% | | |
| 2020 | 17.71 ¹ | 10.14 ² | 75% | | |
| 2025 | 17.34 ¹ | 13.86³ | 25% | | |
| 2030 | 17.60 ¹ | 14.07³ | 25% | | |
| 2035 | 17.87 ¹ | 14.28³ | 25% | | |
| 2040 | 18.14¹ | 14.50³ | 25% | | |

¹ Maximum Day Demand projection is based on the 44 gpcd assumption in 2012 Water Master Plan report and includes a 20% safety factor.

Table 5-3 Water Demand Projections

Water Storage and Distribution System

The water distribution system includes 6 water storage tanks; 5 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. Elevated storage tanks, constructed at 66th Street and 1st Street have increased storage capacity to satisfy future demand. Needs for additional storage capacity beyond that period are assessed as part of the 2024 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 of water pipe.

² Actual metered maximum day demands

³ Maximum Day Demand projection is based on the recently revised 35.2 qpcd assumption and includes a 20% safety factor.

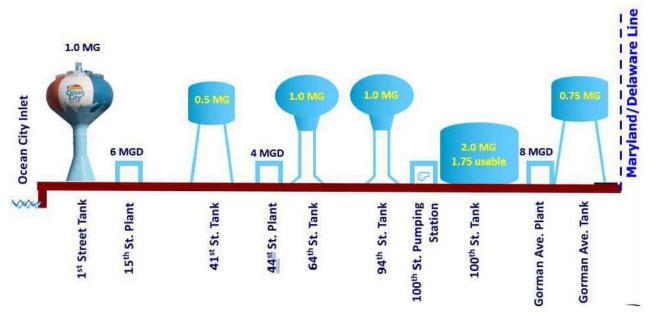


Figure 5-5a Town of Ocean City Water Storage Facilities (Source: Town of Ocean City 2024 Water Master Plan)

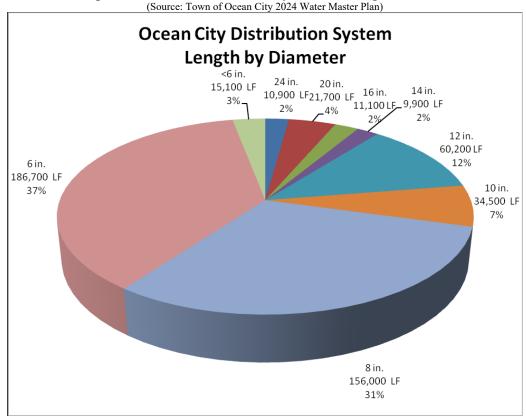


Figure 5-5b Water Storage and Distribution

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 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. Salt water intrusion is occurring in localized parts of the unconfined Columbia Aquifer, but it is not considered a major threat.

The "2024 Water Master Plan", prepared by WR&A, 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. Adequate area has been allocated at the WTPs to install treatment systems for the desalination of brackish water if needed in the future.

Water System Improvement Needs

The 2024 Water Master Plan (WMP) 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.

The Town's Capital Improvement Plan (CIP) continues to include projects for planning and infrastructure upgrades such as the replacement of aging and obsolete equipment in order to maintain its current high level of operational reliability. Specific recommendations of the WMP include ongoing evaluations, and system improvements for raw water supply, water treatment plants, distribution system and storage facilities.

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 at regular intervals.

The Ocean City Wastewater Treatment Plant (WWTP) renewed its State Discharge Permit on May 1, 2024 maintaining a rated capacity of 14 MGD based on annual 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. Improvements to the plant facilities could allow for expansion of capacity to 16.7 MGD if needed.

The wastewater collection and conveyance system consist 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 ten 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 are typically upgraded with scheduled street repaving projects. 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 in compliance with State water quality standards 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 64th street consists of approximately 4,200 linear feet of 30-inch pre-stressed concrete cylinder pipe (PCCP). The current ocean outfall capacity is rated at 21.2 MGD which will continue to set a limit on future growth and development along with determining required treatment technologies.

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. Figure 5-6 shows the actual maximum month wastewater flows for the period from 1990 through 2015 and provides projections for maximum month flows to the year 2020. An update to the Town of Ocean City Wastewater Master Plan has been initiated for completion in 2025.

Town of Ocean City Maximum Month Wastewater Flow Projections

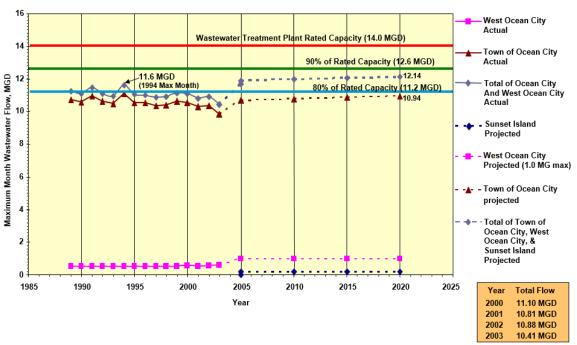


Figure 5-6 Historic Wastewater Flows

Year 2030 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 will be available in the 2025 Wastewater Master Plan when completed.

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 with inlets and underground pipe system, and sheet flow with sediment basins are used.

The pipe and catch basin system is limited by the island's lack of elevation change. Without the required slope, water can back up and create flood conditions, especially during high tide conditions. 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 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.

Stormwater management is directed by Maryland code requirements and planning guidance to encourage a watershed level review that accounts for the cumulative effects of offsite water flows, and future conditions including more intense rainfall events and storm conditions. Ocean City's location on a barrier island is clearly different than most other communities in Maryland. In addition to highly developed urban conditions, sandy soils that allow for greater infiltration, and high-water tables, the Town is divided into over 330 sub watersheds that generally flow from east to west.

Private and public development is required to meet all State and local stormwater management regulations. Typically, as more development covers the land with concrete and black top, stormwater problems will increase. With redevelopment, Ocean City requires use of several alternatives 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 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 project to install tide gate backflow preventers at the bayside outfalls.
- 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.

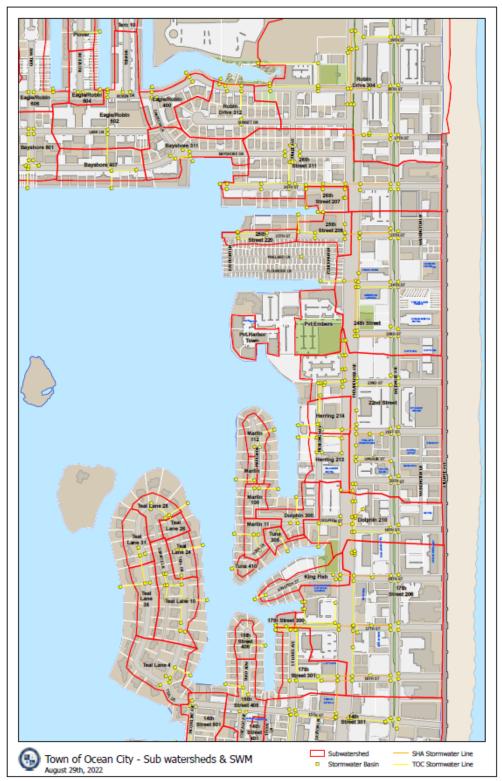
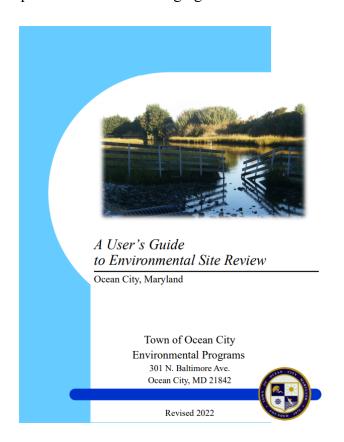


Figure 5-7 Sub watersheds and Storm Drains

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 through 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. A User's Guide t Environmental Site Review has been updated to assist in managing this critical element of Town infrastructure.





Landscaped property boundary perimeter Ocean City, Maryland

Solid Waste Management

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

Ocean City has converted its former recycling program to an 'energy from waste' process. By contract with Reworld Waste, 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.

The Town of Ocean City is proud to partner with Go Green OC, a local non-profit organization whose goal is to make the resort the first zero waste town in the United States. OC Compost LLC has been working since 2018 to collect food waste from nearly two dozen participating businesses, a hotel, and the Roland E. Powell Convention Center, weigh it at the Town's public works complex and transport it to the company's composting site in northern Worcester County. As part of the company's agreement with the Town, Ocean City compensates Ocean Compost for each ton it diverts from the resort's waste stream. In 2023, volunteers collected 176 tons of waste, and assisted with recycling efforts at Bike Fest and Oceans Calling music festival.

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 331-acre public beach, recreational programs offered within 80 acres of other public parks 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 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 includes but is not limited to special events, sport tournaments, and recreational structures such as Wally the Whale and a playground at North Division Street. The 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 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 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, performance stage, exhibits, crabbing & fishing. Sunset Park includes 0.67 acres, and serves as a promenade, a special events venue, and nature park with native shore planting areas and 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.

Beach Volleyball Courts - Located just off the boardwalk between Third and Fourth Streets this facility provides 4 public courts available for pick up play during summer daylight hours.

Bayside Park at 3rd Street - Located between 3rd and 4th Streets bayside and bounded by Philadelphia Avenue at the east and Chicago Avenue on the west, the reconstructed 4.6 acre Bayside Park at 3rd Street offers something for everyone including two playgrounds, one of which is an all access playground with a communication board, quiet grove, music hut and more. A walking path is surrounded by greenery and benches along the bay to enjoy the water and boats passing by. Basketball enthusiasts will enjoy two courts to shoot some hoops and four/one multi-use hard pickleball/tennis courts are also available on a first come, first served basis. Bring your own racquets/nets or rent them during skate office hours. The Ocean Bowl Skate Park, a popular spot for skateboarders and scooters has a newly constructed expansion with many exciting street skate features. Directly on the bay, Chicago Avenue's "Bayside Boardwalk" area is an ideal location for fishing and crabbing. Lighting is provided for evening use at this facility.



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 space, and playground facilities for younger ages.

Convention Center Park - Located on 41st Street and Bayside, Convention Center Park provides a pier along the bay offering fishing and crabbing opportunities.

Ocean City Racquet Center - Located on 61st Street just south of Route 90, the Racquet Center is home to Ocean City's finest outdoor racquet/paddle sport facility. The site consists of approximately 2.5 acres. The facility features 6 asphalt pickleball courts, 4 "Premier" tennis courts that have also been lined to accommodate pickleball play, and 3 Lee Fast Dry Clay courts. Leagues, junior tennis, and clinic play are centered in this location.

Little Salisbury Park - Located on 94th 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 Dog Playground - Ocean City's first 'dog park' has been expanded in an area of open space adjacent to Little Salisbury Park. The Ocean City Dog Playground is a fully-fenced area designed to give dogs a safe space to run and enjoy the outdoors in Ocean City. The Dog playground is the only permitted area to let your dog off-leash within the town limits. Features include: Open Dog Play Area, Small Dog Area, Pavilion, Dog Agility Obstacles, Yard Hydrants, Benches for Humans, Pet Waste Disposal Stations, and a Doggie Pool.

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 125th Street and the Bay. The facility is headquarters to the Park 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 -

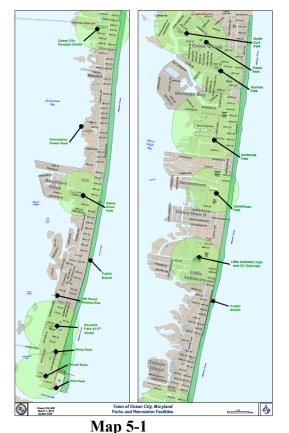
Located off 136th Street and Bayside just west of Derrickson Avenue, this neighborhood park is home to a shared use "Premier" tennis / pickleball court, one asphalt pickleball court, a three-wall racquetball court, picnic shelter and a playground. The park is approximately 1.8 acres in size.

Fiesta Park -

Located on 141st Street and Fiesta Road, Bayside in the Caine Woods neighborhood, this park hosts a wooded haven with nature trails and picnic shelter that provides a relaxing family recreational experience. Features in the 2.46-acre park include: Pavilion, grills, tables, electric, water, & bathroom access (for additional fee), nature trails, and a large grassy lawn.

North Surf Park -

Located adjacent to North Surf Road, this lovely neighborhood park's rolling turf and scattered trees make it idea for outdoor fun. The playground at North Surf Park is sure to make it a favorite family destination. Features in the 1.96-acre park include: Playground, swings, and facilities to support picnicking. Rolling turf and scattered trees make this one of the more attractive park facilities in the community.



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 recreation and park use in addition to the 331 acres of Atlantic Ocean Beach.

Distribution throughout the community means that at least 50% of all residents are within a 5-minute walk (1/4-mile radius) from recreation and park facilities and everyone is linked to other facilities in the community by the transit bus system and a network of sidewalks and bike routes.

National NRPA standards call for 10 acres of parkland per 1,000 residents, and one park per 2,386 residents.

Residents per park:

2,386

Acres
per 1,00



By this standard, Ocean City's population of 7,000 residents is well served by 12 community parks at a rate of 1 per 583 persons. Park acreage at a rate of 10.6 acres per 1,000 residents is on target with 74.2 acres required, and 80 acres provided in addition to the public beach. Seasonal population demand is met by both public and private resources in a broader geographic area.

Ocean City's strategic plan priorities to prepare a Recreation and Parks Master Plan has inventoried existing facilities, identified recreational needs and new opportunities, and proposed management actions for the future. This Plan is ongoing.

Ocean City has also joined with others 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. Planning for a Sports Complex is underway, with support from the Maryland Stadium Authority, that would support a healthy active community, and provide facilities for competitive youth sports programs. With a projected 40 acres needed for both indoor and outdoor facilities, a coordinated effort will be necessary with Worcester County and nearby Towns to locate and build the facility.

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 with other uses at the 65th Street Campus.

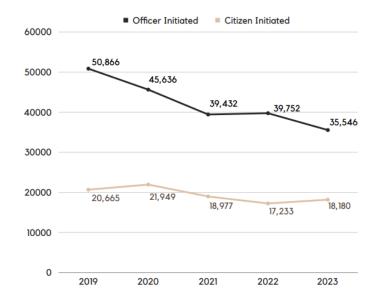
Public safety services and locations are described below. More detailed on each is available in specific departmental plans, mission statements, and budgets.

Ocean City Police Department

The OCPD is centrally located in the Public Safety Building on 65th Street adjacent to the District Courthouse. Also located in the Public Safety Building are the Communications Center, 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.

The OCPD provides 24-hour service with 149 full time employees augmented by 96 temporary employees during the summer season. 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 that will be expanding with the construction new bicycle patrol facilities on Somerset Street. 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 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 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 2023, total calls for service were consistent at 53,726. 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 5-7 illustrates a peak in calls for service in 2013 and a steady reduction in recent years.



| CATEGORY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | ОСТ | NOV | DEC | TOTAL |
|-------------------|------|------|------|------|------|-------|------|------|------|------|------|------|--------|
| Officer Initiated | 1879 | 1919 | 2153 | 1917 | 3576 | 6774 | 5292 | 3778 | 2746 | 2258 | 1575 | 1679 | 35,546 |
| Citizen Initiated | 585 | 492 | 768 | 1008 | 1770 | 3296 | 3827 | 2672 | 1678 | 925 | 590 | 569 | 18,180 |
| Total | 2464 | 2411 | 2921 | 2925 | 5346 | 10070 | 9119 | 6450 | 4424 | 3183 | 2165 | 2248 | 53,726 |

Figure 5-7
Police Department Calls for Service (2023)



Community policing is at the core of the Department's commitment to provide quality police services and assistance to the community. Several current 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.
- Crime Prevention Programs Residential Security Check, Bicycle Registration and TEAP Trespass Enforcement Authorization Program, and Auxiliary Officer Program for volunteers all work to enhance law enforcement responsibilities.
- Patrol Division Outreach Helping the Homeless with a rapid response team partnership with the Diakonia shelter in Worcester County, and the Homeless Outreach Team (HOT) to coordinate the efforts of multiple support agencies.
- Specialized Enforcement and New Responses Implementation of body-worn cameras in 2022, License plate readers as a tool to keep criminals out of Ocean City, Use of social media to quickly communicate information with the community, Cannabis use and impaired driving enforcement, Narcotics enforcement to pedestrian safety

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 2023 Hazard Mitigation Plan and the Emergency Operations

<u>Plan</u>. 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 and State Agencies, 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 with information posted on the Town website.

BEFORE THE DECISION KNOW YOUR ZONE & DIVISION



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.
- Adopt policies regarding reconstruction following a substantial damage storm event.

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 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.

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 63 part-time field personnel. The full-time staff consists of 32 nationally registered Paramedics/Firefighters and 2 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. 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, the Ocean City Fire/EMS division responded to 6,327 calls, a 25% 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) who provide fire protection to Ocean City and West Ocean City from 5 (five) stations. The town's emergency medical personel are stationed at each of the fire houses in the town limits. The fire stations and their equipment are inventoried below:

| <u>Stations</u> | Equipment |
|--|--|
| Headquarters (15 th 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 th Street) | 1 – 105' Tower Truck 1 – Pumper 1 – Rescue Truck |
| Station #4 (130 th 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 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 65th Street will complete the final phase of the improvements recommended in the 2002 Fire Station Location Study.

Strategies

1) Land / Place

- a. Continue with improvements to Northside Park including renovation of facilities, rest rooms, nature walks, athletic fields, basketball courts and event venues.
- b. Establish additional biking/hiking/jogging trails that increase appreciation of the area's environmental resources and provide alternate routes to the busy Coastal Highway corridor.
- c. Develop additional playgrounds to serve local neighborhoods and replace older existing equipment where needed.
- d. Support the Ocean City Volunteer Fire Department to develop a training facility in the West Ocean City Area.

2) Resilience

- a. 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.
- b. Complete update of Water and Sewer master plan(s) 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.
- c. Construct an additional indoor recreational facility for soccer, lacrosse, or other activities.
- d. Improve integration of planning documents such as the Capital Improvement Program, Hazard Mitigation Plan and Comprehensive Plan.

CHAPTER 6: Housing

Introduction

Ocean City has long been considered one of the Mid-Atlantic area's premier beach and resort communities. As a result, many people choose to live, visit, vacation and own residential property in the community with the Town experiencing an extraordinary amount of new development, in both number of housing units and value over the years. For 6,844 permanent residents, 30,028 residential unit owners as well as guests staying at over 10,000 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 Comprehensive Plan refers information from the U.S. Census to identify housing trends.

MD Sustainable Growth
Principle 3 - Housing
Enable a mix of quality
housing types and affordability
options to accommodate all
who want to live in the State
MD Sustainable Growth
Principle 4 - Economy
Allow for adaptive reuse,
mixed-use, and context
appropriate new development
that responds to changing
markets and innovations

As this statistical information is updated, it is clear that there has been a relatively stable housing mix and adequate housing capacity in Ocean City. The national economic recession beginning in 2008 had the effect of temporarily reducing rapid escalation of property values and increasing housing affordability, however the last 10 years were a period of substantial real estate investment, redevelopment, and property value increase.

While larger trends in housing supply and demand continue 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, and for short term, seasonal or employee rentals. This 'change of use' in residential housing creates new impacts on established neighborhoods and often requires building renovation to meet current codes and standards.

This Housing Element of the Comprehensive Plan is updated to address the need for affordable housing, including both workforce and low-income housing, in compliance with Maryland House Bill 1045 (2019), and to affirm Ocean City's market-based approach to meeting the demand.

An assessment of fair housing is also included, in compliance with HB 90 (2021), to ensure that local housing and urban development programs are affirmatively furthering U.S. Department of Housing and Urban Development (HUD) fair housing requirements.

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 available to meet the existing and future needs of all residents, and continues to meet the needs of the visitor population.

Figure 6-1 Aerial View (Photo credit: Chris Parypa)



Core Principles:

- Ocean City, MD relies on private investment and the business community to develop a full variety of housing options over time to meet market demands and opportunities of the tourism-based economy
- Local government strategically invests in infrastructure to support and encourage private investment and development
- Meeting the needs of unique populations or individuals relies on mutual support and partnership with Worcester County, the State of Maryland, and local non-profit organizations
- Affirmatively furthering fair housing in Ocean City through implementation of best practices, cooperation with Worcester County housing programs, and partnership with supporting businesses and organizations.
- Maintain the integrity of the R-1 and MH residential zoning districts

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 Encourage a balanced housing stock with housing opportunities for all residents.
- 6.3 Maintain a diverse housing unit type inventory to provide affordable, adequate housing for young, working families and the seasonal employee population.
- Require site plan and planning review for all major developments to ensure 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.

6.6 Direct the conversion, redevelopment or adaptive reuse of commercial property toward mixed use development

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 is an important resource for year-round residents in Town and yet comprises only 9% of the total housing stock, compared to the County average of 40% (Table 6-1). The mobile home housing type is also a significant component of housing affordability, comprising 4.5% of the total number of units.

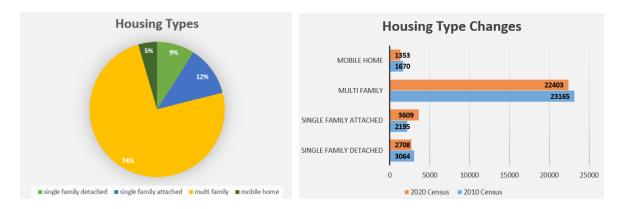


Figure 6-2 Housing Types

| HOUSING UNITS IN STRUCTURE | Ocean City town, Maryland | | Worcester County, Maryla | | |
|----------------------------|---------------------------|--------|--------------------------|--------|--|
| Total housing units | 30,073 | | 56,485 | | |
| 1-unit, detached | 2708 | 9.00% | 22933 | 40.60% | |
| 1-unit, attached | 3188 | 10.60% | 5084 | 9.00% | |
| 2 units | 421 | 1.40% | 621 | 1.10% | |
| 3 or 4 units | 1383 | 4.60% | 1864 | 3.30% | |
| 5 to 9 units | 2676 | 8.90% | 3332 | 5.90% | |
| 10 to 19 units | 4571 | 15.20% | 4914 | 8.70% | |
| 20 or more units | 13773 | 45.80% | 14234 | 25.20% | |
| Mobile home | 1353 | 4.50% | 3446 | 6.10% | |
| Boat, RV, van, etc. | 0 | 0.00% | 57 | 0.10% | |

Table 6-1 Housing Unit Comparison

Source: ACS 5-year Estimates 2020

The overwhelming majority of multi-family units are in larger buildings or building complexes with five to twenty or more units per structure. A review of building permit data from 1985 to

2023 further reveals 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 Housing Unit Building Permits for Ocean City, 1985 - 2023 | | | | | | | | | |
|--|----------------|-----|--------------------------|-------|------------------------------|---|--|-------|--|
| | TOTAL UNITS | | TOTAL U | NITS | | UNITS IN ALL MULTI-FAMILY STRUCTUR | | | UCTURES |
| Year | Total Units | | in Single- Structures | | All Multi- Structures | Units in 2-unit Multi-Family Structures | Units in 3 and 4 unit Multi- Family Structures | | in 5+ Unit Multi- nily Structures |
| | | # | % of Total Units | # | % of Total Units | # | # | # | % of Total Multi- Family Structures |
| 1985 | 1,101 | 79 | 7% | 1,022 | 93% | 2 | 8 | 1,012 | 99% |
| 1986 | 616 | 92 | 15% | 524 | 85% | 6 | 17 | 501 | 96% |
| 1987 | 335 | 65 | 19% | 270 | 81% | 2 | 4 | 264 | 98% |
| 1988 | 265 | 62 | 23% | 203 | 77% | 2 | 10 | 191 | 94% |
| 1989 | 507 | 56 | 11% | 451 | 89% | 8 | 0 | 443 | 98% |
| 1990 | 88 | 40 | 45% | 48 | 55% | 8 | 3 | 37 | 77% |
| 1991 | 141 | 34 | 24% | 107 | 76% | 10 | 0 | 97 | 91% |
| 1992 | 129 | 41 | 32% | 88 | 68% | 6 | 4 | 78 | 89% |
| 1993 | 125 | 47 | 38% | 78 | 62% | 10 | 3 | 65 | 83% |
| 1994 | 156 | 54 | 35% | 102 | 65% | 22 | 0 | 80 | 78% |
| 1995 | 137 | 41 | 30% | 96 | 70% | 16 | 6 | 74 | 77% |
| 1996 | 111 | 48 | 43% | 63 | 57% | 6 | 12 | 45 | 71% |
| 1997 | 107 | 49 | 46% | 58 | 54% | 0 | 8 | 50 | 86% |
| 1998 | 132 | 57 | 43% | 75 | 57% | 22 | 3 | 50 | 67% |
| 1999 | 243 | 63 | 26% | 180 | 74% | 4 | 3 | 173 | 96% |
| 2000 | 249 | 94 | 38% | 155 | 62% | 12 | 15 | 128 | 83% |
| 2001 | 265 | 62 | 23% | 203 | 77% | 8 | 20 | 175 | 86% |
| 2002 | 317 | 58 | 18% | 259 | 82% | 12 | 17 | 230 | 89% |
| 2003 | 424 | 148 | 35% | 276 | 65% | 2 | 20 | 254 | 92% |
| 2004 | 534 | 102 | 19.1% | 432 | 80.9% | 12 | 47 | 373 | 86.3% |
| 2005 | 527 | 118 | 22.4% | 409 | 77.6% | 12 | 31 | 366 | 89.5% |
| 2006 | 571 | 75 | 13.1% | 496 | 86.9% | 0 | 45 | 451 | 90.9% |
| 2007 | 123 | 83 | 67.5% | 40 | 32.5% | 0 | 4 | 36 | 90% |
| 2008 | 83 | 36 | 43.4% | 47 | 56.6% | 2 | 0 | 45 | 95.7% |
| 2009 | 34 | 31 | 91.2% | 3 | 8.8% | 0 | 3 | 0 | 0 |
| 2010 | 23 | 23 | 100% | 0 | 0 | 0 | 0 | 0 | 0 |
| 2011 | 17 | 17 | 100% | 0 | 0 | 0 | 0 | 0 | 0 |
| 2012 | 20 | 20 | 100% | 0 | 0 | 0 | 0 | 0 | 0 |
| 2013 | 42 | 37 | 88.1% | 5 | 11.9% | 2 | 3 | 0 | 0 |
| 2014 | 63 | 22 | 34.9% | 41 | 65.1% | 2 | 6 | 33 | 80.5% |
| 2015 | 41 | 30 | 73.2% | 11 | 26.8% | 0 | 0 | 11 | 100.0% |
| 2016 | 39 | 39 | 100.0% | 0 | 0 | 0 | 0 | 0 | 0 |
| 2017 | 27 | 22 | 81.5% | 5 | 18.5% | 2 | 3 | 0 | 0 |
| 2018 | 40 | 25 | 62.5% | 15 | 37.5% | 2 | 0 | 13 | 86.7% |
| 2019 | 61 | 45 | 73.8% | 16 | 26.2% | 2 | 8 | 6 | 37.5% |
| 2020 | 60 | 46 | 76.7% | 14 | 23.3% | 2 | 0 | 12 | 85.7% |
| 2021 | 86 | 56 | 65.1% | 30 | 34.9% | 8 | 7 | 15 | 50.0% |
| 2022 | 64 | 58 | 90.6% | 6 | 9.4% | 0 | 0 | 6 | 100.0% |
| 2023 | 133 | 44 | 33.1% | 89 | 66.9% Cities Data Systems | 2 | 0 | 87 | 97.7% |

Housing Unit Permits

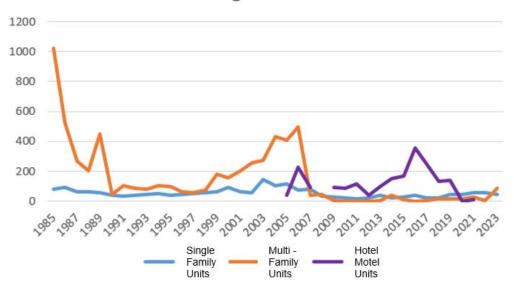


Figure 6-3 Housing Permit History

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. 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 a sustainable 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 current Plan updates the addition of over 1,000 new rooms within the past several years has been noted. The increased use of individual housing units as transient short-term rental housing to meet the needs of our resort community has also challenged the traditional role 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 67th 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. Recently the conversion of commercially zoned property to residential use has increased housing supply to meet current market demand and investment opportunities.

As each cohort of housing passes into the next decade, regular maintenance, renovation and inspection demands increase. With many of the larger multi-family condominium structures approaching 50 years in age, it can be expected that maintenance responsibilities will increase.

The Maryland General Assembly passed new legislation in 2022, (HB 107), requiring that community associations conduct a Reserve Study (and update that Reserve Study every five years) of the reserves needed for future major repairs and replacement of the common elements of a cooperative housing corporation or condominium, or the common areas of a homeowner's association (HOA). This bill will enable over 1,200 condominium associations in Ocean City to meet their legal, fiduciary, and professional requirements. It will also protect, preserve, and enhance a community's property values, provide a planned replacement for major common items, and minimize the need for future special assessments.

| Ocean City Housing Units by Year Built | | | | | |
|--|-------------------------|--|--|--|--|
| Year Structure Built | Number of Housing Units | | | | |
| 2010 to 2014 | 352 | | | | |
| 2000 to 2009 | 3,948 | | | | |
| 1990 to 1999 | 1,493 | | | | |
| 1980 to 1989 | 11,404 | | | | |
| 1970 to 1979 | 9,935 | | | | |
| 1960 to 1969 | 1,827 | | | | |
| 1950 to 1959 | 369 | | | | |
| 1940 to 1949 | 305 | | | | |
| 1939 or earlier | 440 | | | | |
| Total housing units | 30,073 | | | | |

Table 6-3 Age of Housing Units Source: ACS 5-year Estimates 2020

Housing Unit Occupancy

In April of 2020, the U.S. Census identifies 3,820 of the total housing units in Ocean City, MD (12.7%) as 'occupied' for full time residency. The remaining 26,208 housing units (87.3%) are designated as 'vacant' with most identified for seasonal, recreational or occasional use.

Table 6-4 illustrates the status of occupancy and tenure for housing units in the Town. 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 meets the needs of full-time residents, second home owners, investors and workforce housing providers at different times of the year.

Consideration of detailed Census data, which is typically focused on full time residents, must be balanced with the characteristics of the seasonal and visitor population. Short-term rental properties in the R-1 and MH zoning districts are an example of competing occupancy for the same housing units.

| | Ocean City town, Maryland | | Census Tract 9500; Worcester County; Maryland | | Census Tract 9501; Worcester County; Maryland | | Census Tract 9503; Worcester County; Maryland | |
|--------------------------------|------------------------------|---------|---|---------|---|---------|---|---------|
| Label | Count | Percent | Count | Percent | Count | Percent | Count | Percent |
| HOUSING OCCUPANCY | | | | | | | | |
| Total housing units | 30,028 | 100.00% | 5,705 | 100.00% | 12,947 | 100.00% | 11,608 | 100.00% |
| Occupied housing units | 3,820 | 12.70% | 1,029 | 18.00% | 1,046 | 8.10% | 1,777 | 15.30% |
| Vacant housing units | 26,208 | 87.30% | 4,676 | 82.00% | 11,901 | 91.90% | 9,831 | 84.70% |
| For rent | 1,392 | 4.60% | 208 | 3.60% | 884 | 6.80% | 302 | 2.60% |
| Rented, not occupied | 428 | 1.40% | 58 | 1.00% | 356 | 2.70% | 15 | 0.10% |
| For sale only | 125 | 0.40% | 21 | 0.40% | 40 | 0.30% | 66 | 0.60% |
| Sold, not occupied | 177 | 0.60% | 28 | 0.50% | 137 | 1.10% | 12 | 0.10% |
| For seasonal, recreational, or | | | | | | | | |
| occasional use | 23,803 | 79.30% | 4,227 | 74.10% | 10,398 | 80.30% | 9,372 | 80.70% |
| All other vacants | 283 | 0.90% | 134 | 2.30% | 86 | 0.70% | 64 | 0.60% |
| HOUSING TENURE | | | | | | | | |
| Occupied housing units | 3,820 | 100.00% | 1,029 | 100.00% | 1,046 | 100.00% | 1,777 | 100.00% |
| Owner-occupied housing units | 2,576 | 67.40% | 525 | 51.00% | 748 | 71.50% | 1,335 | 75.10% |
| Renter-occupied housing units | 1,244 | 32.60% | 504 | 49.00% | 298 | 28.50% | 442 | 24.90% |

Table 6-4
Source: U.S. Census 2020 DP1 Housing Tenure

Housing Affordability

This Housing Element of the Comprehensive Plan addresses the need for affordable housing in Ocean City, MD in compliance with HB1045, to include both workforce and low-income housing. **Affordable housing** is defined generally by Maryland Code as housing with costs not exceeding 30% of a household's total gross income. Affordable housing is typically measured by the share of household income devoted to housing expenses, also known as the standard of 'housing cost burden'.

Workforce housing is further defined as <u>rental housing</u> affordable for a household income between 50% and 100% of the Area Median Income (AMI), or <u>homeownership housing</u> between 60% and 120% of AMI.

Low-income housing is defined as housing that is affordable to a <u>household</u> with an aggregate annual income below 60% of the AMI as determined by the U.S. Department of Housing and Urban Development.

| 2023 AMI for Ocean City town / Worcester County, MD HUD Area: | \$103,400 |
|---|----------------------|
| HB 1045 Household Annual Income Levels/Ranges | |
| Workforce Ownership Range (60% - 120% AMI): | \$62,040 - \$124,080 |
| Workforce Rental Range (50% - 120% AMI): | \$51,700 - \$103,400 |
| Low Income (< 60% AMI): | \$62,040 |

| Affordable Homeowner/Rental Monthly Payments (Based on 30% of Household Income) | |
|---|-------------------|
| Workforce Ownership Range: | \$1,499 - \$2,999 |
| Workforce Rental Range: | \$1,249 - \$2,499 |
| Low Income: | \$1,499 |
| *The ranges and limits in this table are calculated using 20% of income as a measure of cost burden | |

Table 6-5

Source: Maryland Department of Planning Housing Dashboard

Household Income

ACS 5-year estimate of median household income for the Ocean City, MD resident population in 2023 was \$69,675. For the year-round population of 3,872 households, approximately 1,667 (43%) would be considered as low income with regard to housing costs. Income limits are further defined by HUD using Fair Market Rent (FMR) guidelines for specific geographic areas with adjustments for family size. Ocean City is included in the Worcester County, MD HUD Metro FMR Area.

| Ocean City MD Resident Households by Annual Income and Benefits | | | | | | |
|---|-----------------------|----------------------|--|--|--|--|
| 2023 | Percent of Households | Number of Households | | | | |
| < \$10,000 | 5.8 | 224 | | | | |
| \$10,000 to \$14,999 | 1 8 | 38 | | | | |
| \$15,000 to \$24,999 | 6.5 | 251 | | | | |
| \$25,000 to \$34,999 | 7.7 | 299 | | | | |
| \$35,000 to \$49,999 | 12.2 | 471 | | | | |
| \$50,000 to \$74,999 | 19.8 | 768 | | | | |
| \$75,000 to \$99,999 | 12.8 | 497 | | | | |
| \$100,000 to \$149,999 | 15.4 | 597 | | | | |
| \$150,000 to \$199,999 | 7.7 | 299 | | | | |
| > \$200,000 | 11.1 | 428 | | | | |
| Total | 100 | 3,872 | | | | |

Table 6-6 Resident Household Incomes (2023)

Source: ACS 5-year Estimates 2019-2023

| Median Family | FY 2024 Income Limit | | | | Persons | in Family | |
|---------------|----------------------|----------|----------|----------|----------|-----------|----------|
| Income | Category | 1 | 2 | 3 | 4 | 5 | 6 |
| | Low (80%) | \$57,900 | \$66,200 | \$74,450 | \$82,700 | \$89,350 | \$95,950 |
| \$103,400 | Very Low (50%) | \$36,200 | \$41,400 | \$46,550 | \$51,700 | \$55,850 | \$60,000 |
| | Extremely Low (30%) | \$21,700 | \$24,800 | \$27,900 | \$31,200 | \$36,580 | \$41,960 |

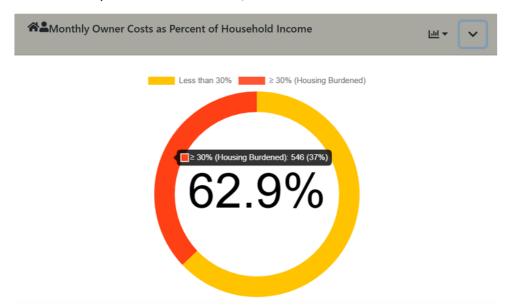
Table 6-7 HUD Income Limits FY2024

Source: U.S. Department of Housing and Urban Development

Housing Cost

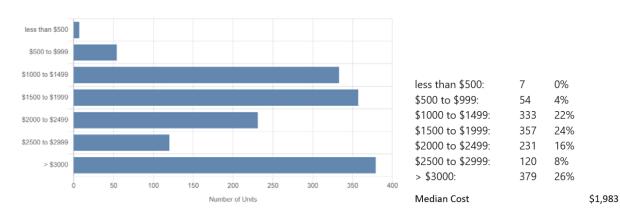
Ocean City, MD housing options abundantly meet the needs of the resident population with over 30,000 units and a wide variety of housing unit types. Based on 2023 ACS 5 year estimated data, 3,872 resident housing units include 2,842 (74%) owner-occupied and 1,030 (26%) renter-occupied units. Owner-occupied housing is further separated by housing units with a mortgage (1,481) and housing units without a mortgage (1,361). Maryland Department of Planning applies an income-based review of the following comparative housing characteristics to assist with the intended identification of housing needs. In addition to income measures, affordability and availability of housing are often determined by age, size and type of the housing unit.

Owner Occupied Units: 2,842



* [546 Owner Occupied Units = 0.02% of 30,000 housing units]

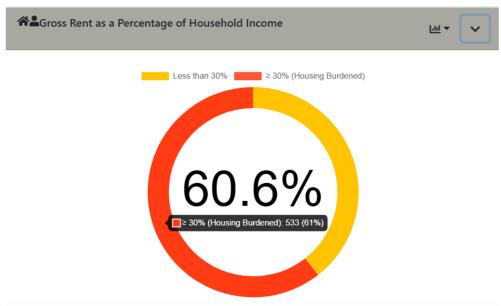
Selected Monthly Owner Costs (SMOC) with mortgage 1,483



| Sciected Monthly Owner Costs (SMOC) Without mortgage 1,30 | Selected Monthl | V Owner Costs | (SMOC) without mortgage | 1,361 |
|---|-----------------|---------------|-------------------------|-------|
|---|-----------------|---------------|-------------------------|-------|

| Median Cost | | | \$809 |
|------------------|-----|-----|-------|
| > \$1000: | 450 | 26% | |
| \$800 to \$999: | 243 | 16% | |
| \$600 to \$799: | 311 | 24% | |
| \$400 to \$599: | 216 | 22% | |
| \$250 to \$399: | 139 | 4% | |
| less than \$250: | 2 | 0% | |

Renter Occupied Units: 1,030



* [533 Renter Occupied Units = 0.02% of 30,000 housing units]

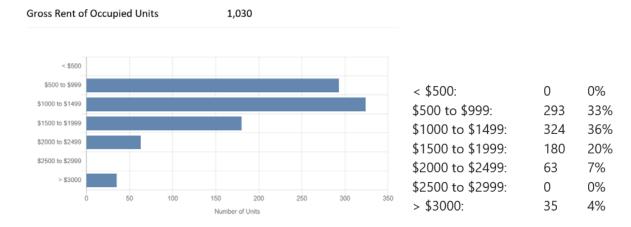


Table 6-8 Housing Cost as a Percentage of Income Source ACS 5-year Estimates 2023

It is not unusual in a high-value resort community for housing costs to exceed the '30% of income' affordability measure. Workforce housing is also constrained by availability and cost competition for short term rentals serving the seasonal visitor population. This analysis demonstrates that approximately 1,079 resident housing units may exceed the monthly cost threshold (>30%) for resident households in Ocean City MD. Since these results are based on community survey data of existing residents, it is reasonable to state that affordable housing needs are currently being met through a variety of means. Future estimates for population growth (less than 1.0%) and historically stable or declining resident population indicates that existing housing strategies are successfully in meeting community needs.

Figure 6-4 provides a comparison of Ocean City's housing units by the number of bedrooms in each, including data for Worcester County. In Ocean City, two-bedroom housing units outnumber all other units by a wide margin, reflecting the historic demand for one-family seasonal use units in the Ocean City housing market. In comparison, the largest number of housing units in Worcester County are three-bedroom, where the percentage of full-time resident families 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 market demand for family-oriented accommodations.

It should be noted that housing unit renovations in Ocean City often add additional bedrooms where possible in order to increase marketability for rental purposes (gap highlighted below). 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.

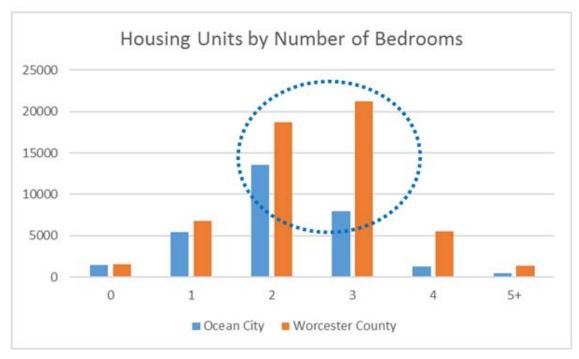


Figure 6-4 Number of Bedroom Comparison

Each year there are new challenges and opportunities that rely on cooperative planning with non-profit organization partners such as OCDC, Worcester County and the State of Maryland. Based upon the existing high percentage of 'vacant' non-resident housing units, it is clear that increased housing supply alone will not meet the demand for affordable housing in Ocean City, MD. The Town of Ocean City will continue to rely on existing housing strategies and private market-based solutions, to meet affordable housing needs.

Fair Housing

The Land Use Article of the Maryland Annotated Code was amended in 2021 (HB 90) to require that the Comprehensive Plan Housing Element include an affirmation to further fair housing requirements from U.S. Housing and Urban Development, and to identify meaningful actions to combat discrimination, overcome patterns of segregation, and foster inclusive communities free from barriers that restrict access to housing and opportunity based on protected characteristics of race, color, religion, sex, age, national origin, familial status, or disability.

The Town of Ocean City, MD adopts the core principle to affirmatively further fair housing through implementation of best practices, cooperation with Worcester County and State of Maryland housing programs, and partnership with supporting businesses and organizations. Several current strategies are listed below:

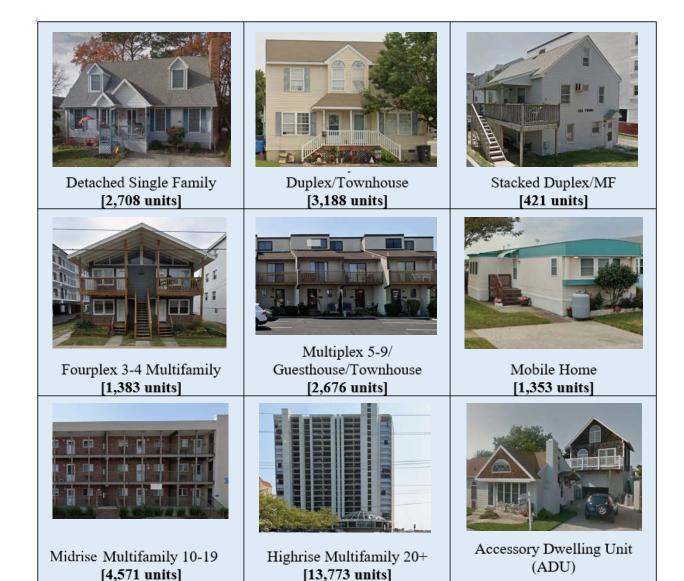
- Active engagement of the Coastal Association of Realtors with community property sales and rentals
- Successful partnership with U.S. Department of State, major employers and sponsor agencies in support of the Exchange Visitor (J1) Visa program
- Division of Rental Housing as a collaborative effort between the Department of Planning and Community Development, the Office of the Fire Marshal, and the Department of Finance in the Town of Ocean City to enforce adopted Town Codes and Licenses for safe, well managed, and maintained rental housing for all residents and visitors.
- Revitalization of Ocean City's downtown areas (Census tract 9500) with assistance from the Ocean City Development Corporation and Maryland DHCD grant programs
- Census tract 9500 designated as an Opportunity Zone in 2017 based on an individual poverty rate of at least 20% and median family income no greater than 80 percent of the area median. Opportunity zones are designed to spur economic development by providing tax benefits and incentives to investors



Housing Types

Ocean City MD demonstrates a successful community housing supply with a diversity of unit types and densities developed over time, which can provide options to meet a variety of needs. Ocean City's development as a traditional seaside resort town, within a full range of zoning districts, is also evaluated in Chapter 2 Economic Development and Chapter 3 Land Use. All housing is considered by the previous cost analysis for affordability, and separately based on its investment value for property owners.

The inventory of housing completed by American Community Survey (ACS) 2020 in Table 6-1 aligns with a current national planning emphasis on providing for 'missing middle housing' or medium density residential (highlighted below) in the range between single family and mid-rise multifamily. The American Association of Retired Persons (AARP) has also endorsed this planning approach in their Livable Communities program as a way to meet housing needs for people of all ages. Examples of each unit type are found throughout Ocean City.



Other Housing Types: Mixed Use/Workforce

Rear-alley Garage Townhouse Condominium Mobile Home replacements (frame construction) Hybrid Hotel/Condominium/Multifamily

Consideration of housing solutions for the future should balance the best ideas for livable and walkable communities along with the foundational building principles for Maryland's oceanfront resort community that encourages vacation home ownership and short-term residency.

Workforce Housing

The Ocean City Comprehensive Plan consistently notes that the major housing problem facing the Town is "the availability of affordable, decent, temporary housing for seasonal employees." Seasonal workers are a key ingredient of Ocean City's economy, as over 10,000 workers come to town to fill summer jobs. The resort industry must rely on nonresident seasonal employees to staff the resort's attractions and restaurants. This demand also includes many seasonal and part time City employees.

With Ocean City's accelerating rehabilitation of older properties for short term rental use, and enforcement of maximum occupancy standards, the supply of lower cost housing options is dwindling. This creates 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, however government sponsored housing is not considered to be an effective solution as the seasonal employees do not qualify for assistance as low- or moderate-income residents and would only occupy the housing for several months of the year. One alternative considered was the establishment of a public-private partnership to develop and operate affordable housing, possibly on the downtown 'Model Block'. This approach relied on a single large site to reduce operational costs, and such sites are limited in Ocean City. In addition, the request for free or reduced land cost, and extensive tax benefits made such an endeavor unfair competition for existing property owners who currently provide workforce housing.

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, distributed employee housing projects, and adaptive reuse of commercial structures. The Town has provided zoning density and parking exceptions by code to encourage private sector solutions.

Housing seasonal employees in West Ocean City where land and housing costs are cheaper has increased in recent years. This creates additional demand on transportation systems to connect workers to job destinations on the island. The West Ocean City Park & Ride will continue to facilitate this approach.



Workforce housing needs are met each year through a coordinated effort made by Town employers, sponsor organizations for visa employees, the Chamber of Commerce, and residential property owners to promote the availability of a variety of housing options in distributed locations.

Transient Housing



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

The Planning and Zoning Commission has recently heard public comment through several public hearings that the impacts of short-term rentals are a critical issue, particularly in the R-1 district which contains larger single-family homes located within established neighborhoods. Opposing viewpoints have been expressed regarding quality of life issues necessary to maintain neighborhood character suitable for year-round living, compared to real estate investment expectations in a resort community which often require market based rental activity.

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 enforcement for maximum occupancy, safe housing, rental license and tax compliance has increased and forced new and creative solutions each year.

To address impacts of short-term rentals, the Town will continue to focus on licensing procedures, pre-season education for landlords and property managers, regular property inspection, and enforcement through existing and potential new tools listed below:

- ✓ A clear zoning definition of 'short term rental' is necessary to provide an additional tool for effective enforcement.
- ✓ Supplemental zoning regulations in Chapter 110, Article V may be considered to manage specific uses such as rental housing.
- ✓ Additional regulation of adverse impacts will require amendment to Ocean City Code Chapter 14 Business, Article V. Rental Housing
- ✓ Code amendments to Chapter 10 Buildings and Building Regulations may be necessary to define new housing use types such as dormitory, workforce housing, transient lodging
- ✓ Coordination with State and County to adopt new standards for collection of 'Room Tax' for all transient and short-term rental properties within the Town

With the addition of new national franchise hotels to the existing market, conversion or redevelopment of older hotel/motels has followed 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.

Homelessness

As a resort community, Ocean City attracts a transient population and, in some cases, homeless or unhoused individuals who are attracted by good weather, public spaces and community support services. In 2023, community partner Diakonia initiated a new program called the Rapid Response Team to help the homeless in Ocean City. This program dispatches staff members immediately after law enforcement, hospitals, EMTs, or other service providers identify a new homeless individual. The Rapid Response Team provides real-time assistance to the homeless.

The Homeless Outreach Team (HOT) is another element that aims to offer outreach to homeless individuals throughout the county in a more coordinated and efficient way. HOT comprises OCPD, Worcester County Health Department representatives, the Local Behavioral Health Authority, the Department of Social Services, Ocean City Crisis Coalition, and Atlantic General Hospital. The team works together on pre-scheduled days to coordinate efforts to help the homeless.

Implementation of Existing Housing Strategies

- a) Condominium ownership provides a type of affordable housing by increasing allowable density, and sharing in property maintenance costs
- b) Small lot size requirements, typically 5,000sf allow compact neighborhood residential development
- c) Pyramidal zoning allows full range of residential housing in commercial districts as a stand-alone use or mixed use
- d) Mobile Home zoning district provides small lot 'affordable home' neighborhoods
- e) Rental license is equitable for all properties
- f) Workforce housing code allows reduced parking and density exemption
- g) Residential occupancy limits reduced in adopted I-Codes from 50sf to 40sf per person in bedroom
- h) Reduced building setbacks (waterfront, porch/deck encroachments)
- i) Accessory units are allowed without kitchen in the R-1 district
- j) BZA variance, yard exception, parking exception process provides relief for existing conditions
- k) Primary Residence Incentive Program (PRIP) incentive program for full time residents since FY2020 (\$2,500 tax rebate and \$7,500 permit discount)
- 1) MD Homestead tax incentive, local 0% increase benefit in Ocean City
- m) OCDC grant programs (façade renovation, roofing/energy/windows, demolition, business assistance)
- n) Manufactured homes permitted
- o) Mixed use zoning districts based on permitted residential density only, allowing commercial uses limited by parking and bulk regulations only
- p) Wireless cellular 5.0G access

- q) Basic community services, and resort amenities available year around
- r) Historic properties (NTHP sites)
- s) Workforce housing: traditional and new solutions, J-1 workforce, employer based
- t) Property investment for generational wealth
- u) Park where you live policy transit system year around
- v) Enhanced Local Employment
- w) Connected communities/services in Worcester County (WOC, Berlin, Ocean Pines)
- x) Partner with community organizations such as Believe in Tomorrow Children's Foundation, Diakonia, Inc. and others

Future Strategies

- 1) Consider and adopt strategies for protecting both neighborhood character and real estate investments in defined areas to encourage year-round residential use, particularly in single family home areas.
- 2) 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.
- 3) Encourage the private sector to address the seasonal employee housing problem through wage adjustments, employer-provided housing, or a private nonprofit housing corporation.
- 4) 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 or individuals.
- 5) Affirm fair housing principles through Town programs and practices, and with affiliated partners, to foster and maintain compliance with civil rights and fair housing laws.
- 6) 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.
- 7) 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.
- 8) 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.
- 9) Coordinate with State and County resources to promote housing affordability
- 10) 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.
- 11) Monitor the age and building permit history of large 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.
- 12) 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
- 13) 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.
- 14) Study recent redevelopment and infill projects to evaluate challenges and best practices for possible incorporation into code standards.

CHAPTER 7: Environment

Ocean City's location on a nine-mile-long barrier island, bounded on the east by the Atlantic Ocean and on the west by the Isle of Wight and Assawoman coastal bays, is defined by its environment comprised of the natural elements of land, sea, air, as well as the built community.

This element of the Plan identifies a general goal with objectives and strategies for protection and management of sensitive areas and environmental features. Connections are identified with the Water Resources element in Chapter 11 to identify important areas for management of natural areas, community building and infrastructure that may be vulnerable to water-related hazards. Finally, strategies for maintaining and improving the quality and function of the Town environment are provided.

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.

MD Sustainable Growth Principle 7 – Place

Provide for public spaces that encourage social interaction and value cultural, historical, and natural resources

MD Sustainable Growth Principle 8 – Ecology

Protect and restore sensitive ecological systems and conserve natural resources, including forests, agricultural areas, and waterways

MD Sustainable Growth Principle 6 – Resilience

Integrate resiliency measures that will minimize the impacts of rapid and unexpected natural and human-caused threats on communities

The Town's connection and inter-dependence with the natural environment is underscored by 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 well-managed 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, such as Assateague Island, to remain undeveloped.

Looking to the future, the potential for significant changes in climate, water quality and the impact of offshore energy development will require new management and action strategies.

Goal:

To protect the quality of the air, water and land from the adverse effects of development and, where feasible, to enhance the natural environment and sensitive areas through active management. New priorities for a more resilient community include adaptation to climate change, mitigation of hazards, and advocacy for responsible use of ocean resources.

Town Environmental Principles:

- Natural and scenic resources add unique value to the community
- Development is prioritized within the Town growth area, and complemented by surrounding natural resource management areas
- The coastal environment which supports recreation, tourism, real estate and fishing
 industries is an economic resource for all of Maryland that requires active planning,
 management and mitigation of hazards
- Management of natural and cultural resources is a shared responsibility
- Industrial scale renewable energy development is not compatible with protection of natural resources, and in close proximity with established coastal communities

Objectives:

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

- 7.1 Continue to protect and enhance the Public Recreational Beach along Maryland's Coast and maintain the Beach Replenishment Program for the Town's greatest environmental asset and community protection from flooding
- 7.2 Actively advocate for balanced and responsible management of offshore ocean resources, and public lands at Assateague Island National Seashore that have a direct effect on the Town of Ocean City
- 7.3 Build upon the partnership with FEMA to implement the community's Hazard Mitigation Plan, and participation in the National Flood Insurance Program, with higher standards through the Community Rating System
- 7.4 Monitor the Town's energy consumption patterns and identify opportunities for instituting energy conservation measures and responsible

- use of renewable energy sources
- 7.5 Continue to enhance the Town waste-to-energy program where possible to reduce litter through the Adopt-a-beach, Adopt-a-street and Downtown Clean-up programs as well as other initiatives
- 7.6 Expand the role of eco-tourism through outdoor experiences, education and volunteer activities
- 7.7 Maintain and enhance the quality of the Coastal bays by continuing to actively participate in and support the Maryland Coastal Bays Program
- 7.8 Protect, preserve and manage coastal marsh and wetlands as valuable aquatic spawning areas and to maintain the benefits they provide to water quality, shoreline stabilization, and wildlife habitat
- 7.9 Utilize development standards for the location and construction of structures to minimize the impacts of flooding, to mitigate major flood hazards, and to maintain adequate open space for stormwater infiltration
- 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
- 7.12 Require all forms of development and re-development to avoid sensitive areas whenever possible, and to mitigate for impacts
- 7.13 Prepare for and adapt to changes in environmental conditions and extreme climate events

Sensitive Areas

Maryland's Land Use Article requires the Town's Comprehensive Plan to incorporate a "Sensitive Areas Element" that contains goals, objectives, principles, policies and standards designed to protect sensitive areas from the adverse effects of development. Sensitive areas are defined across a wide range of geographic conditions as including the following: 1) streams and their buffers; 2) 100-year floodplains; 3) habitats of threatened and endangered species; and 4) steep slopes.

Additionally, the Environment Article added a statutory requirement in 2015 for State Agencies to encourage integration of climate adaptation strategies into local plans and ordinances. Chapter 7 - Environment identifies three sensitive geographic areas which are specific to the Town of Ocean City and which connect with Chapter 11 - Water and Mineral Resources.







Ocean City Beach

MD Coastal Bays

Special Flood Hazard Area

Ocean City Beach

This Sensitive Area is protected by State Ownership/Easements, Town BR Beach Reserve zoning district, a Transfer of Development Rights (TDR) program, and the Federal USACE Atlantic Coast of Maryland Shoreline Protection project.

For 150 years, Maryland's Atlantic Ocean coastal community has provided recreation and renewal for summertime visitors to the beach. Today, Ocean City has been rated by TripAdvisor as top 10 'Best of the Best Beaches' in the United States and a family-friendly beach with incredible views. This standing as a premier resort community located in proximity to abundant natural resources is built on the combined investment of private industry along with local, state and federal governments.

The public recreational beach is Ocean City's #1 sensitive area resource, and highest priority for mitigating risk of damage or loss due to erosion, sea level rise and storms. A lasting solution has been possible through many **partnerships** including with Worcester County, the State of Maryland and the US Army Corps of Engineers (USACE).

A series of historic storm events lead to the current USACE Shoreline Protection program that has achieved an engineered sand dune and sea wall system providing long-term community benefits (USACE estimates this project has prevented more than \$927 million in storm damage since construction started in 1990). This nature-based system was recognized as a mitigation measure by the FEMA RiskMAP study in 2015 thereby reducing flood risk, and insurance costs for the majority of properties in Ocean City. USACE Ocean City project information is found online: https://www.nab.usace.army.mil/OceanCity/

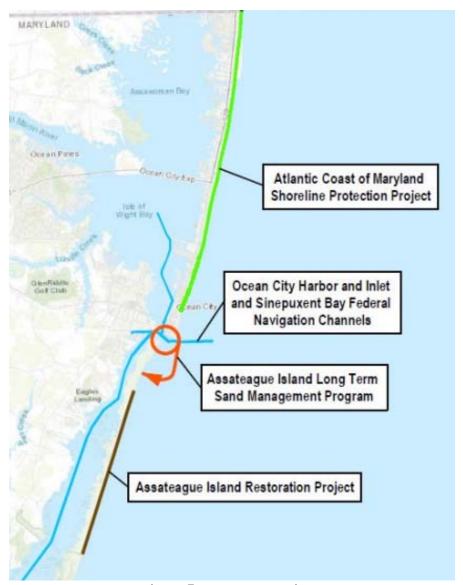


Figure 7-x. USACE projects

Following the impact of Hurricane Sandy in 2012, a national assessment of coastal storm risk was prepared in 2015 by the USACE called the North Atlantic Coast Comprehensive Study: Resilient Adaptation to Increasing Risk (NACCS). This report continues to serve as a reference manual and 'risk management framework to support resilient coastal communities and robust, sustainable coastal landscape systems, considering future sea level and climate change scenarios, to manage risk to vulnerable populations, property, ecosystems, and infrastructure'. A connection was forged through the NACCS with The Nature Conservancy to link natural and nature-based features (sensitive areas) with methods of asset protection (infrastructure). (Source: http://www.nad.usace.army.mil/CompStudy)

FINDINGS

The NACCS is based on the study and examination of a great amount of new information pertaining to all facets of coastal storm risk management. The following conclusions emerged from this effort.

Addressing coastal Developing and implementing comprehensive coastal storm risk management storm risk is a shared solutions is a shared responsibility among Federal, State, regional, and Tribal entities; responsibility NGOs; academia; business and industry; local governments; and the public. Addressing coastal storm risk requires responsible evacuation planning and rethinking approaches to land use and use of floodplains, systems planning, risk communication, Federal and State assistance programs, cost sharing, and related local, regional, State, and Federal policies, as well as coordination with private land owners during implementation of coastal storm risk management solutions. Vulnerability and Numerous populations, infrastructure, local and regional economies, ecosystems, residual risk continue and other significant assets in the North Atlantic region are increasingly vulnerable to increase in the to coastal storm damage and impacts from sea level change. Areas most vulnerable North Atlantic region include those with high populations and urban areas. Risk communication is critical to convey existing and potential future risk. Improved coastal Employing three primary strategies—avoid, accommodate, and preserve—coastal storm risk communities should consider a system of comprehensive, resilient, and sustainable management coastal storm risk management measures. The system should include a combination of measures (structural, NNBF, and nonstructural measures) to form resilient, redundant, measures are needed robust, and adaptable strategies and measures (Figure II-1) that promote life safety based on local site conditions and societal values. ELEVATED - LIVING SHORELINES FLOOD WARNING VEGETATED FEATURES DRAINAGE IMPROVEMENTS OYSTER & CORAL REEFS RELOCATION BREAKWATERS MARITIME FORESTS ACQUISITION LEVEE/ BEACH & DUNE ,FLOODWALL, SHORELINE RESTORATION STABILIZATION ESTUARY FOREST Figure II-1. Combinations of Adaptable Measures That May Be Used to Improve Redundancy, Robustness, and Resilience Associated with Coastal Flood Risk Management (not to scale) Sea level change is One of the important data gaps identified by the NACCS is how sea level change will affecting the nature affect communities and their existing stormwater infrastructure. Sea level change will of fluvial and coastal alter the ability of streams and rivers to convey rainfall to coastal bays and estuaries and flooding interactions may increase the frequency and severity of inland and coastal flooding from rainfall. Interior, low-lying Low-lying areas with large populations and/or critical infrastructure are shorelines are particularly vulnerable to sea level change. susceptible to small changes in water levels

NACCS – resilient adaptation to increasing risk

The USACE has since advanced to complete detailed Tier 3 coastal storm risk management plans, and 'Back Bays' studies for specific Atlantic Coast locations that include local-scale analysis, project identification, and benefit-cost evaluations. Many aspects of these plans for protection of sensitive areas and community resources are applicable to Ocean City, Maryland.

New Jersey Back Bays 2021

- Nassau County NY 2021
- Virginia Peninsula / City of Hampton / Norfolk VA 2024 ongoing
- Delaware Inland Bays/Bay Coast 2023 ongoing
- City of Baltimore MD 2024

Ocean resource conservation has also advanced through the efforts of the Mid-Atlantic Regional Council on the Ocean (MARCO) which has built a robust ocean data and information management system including a wide range of human use, environmental, socioeconomic and regulatory data and providing the building blocks for multi-use, regional-scale ocean planning. https://www.midatlanticocean.org/about/overview/

The MARCO Portal serves as a platform to engage all stakeholders in ocean planning from the five-state Mid-Atlantic region—putting essential data and state-of-the-art mapping and visualization technology into the hands of the agencies, industry, and community leaders.

https://portal.midatlanticocean.org/

Four Shared Regional Priorities

The Governors' Agreement identified four regional priorities for shared action to improve ocean health and contribute to the high quality of life and economic vitality of the region.



Climate Change Adaptation

Prepare the region's coastal communities for the impacts of climate change on ocean and coastal resources.



Renewable Energy

Collaborating on a regional approach to support the sustainable development of renewable energy in offshore areas.



Marine Habitats

Coordinating the protection of important marine habitats, including sensitive and unique offshore areas such as corals, canyons and migration corridors.



Water Quality

Promoting improvements in ocean water quality.

Ocean Planning for the Future

MARCO uses regional ocean planning as a means to advance priorities identified in the Governors' Agreement. Ocean planning is a process to improve understanding of how ocean resources and places are being used, managed, and conserved, and to establish a common foundation that will guide actions to address the shared regional priorities.



Coastal planning resources and actions are supported by the National Coastal Zone Management Program administered by NOAA as a voluntary Federal-State partnership for protecting, restoring, and responsibly developing our Nation's diverse coastal communities and resources.

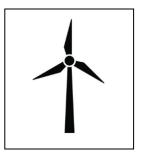
Maryland's Chesapeake and Coastal Service (CCS), a unit of the Maryland Department of Natural Resources, works to ensure that the state and its communities are equipped to better balance the often competing and occasionally conflicting demands and needs of Chesapeake and coastal resource use, economic development and conservation.

The MD DNR Office of Coastal and Ocean Management provides funding, planning support and critical interagency and regional coordination services for state and local partners to improve public access, plan for multiple uses of coastal resources and undertake the planning needed to prepare for and reduce impacts from a changing climate. Office staff provide tools and training to make informed management decisions and provide means of implementing those decisions and building capacity within communities.

Each Mid Atlantic State has adopted CZM enforceable policies (https://dnr.maryland.gov/ccs/Pages/Enforceable-Policies.aspx) that must be reviewed under the National Environmental Policy Act (NEPA) when major federal actions may impact sensitive areas and natural resources such as development of offshore wind energy resources. Maryland has not adopted enforceable policies to address coastal impacts of offshore energy development, and must request an extension of the Geographic Location Description (GLD) of areas where offshore activities in federal waters will have reasonably foreseeable coastal effects.



Ocean City's public recreational beach is well managed today to meet the Maryland Sustainable Growth Principles. For the next Comprehensive Plan cycle, the greatest risks to this sensitive area will likely be coastal storm induced shoreline erosion/flooding, and the cumulative impacts of offshore energy development.



Maryland Coastal Bays

This sensitive area is protected in part by the Town RC-1 Resource Conservation zoning district, State waters and wetlands regulations with locally adopted Critical Area regulations, and the Federal designation under the National Estuary Program.

The Maryland Coastal Bays Program (MCBP) is one of 28 National Estuary Programs (NEP) across the country that receives EPA funding in order to work toward the restoration and

protection of "estuaries of National significance." The Maryland Coastal Bays watershed is an impressive coastal resource; it supports abundant wildlife and a wealth of aquatic resources in a relaxing rural atmosphere unique to the mid-Atlantic region. Here, residents and tourists alike enjoy fishing, hunting, boating, sunbathing, and the natural serenity offered by the sea.

As one of the most ecologically diverse regions in the state, the collective watershed of these bays encompasses approximately 175 square miles of Maryland's coastal plain. It supports numerous rare and threatened plant and animal species, forests, and wetlands vital to migratory songbirds and waterfowl, as well as numerous important commercial and recreational fin and shellfish species. (https://mdcoastalbays.org/)



The Maryland Coastal Bays Program (MCBP) is a partnership including the Towns of Ocean City and Berlin; Worcester County; Maryland Departments of Natural Resources, Agriculture, Environment and Department of Planning; National Park Service; and the US Environmental Protection Agency. The MCBP provides an independent, science-based approach that offers a neutral and collaborative forum for inclusive and resilient watershed conservation and improvement.

MCBP implements a Comprehensive Conservation and Management Plan (CCMP) that addresses current and emerging issues impacting the water quality and environmental health of estuaries behind Ocean City and Assateague Island. This 10-year plan is currently being updated for adoption in 2025. Once completed, the CCMP will continue to be adopted by reference as an element the Ocean City Comprehensive Plan.

Ocean City's Coastal Resources Legislative Committee or 'Green Team' connects with MCBP through bi-monthly meetings of Town departments and allied community organizations focused on protecting the natural resources of the Town of Ocean City. Specific priorities and actions of the associated Sustainable Maryland Certified Program are detailed in the Ocean City 2022 participating community report (https://sustainablemaryland.com/).

What is sustainability for Ocean City? It is living in a way that allows the needs of the current and future generation to be met; where the current generation is using their resources in a way that ensures they will not run out or be destroyed for the upcoming generation. For all of the programs and activities of the Green Team, see the Town website: https://oceancity.green/



IN AN EFFORT TO ELIMINATE LITTER, THE TOWN OF OCEAN CITY IS LAUNCHING AN ANTI-LITTER CAMPAIGN. IT WILL TAKE THE COMMUNITY AS A WHOLE TO PREVENT LITTERING. THE TOWN OF OCEAN CITY IS REQUESTING RESIDENTS, STUDENTS, VISITORS, BUSINESSES, AND OUR EMPLOYEES TO PLEDGE AND COMMIT TO TAKING PART IN THIS ANTI-LITTER EFFORT. IT TAKES ALL OF US TO MAKE A DIFFERENCE!

Maryland Coastal Bays are well managed today to meet the Maryland Sustainable Growth Principles. For the next Comprehensive Plan cycle, the greatest challenges to this sensitive area will likely be loss of habitat areas, implementing navigation channel dredging with beneficial re-use of dredge materials, and maintaining water quality standards

Special Flood Hazard Area

This sensitive area is protected and managed under the FEMA National Flood Insurance Program, RiskMAP defined Special Flood Hazard Area, with floodplain management implemented through Town Code Chapter 38, and adoption of higher standards with the Community Rating System (CRS)

A Flood Insurance Rate Map (FIRM, or flood map) is an official map on which FEMA has delineated Special Flood Hazard Areas (SFHAs), or areas at a high risk of flooding. Along the coast, the flood map has delineated coastal SFHAs where the source of flooding is from coastal hazards, such as storm surge and waves. These sensitive areas allow for development to occur on land in coastal communities, and generally indicate a transition to open water areas. The SFHA is the area where the National Flood Insurance Program's (NFIP's) floodplain management regulations must be enforced and the area where the mandatory purchase of flood insurance applies.

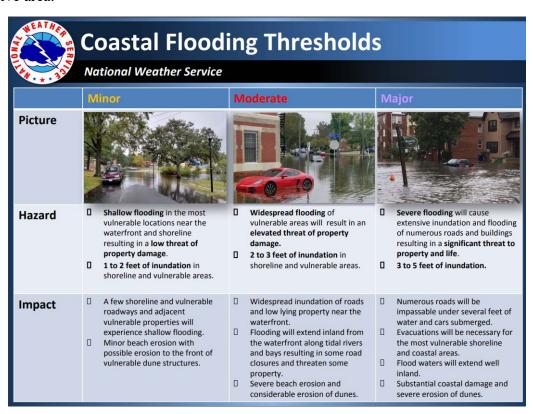


In 2015 the Town of Ocean City adopted FEMA's new Risk MAP flood risk mapping and updated the Town Code Floodplain Ordinance. This information was incorporated into the Hazard Mitigation Plan, and used to support participation in the Community Rating System that adopts higher regulatory standards for floodplain management and building construction for every area of Town. Several amendments to the flood insurance rate map have been approved by FEMA to clarify flood zone boundaries along portions of the oceanfront, and bayside shorelines. Mitigation of risk from flooding is accomplished through management of these programs for both natural and built form assets in the community.

Virtually all of Ocean City's land area is at risk from the effects of coastal flooding, storm surge and high winds. Based on the FEMA coastal RiskMAP analysis, flood insurance rate maps have reduced the portion of Ocean City located within the special flood hazard area or 1% chance floodplain due to more accurate ground elevation information and the USACE shoreline protection program. 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 substantially developed, new development in the special flood hazard area cannot be avoided. Ocean City's flood protection and stormwater management regulations address the problems inherent in developing in the floodplain, and enforcement of these regulations should continue to be stringent.

Living on a barrier island with average land elevation of 6 feet above sea level means that flooding conditions can be anticipated and basic building principles and codes will positive drainage away from structure foundations, utilizing streets and storm drain infrastructure to carry the majority of flood waters. Elevation of new or substantially improved structures above flood protection levels will incrementally improve community resiliency in this sensitive area.



https://www.weather.gov/media/erh/erhcoast/CoastalFloodThresholds.pdf

In addition to providing flood hazard information on the Town webpage, Maryland Department of the Environment provides digital flood mapping resources at: https://mdfloodmaps.net/

Nuisance Flood Plan

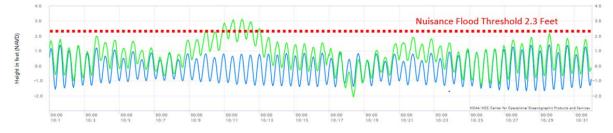
Risk management planning by federal, state and non-governmental organizations has expanded since the last Comprehensive Plan review. Local government is now tasked to evaluate incremental scenarios beyond RiskMAP including more frequent nuisance flooding events, and extreme/cumulative impacts of future climate conditions with increased intensity and duration of storms (wind, rainfall, storm surge) along with seasonal variations.



Figure 7-x Average Flood Days per Month

Source: https://www.coast.noaa.gov/digitalcoast/tools/sea-level-calculator.html

Through the development of a Nuisance Flood Plan to meet Maryland HB1427 (2019), Ocean City has collected data on nuisance flooding since 2020 and will evaluate recommendations for strategies and actions in 2025. Protection of life, property and environmental features from flood damage will continue to be managed through the Town's floodplain management program.



Planning for Future Conditions

Elements of the Town of Ocean City Hazard Mitigation Plan inform the Comprehensive Plan regarding risk to environmental resources, building standards for critical infrastructure, and anticipating the potential for combined or compound events

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. The Town of Ocean City 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) and NOAA National Ocean Service (NOS) to identify the risk and adaptation measures necessary for this hazard mitigation element.

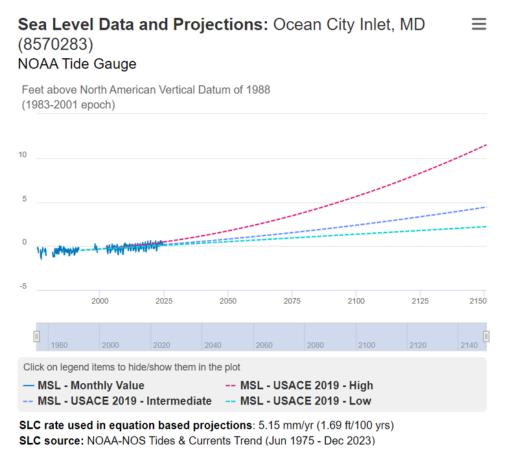
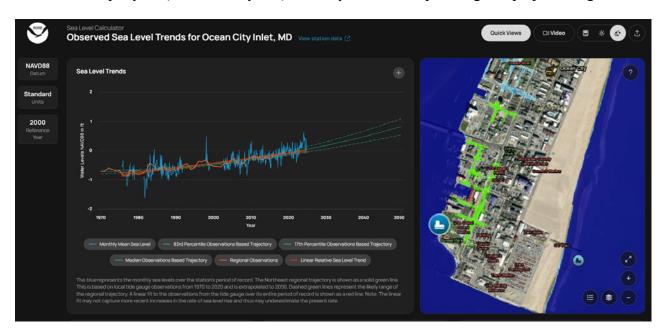


Figure 7-2 (https://climate.sec.usace.army.mil/slat/)

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.

The USACE established three projections for future sea level change (updated in 2019) based on observational tide gauge data from the Ocean City Inlet (#8570283), and beginning with an extension of historic sea-level rise rates over a 40-year period. The USACE Low Curve is based on a NOAA-NOS Tides and Currents trend estimate of 0.0169 feet per year (1 foot in 59 years) for Ocean City, Maryland. The USACE Sea Level Analysis Tool also estimated an intermediate rate scenario of 0.0316 feet per year (1 foot in 32 years), and a high rate scenario of 0.0784 feet per year (1 foot in 13 years) that may be used for planning and project design.



Fundamental to the ongoing USACE Atlantic Coast of Maryland Shoreline Protection project, are conclusions drawn from a study conducted by EPA in 1985 indicating that sea level rise could double the rate of erosion at Ocean City in the next forty years. If no additional erosion control measures were taken, the shore could have eroded 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.

Page | 7-15

- 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.

Beach Stabilization and Storm Damage 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 sheet pile 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, and funding was available to complete another renourishment which is underway in 2017. 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 successful solution to the beach erosion problem.

Existing barrier island profiles and the Ocean City Inlet have demonstrated the effect of reducing storm surge and flooding impacts to the bayside shorelines of the community as evidenced by the 2015 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-x Inlet Flood Zones

Sea Level Rate projections 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.

Storms with Increased Intensity, Duration and Frequency

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.

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.



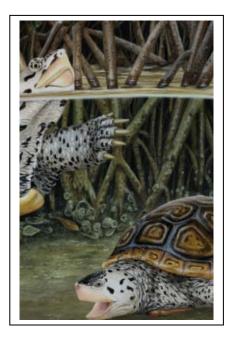
| Top Ten High Water Events | | | | |
|---------------------------|---------|---------------------------|--|--|
| 2/5/1998 | 4.37 ft | Nor easter | | |
| 10/29/2012 | 4.3 ft | Hurricane Sandy | | |
| 9/27/1985 | 4.1 ft | Hurricane Gloria | | |
| 10/14/1977 | 4.02 ft | Coastal Low Pressure | | |
| 11/22/2006 | 3.88 ft | November Nor'easter | | |
| 10/31/1991 | 3.75 ft | The Perfect Storm | | |
| 1/28/1998 | 3.67 ft | Nor easter | | |
| 3/29/1984 | 3.61 ft | Nor easter | | |
| 11/13/2009 | 3.56 ft | Hurricane Ida | | |
| 10/19/1989 | 3.51 ft | Low Pressure System | | |

Wildlife Habitats

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 rich ecological areas in the coastal bays. The use of native plants in landscaping is encouraged with all required planting.

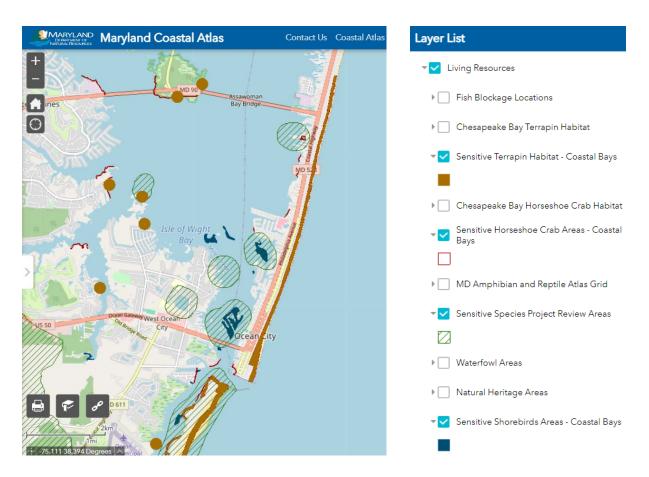
Habitats of threatened and endangered species should be protected and State and Federal guidelines for their protection continue to be adhered to. Ocean City's location adjacent to Assateague Island National Seashore and the Maryland Coastal Bays national estuary places high density urban built form 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.

Appendix A includes a List of Rare, Threatened, and Endangered Species of Worcester County (November 2021), prepared by Maryland DNR Wildlife & Heritage Service-Natural Heritage Program, that has traditionally been included in the Comprehensive Plan. A mapping tool is available for reference in identifying potential impacts of development on associated habitat areas. (https://dnr.geodata.md.gov/CoastalAtlas/)









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.

Climate and Air Quality

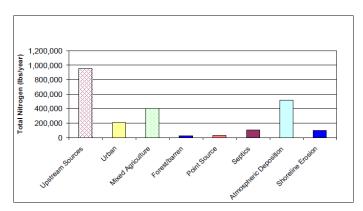
Ocean City's climate is greatly influenced by its proximity to the Atlantic Ocean. Average annual rainfall is forty-nine inches, and snowfall averages up to ten inches per year.

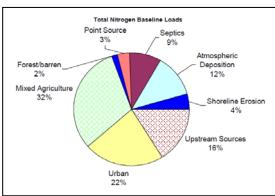
Extreme weather comes in several forms. Thunderstorms occur about thirty times a year, bringing heavy short-term rains and high winds. Although rare, tornadoes and water spouts do occur. Hurricanes can make landfall, and northeasters occur regularly. Snowfall is generally light, but occasionally heavy snows occur.

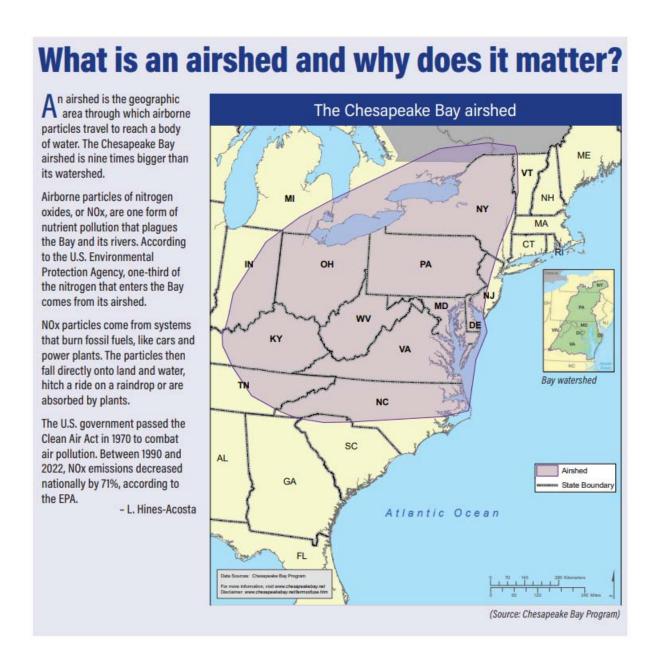
In general, the air quality of Ocean City is good and likely to remain so. The northwest winds during the cooler months are brisk and help to reduce pollutant concentrations. During the summer, Maryland is often under the influence of a Bermuda High (a high-pressure system) centered over the Atlantic 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 managed at a regional and national level. Acid rain is a result of carbon fuel combustion, such as motor vehicles, which adds nitrogen oxides to the air. In the past, the rainfall in Maryland has been ten times more acidic than natural levels. In areas where soils and geologic formations are thin, acid rain may cause the waters to become very acidic resulting in the decline of fish populations.

Coastal Bays water quality standards are established by a TMDL for contributing sources of nutrients such as nitrogen and phosphorus. The study approved in 2016 states that atmospheric deposition contributes 12% of nutrient loads in the Isle of Wight Bay, and 13% of nutrient loads in the Assawoman Bay.







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.

Ocean City's recycling program began in 1989 and now includes a unique means of landfill avoidance, metals recycling and energy production. Aluminum, plastic, cardboard, newspaper,

office paper, metal, and glass are recycled through regular refuse collection and transport of all waste materials to an energy production recycling facility.

Ocean City currently holds a contract with Reworld Waste, a leader in the field of solid waste management energy from waste facilities, for trucking and repurposing of the town's Municipal Solid Waste (MSW). Locally, residents and visitors generate roughly 34,000 tons of MSW annually which on average produces 670 Kilowatts of electricity for every one ton of trash that is burned. For more information, visit the Town Public Works website: https://oceancitymd.gov/oc/departments/public-works/recycling/).

The Town of Ocean City is proud to partner with Go Green OC, a local non-profit organization whose goal is to make the resort the first zero waste town in the United States. OC Compost LLC has been working since 2018 to collect food waste from nearly two dozen participating businesses, a hotel, and the Roland E. Powell Convention Center, weigh it at the Town's public works complex and transport it to the company's composting site in northern Worcester County. As part of the company's agreement with the Town, Ocean City compensates Ocean Compost for each ton it diverts from the resort's waste stream. In 2023, volunteers collected 176 tons of waste, and assisted with recycling efforts at Bike Fest and Oceans Calling music festival.

The Town's Green Team also supports multiple initiatives to reduce and remove waste products from the environment through a network of volunteers and civic organizations, including a cigarette butt to bench recycling campaign with MCBP and TerraCycle.

The ocean has received a variety of waste products over the years. 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. 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.

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 Public Works Department, and numerous volunteers help to adopt sections of town and collect litter from the dunes and beach.

Energy Conservation and Environmental Impacts

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 continues to be emphasized along with utilization of 'green energy' sources. Conservation efforts are supported through adoption of current building codes, and energy efficiency is factored into all public construction and purchases including consideration of energy saving vehicle purchases.

Ocean City continues successful bidding of multi-year contracts for electricity supply and saves money while achieving a goal of 53.5% energy from sustainable or renewable sources. [25% from the solar farm plus the state mandated 38% renewable portfolio standard for the remaining 75% of local government electric use (25+(0.38x75)=53.5)]

Electric vehicle charging stations have been constructed in recognition of the increasing number of EV visitors, and in response to a grant to install a TESLA compatible station. Solar PV installations have continued to be installed in both residential and commercial applications with adopted Town permit standards. Delmarva Power is proceeding with system upgrades including a Battery Energy Storage System (BESS) at 100th Street to address peak energy use.







Advancing alternative energy solutions can meet many national and state goals, and yet still have adverse impacts on local communities.

- Pilot projects for solar power installations were initially welcomed in rural areas, and now there is a growing concern about loss of productive farmland with large scale implementation.
- Conversion of outdoor lighting to LED fixtures has included financial incentives from power companies to implement energy savings, with unanticipated community impacts from unregulated and unshielded LED light fixture glare, brightness and color intensity.
- Through a similar pre-emption of local authority, the planned development of large-scale industrial wind energy systems in federal waters along Maryland's Atlantic Ocean coastline will have unresolved environmental and community impacts.

Night lighting in the Ocean City resort community 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 lights with

impacts to residential properties and roadway safety. Additional study and installation standards may be required to manage this change in the future.

The Maryland Offshore Wind Project proposed by US Wind Inc, includes construction and installation, operations and maintenance, and conceptual decommissioning of industrial scale offshore energy generation comprised as many as 121 wind turbine generators, up to 4 offshore substations, up to 4 offshore export cables, and 1 meteorological tower, distributed across an expansive Lease Area.

The offshore export cables are planned to make landfall in Sussex County, Delaware. The Project will be interconnected to the onshore electric grid by up to four new 230 -275 kilovolt export cables to new US Wind onshore substations, with an anticipated connection to the existing Indian River substation near Millsboro, Delaware.

Ocean City's Mayor and City Council have joined others to oppose the Project by resolution and litigation based on the "substantial threat" of industrializing the ocean with offshore wind farms, cumulative impacts to the tourism economy as well as on commercial fishing, marine life, and safety related concerns for marine traffic and military radar.

US Wind responses to community concerns, and environmental impacts identified through the NEPA permit review process, demonstrate that the proposed use **will** have measurable cumulative impacts and unintended consequences for the future.



WATERMEN REJECT NEGOTIATED US WIND RELIEF PACKAGE

Brian Shane, OC Today-Dispatch

US Wind promises to create a \$20 million relief fund for fishermen whose businesses would be harmed not only by the 114-turbine wind farm, but also the accompanying operations and maintenance facility to be built in the West Ocean City commercial fishing harbor.

"We're not going to make an agreement to put ourselves out of business," said Jeanene Gwin, vice president of the Waterman's Association of Worcester County.

MARYLAND OFFSHORE WIND FACT SHEET

DID YOU KNOW...

A Company called US WInd has applied to build

4 WIND TURBINES

This is what 114 turbines looks like.

410' LONG. That's almost one &

Each turbine blade is

a half times longer than a football field.

> The US Wind project is **OPPOSED** by commercial & recreational fishermen.

Each turbine must be lit at night with flashing red lights, which will also be visible from our beach.

Other Wind Farms Distance to Shore

NC & VA's Distance 25 MILES

New York's Distance

They have determined that the project will:

HARM marine life, **RESTRICT** their fishing grounds and be a **HAZARD** to navigation. The turbines are 938' tall, almost

the height of the tallest building in Ocean City.

US Wind is NOT American owned. It is an **ITALIAN COMPANY.**

Did you know?

US Wind plans to build an industrial maintenance yard in the West Ocean City Harbor.

Studies have proven that visible offshore wind turbines hurt beach tourism and reduce property values.

The turbines will be **CLEARLY VISIBLE** from our beach

Because the project is so expensive to build. the Maryland General Assembly has ordered Marylanders to pay US Wind HUNDREDS OF MILLIONS OF DOLLARS in subsidies

every year through higher electricity bills.

Although Marylanders are subsidizing the project, the power will be delivered to DELAWARE and US Wind is giving the State of Delaware and many Delaware cities millions of dollars in grants in exchange for not opposing the project.

https://oceancitymd.gov/oc/oc-opposes-proposed-wind-farms/

Prepared by the Town of Ocean City

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 detract from the visitor experience. The most negative aesthetic factors include overhead utility wires and poles, the proliferation of signs, the lack of landscaping, 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 greenspace. The use of bermed landscaping along Coastal Highway also improves 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 pocket parks or green spaces that provide respite from hardscapes in the Town should be 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 parks 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, and loss of open space, 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 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 17th street, with plans to update the design standards for larger projects.



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.

The design guidelines have been incorporated into Town Code and zoning district standards, providing momentum toward a more pleasing visual environment. 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)
- Respecting adopted flood protection elevation requirements, and meeting parking demand while maintaining an emphasis on the pedestrian sidewalk experience
- Promoting mixed use development in commercial zones, especially in the downtown areas
- Incorporation of updated 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 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, in excess they can become 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 are regularly reviewed and enforced to reduce the number of signs, better regulate their location, and eliminate more obtrusive signs. The Downtown Design Guidelines establish provisions for continuous management of signage, including digital signs, in the Downtown area. These provisions also recommend treatment for lighting, parking, fencing and screening which are important elements of the built environment.

Summary

Ocean City has made substantial progress in the quality and variety of both 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.

Overall, Ocean City's environment is of high quality for an urbanized area. Air quality is excellent with a sea breeze. The public recreational beaches are broad and clean. Water quality in the Atlantic Ocean and Coastal Bays is maintained to high standards.

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 are a long-term commitment to maintaining Maryland's most valued coastal resort assets.

Future challenges confronting Ocean City's environment center on maintaining the quality and resilience of beaches, waters, and wetlands that sustain the tourism economy and add value to the built environment. For the next Comprehensive Plan cycle, the greatest risks to this sensitive area will likely be coastal storm induced shoreline erosion/flooding, and the cumulative impacts of offshore energy development.

Recommendations

1) Place

- a. Off-shore wind energy systems may have significant visual and property value impacts on tourist visitation at the Ocean Beach. Ocean City will continue to oppose wind turbine and substation locations that are visible from the beach and major high-rise condominiums.
- b. Support the Maryland Coastal Bays Program 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, wildlife habitat and water-based recreation.
- c. The beaches should always remain accessible to the public, and more public access to the bays should be provided through both public and private improvements. Coordinated access plans with existing state and county park/water access facilities should be identified and information provided to the public through 'green tourism' marketing.
- d. Advocate for state legislation to adopt Maryland CZM enforceable standards for offshore energy resource development, and request adoption of a GLD sufficient to guide development of offshore resources
- e. A town-wide urban design, open space, and landscaping plan should be developed with Town Code revisions to adopt performance standards
- f. 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.
- g. 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.
- h. Sign controls should be strengthened to better regulate the proliferation and appearance of signs.
- i. A systematic program to bury utility wires should be developed and implemented including implementation of the Baltimore Avenue streetscape project

2) Ecology

- a. Off-shore drilling for oil and gas should be opposed to prevent environmental damage and impact to the coastal resort economy.
- b. Continue to meet federal and state standards for disposal of sewage treatment plant effluent that should be limited by the capacity of the ocean and coastal bays to receive the nutrients and process them without significant reduction of water quality.
- c. Explore opportunities to utilize beneficial dredge material from navigation channel maintenance in the Coastal Bays to create island habitats, improve water quality, and provide open circulation and water depth for recreational boating
- d. Wetlands and coastal marshes should be protected, as they are critical to water quality, provide valuable wildlife habitat, provide flood protection, and serve as a nursery for virtually all locally important finfish and shellfish.
- e. The town should encourage native plant landscaping for migratory birds, butterflies, moths and other pollinators. This effort should be integrated into the town's beautification and Critical Area Program efforts.
- f. Continue active enforcement of EIFS Styrofoam building material controls during construction and renovation projects.

3) Resilience

- a. Continue to monitor threats to beach stability include major storm events, long term coastal erosion and potential changes in federal coastal management on Assateague Island. Propose and implement new adaptation measures that will be required to maintain the Ocean City Inlet and protect downtown areas from storm surge and tidal flooding.
- b. Coordinate with federal, state and county partners to continue active management of the Ocean City Inlet that 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.

- c. Prepare a new Plan Element on Coastal Resiliency to be included in the next Plan update that combines recommendations of the Nuisance Flood Plan and expands research and strategies from USACE projects for adaptation to environmental change and coastal storm risk.
- d. The Beach Replenishment Program, Navigation channel dredging, and Inlet sand bypass projects should be maintained to provide storm protection and recreational use.

CHAPTER 8: Downtown Development/ Redevelopment/Reinvestment

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. In response, the Mayor and City Council supported the incorporation of the Ocean City Development Corporation (OCDC) 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.

MD Sustainable Growth Principle 1 – Place

Provide for public spaces that encourage social interaction and value cultural, historical, and natural resources

MD Sustainable Growth Principle 4 – Economy

Allow for adaptive reuse, mixed-use, and context appropriate new development that responds to changing markets and innovations

Ocean City has achieved and renewed the Maryland Sustainable Communities designation in support of Downtown reinvestment. This program evaluates revitalization progress and establishes a 5-year action plan for improvement projects. Through this program, Ocean City is eligible to apply for and receive funds from several state agencies including the Community Legacy Program and the Strategic Demolition Fund, with local grant programs administered by OCDC.

With the 2024 Comprehensive Plan update, principles of this chapter are extended 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 in support of private investment, encourage renovation of older structures, and promote redevelopment and revitalization of properties that continue the traditions and architectural character of Ocean City, Maryland.

Town Redevelopment Principles:

- Lead by Design envision future development potential to encourage new projects
- Public investment in infrastructure multiplies private investment in redevelopment and property maintenance
- Implement Main Street program strategies throughout Ocean City Downtown areas
- Perpetuate nonconformity within the bounds of Town Code as an incentive for reinvestment and new development
- Nonconformity for off street parking must be reduced or eliminated for residential redevelopment
- Promote mixed use development which continues Ocean City traditions, encourages Beach to Bay connections, and implements a Bayside Boardwalk

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

- 8.1 OCDC will continue to lead downtown revitalization and be 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 promote special events and marketing that support downtown businesses, and enhance the tourism destination
- 8.2 <u>Housing</u> for seasonal employees will be provided through market based private investment, with geographically dispersed locations meeting the needs of Town businesses. Municipal buildings will include housing for Town employees where possible to demonstrate the potential for mixed use building types.
- 8.3 Renovation/Reinvestment will be encouraged through the continued renovation of older structures throughout Ocean City, working with design guidelines and grant program assistance where possible, and meeting current building standards.
- 8.4 <u>Downtown design guidelines</u> will be updated to adopt standards for large landmark development projects, mixed use and workforce housing, where permitted by zoning regulations.

8.5 <u>Redevelopment</u> – Allow and encourage infill development and revitalization of properties while protecting established neighborhoods and districts from adverse impacts.

Overview of Downtown Development Issues

Current challenges and opportunities for the Downtown and Upper Downtown plan areas include:

- Ownership transfer and consolidation of property
- Reinvestment and reinvention of the Ocean City experience
- Continuation of core principles and community identity (family focus, public beach, boardwalk amusements, waterfront access)
- Trend toward stacking special events, and layering land uses at a single location to maximize value
- Off street parking

Review of Prior Initiatives

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. 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.

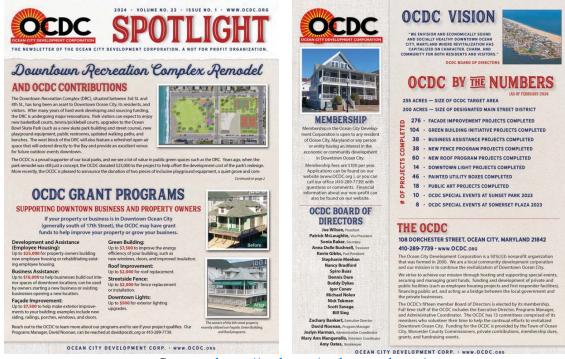
Throughout the 1980's and '90's the City made significant investments in the Downtown, and continues to do so today. The list below (Table 8-1) identifies public improvement projects that had been accomplished following the 1980 Downtown Revitalization Study.

| Table 8-1 Public Improvements in the Downtown | | | |
|---|-------------|--|--|
| Action | Cost | | |
| Purchase of property for Entry Park | \$142,158 | | |
| Downtown improvements (1982 bond issue) | \$668,900 | | |
| Baltimore Ave. water main (phase 1) | \$1,553,197 | | |
| Chicago Avenue Park | \$100,000 | | |
| Inlet park and boardwalk (phase 1) | \$51,000 | | |
| Worcester St. parking lot, Whiteside lot | \$100,000 | | |
| Property purchase for Somerset St. parking | \$578,000 | | |
| Property purchase for 5th St./Balt. Ave. parking | \$379,000 | | |
| Fishing/crabbing pier (9th St.) | \$40,544 | | |
| Skateboard park | \$77,115 | | |
| Stormdrain improvements | | | |
| Bulkhead, Chicago Ave. | \$131,781 | | |
| Bulkhead, Edgewater Ave. | \$161,338 | | |
| Baltimore Ave. improvements (utils., streets, etc.) | \$2,000,000 | | |
| South Division St. transit center | \$41,680 | | |
| Downtown bayside improvements | \$725,000 | | |
| 15th St. water plant | \$9,900,000 | | |
| Boardwalk improvements | \$627,000 | | |
| 10th St. to 15th Improvements | \$395,000 | | |
| Worcester St. parking lot, Whiteside lot | \$81,410 | | |
| Worcester St. bayfront deck | \$51,875 | | |
| 4th St. parking lot | \$61,000 | | |
| Somerset Plaza | | | |
| South 1st Street | | | |
| Sunset Park | | | |

The *Ocean City Downtown Village Plan of Action (1999)* was prepared 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. OCDC's work plan has evolved over the years and its annual newsletter illustrates accomplishments of the work plan.

| Table 8-2 Downtown Village Action Plan, 1999: Projects and Progress | | | | |
|--|---|---|---------------------------------|--|
| Project Description | | Description | Status | |
| Phase 1 | | | | |
| Pedestrian Corridor Program | Increa | se pedestrian traffic to Bay front. | Talbot St Somerset S | |
| Parking Garage/Multimodal Transit Station | Construct on two blocks between Balt. And Phila. Aves. | | Transit Station completed | |
| Inlet Parking Lot Enhancement | | ign 1200-car parking area. | Competed | |
| Transportation Diversification | betwe | re parking sites for 400+ cars en 3rd and 27th Sts. | | |
| | Create | op park and ride program. be bayside water transportation n. d existing boardwalk train into d/t | Private service available | |
| Phase 2 | • | | | |
| Inlet Parking Lot Enhancement | impro | e pedestrian and landscape vements. | | |
| East-West Corridor Enhancements | on eas Phila. | ge vehicular and pedestrian features st-west streets between Balt. and Aves. | | |
| Philadelphia Ave. Enhancements | move | | | |
| Baltimore Ave. Enhancements | move | ve pedestrian and vehicular ment. | | |
| Phase 3 | | | | |
| Completion of East-West Corridor Enhancements | Comp Baysi | lete pedestrian improvements to de. | | |
| Identification of Development Sites | Offer | locations for high-profile projects. | Model Block Project | |
| Source: Ocean City Downtown Village Plan of Action; Thom | nas Point Ass | ociates, Inc. | | |



Source: https://ocdc.org/ocdc-newsletter/

Current Status

Sustainable Communities (2013) designation by the Maryland Department of Housing and Community Development (DHCD) provided a new master plan for downtown areas from the Ocean City Inlet to 15th and 17th Street. This plan was renewed in **2018** and 2023 to provide technical assistance from State agencies, to qualify the Town for access to competitive grant funding, and to create an Action Plan for multiple focus areas.

- Environment
 - Outcome 1 Enhance Boardwalk to Bayside connections
 - Outcome 2 Mitigate impacts of Nuisance Flooding
- Economy
 - Outcome 1 Adaptive Marketing to Expand Shoulder Seasons
 - Outcome 2 Reinvest, Redevelop and Rediscover Ocean City
 - Outcome 3 Small Business Development
- Transportation
 - Outcome 1 Baltimore Avenue Streetscape
 - Outcome 2 Route 50 Bridge Reconstruction
 - Outcome 3 Pilot Parking Districts for FILOP Program
- Housing
 - Outcome 1 Workforce Housing
 - Outcome 2 Infill Redevelopment
- Community Health and Quality of Life
 - Outcome 1 Model Block Redevelopment
 - Outcome 2 Job Growth
 - Outcome 3 Downtown Vitality/10th Street Medical
- Local Planning and Staffing Capacity
 - Outcome 1 Comprehensive Downtown Master Plan
 - Outcome 2 Update Design Standards for Large Scale Projects (POD)

Significant accomplishments are celebrated with each 5-year renewal including:

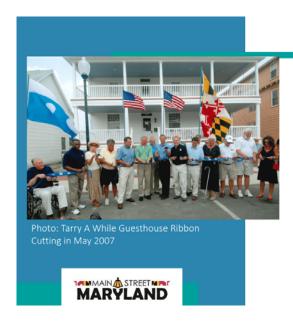
- ✓ Continuing Downtown Revitalization
- ✓ Growing Special Events
- ✓ Downtown Public Works/Parking Facilities
- ✓ Seasonal Workforce Housing
- ✓ Beach to Bay Access

Sustainable Community Action Plan projects that have not yet been accomplished are also identified.

- o Restoration and Maintenance of Older Buildings (ongoing)
- o Model Block Redevelopment (Interim use for public parking/program revenue)

 Expansion of Sustainable Communities area north to 33rd Street (Pending reconsideration in next cycle)

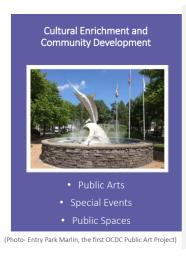
OCDC is celebrating a 25th Anniversary since their founding in 2000, and recently presented an annual report to the Mayor and City Council including the following:



OCDC: Celebrating 25 Years of Revitalization in Downtown Ocean City

- Community Development Corporation founded in 2000.
- 501(c)(3) Non-Profit Organization
- 15 person Board of Directors with 170 general members
- Staff includes: Executive Director, Programs Manager, Office Administrator, and Volunteer Coordinator
- Manages the Main Street designation and assists with the Sustainable Communities Designation.

What does Downtown Revitalization look like?





- Property ImprovementsEmployee Housing
- New Business Development

(Photo: Downtown Design Standards Cover)



Partnership with Local Government

- Continue to operate Downtown Design Committee to help enforce Downtown Design Standards.
- Collaborated with Town of Ocean City's Department of Planning the Community Development to propose new ordinances to clean up outdoor display of merchandise on the Boardwalk.
- · Started the Save OC committee to help fundraise for the fight against offshore wind turbines.
- Continue to act as a liaison between the Boardwalk business owners and music festival promoters/TOC.
- · OCDC Manages the housing of seasonal lifeguards and seasonal PSO's.

OCDC Grant Programs



<u>Façade Improvement:</u> up to \$7,500 for exterior improvements

Green Building Initiatives

up to **\$7,500** for energy efficiency











Grants Awarded

Over the Past 12 Months

- \$300,000 (DHCD Strategic Demo) for the Henry Hotel restoration project
- \$300,000 (DHCD Project Restore 2.0) for renovation of 102 Worcester
- \$100,000 (DHCD Maryland Façade) for OCDC's Façade Improvement and Commercial Façade Improvement Programs
- \$50,000 (DHCD Community Legacy) for OCDC's Green Building Initiatives Program
- \$30,000 (DHCD Technical Assistance Grant) for murals at the Ocean Bowl Skate Park
- \$25,000 (DHCD Main Street Improvement Program) for the OCDC's Employee Housing Program
- Totaling over \$800,000 in state allocated grant funds awarded in the past 12 months

Public Art and Community Engagement



OCDC organizes the annual Boardwalk Scavenger Hunt. This free, family friendly event gives away hundreds of stuffed animals every year.







OCDC operates the Boardwalk Information Cottage, assisting thousands of visitors each year



Special Events, Fundraisers, Community Gatherings



Community Events

We host many events that are low cost or free and a great excuse for the local community to come together, such as our After Dark Events, Pancake Breakfast, and Italian Dinner.



Free Summer Events

Events like the Sunset Park Party Nights and OC Cruzers Car Shows on Somerset Plaza are free, family friendly events enjoyed by visitors and locals alike during the summer months



OCDC Fundraisers

We produce a number of fundraisers every year, such as the Shore Craft Beer Festival, Art Davis Memorial Golf Tournament, and Sunfest Beer Garden.



Support Large Events

We continue to support the large music festivals, acting as a liaison for the Boardwalk Merchants. We also promote events throughout the year in the Downtown Discovery insert in the OC Today-Dispatch.

Current Large Development Projects



OCPD Downtown Substation

- Many years in the making, we broke ground in summer of 2024 with an expected completion date of summer 2025
- Partnership between the Town of Ocean City and OCDC, with a total budget of \$4,200,000. OCDC has been awarded \$350,000 in grant funds to date.
- Facilities include offices for OCPD, bike garage, housing for seasonal employees, new public restrooms, and new off island shuttle stop



102 Worcester Street

- · Purchased by the OCDC in late 2023.
- Work has begun on the building. OCDC is currently in negotiations with a long-term tenant.
- Property sat vacant for many years. It will be tenant occupied on first floor, with seasonal housing on second floor, and leased parking spaces to local businesses.
- To Date, OCDC has been awarded \$465,000 in grant funds, which went towards the purchase and expected renovation costs.

Source: OCDC Annual Report 2025

New Development

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 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. Other landmark projects include the conversion of Cropper Concrete to the Cambria Hotel, Harrison Harbor Watch deck, and the recent approval of the Kyma Hotel at the Inlet. Equally significant is the steady renovation and reinvention of small-scale destination properties between the boardwalk and bayfront marina districts, including restaurants, churches, shops, museums, housing and municipal buildings.

Cultural Resources

Cultural Resources are celebrated and Ocean City's history is retold through an active heritage tourism program. The Town's 150th Anniversary highlights the generational family legacy of still found in the Hotels, Boardwalk businesses and active Places of Worship in the Downtown area.



Redevelopment/Reinvestment

The 2014 report of the Maryland Sustainable Growth Commission titled <u>'Reinvest Maryland: Accelerating Infill Redevelopment & Community Revitalization'</u> 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.

Many state agencies are ready to provide technical assistance and may administer programs which support redevelopment and reinvestment. One specialized example is

the MDE Land Management Administration which regulates redevelopment activities including underground storage tanks and lead based paint abatement that apply to rental properties and the protection of surface/groundwater during development.

Recognizing that redevelopment and infill principles are incorporated into current codes, it is clear that new measures are still needed for a connected development process to coordinate Board of Zoning Appeals, Planning Commission, OCDC and Town Permit Review agencies to ensure design excellence with protection of surrounding neighborhoods and integration into surrounding mixed use development.

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 clear 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

Strategies - OCDC continues to have the strong support of the Mayor and City Council and the business community, and has made significant progress over its 25-year history. The current work plan has been updated with additional priorities and projects. Many of the long-term issues are still unresolved and present a challenge to the ongoing revitalization process:

1) Place

- a. The US Coast Guard Station is an important element of the downtown area which should be incorporated into long term redevelopment plans as both a key property and important public service resource.
- b. Special event programs and entertainment will complement the range of traditional boardwalk attractions. Increased use of the Inlet Parking Lot as a multi-purpose destination entertainment venue will continue to test the capacity limits of Ocean City's downtown along with seasonal variation in weather conditions. Event planning, communications and utility infrastructure are improved each year based on prior year experience.

2) Economy / Resilience

a. Parking is a major issue during peak tourism season. OCDC has renewed interest in a multi-level parking structure on the Worcester Street parking lot. Project research has been updated with a consultant feasibility study and cost estimates. A business advisory task force is evaluating financing and construction alternatives.

- b. Repetitive shallow street flooding is a symptom of proximity to the Inlet and low ground elevation which creates challenges for vehicle access, utilities, and first floor retail space during storm and seasonal high tide events. The nuisance flood planning effort will continue to evaluate mitigation options as conditions require adaptation.
- c. Ongoing programs at Sunset Park, the continued development of the wraparound Bay front Boardwalk, streetscape improvements to N. Baltimore Avenue, and the Model Block program continue to be important and need long-term support. Completion of construction for each project will mean the beginning of a continuing process of maintenance and improvement.
- d. OCDC is proactive in development by leveraging a 'lead by design' and cost sharing approach to advance public property development opportunities that will expand the range of attractions and promote mixed-use projects to add vitality to the area.
- e. OCDC partners with the Town in meeting the need for seasonal municipal employee housing, and promotes private sector employee housing through its grant programs.

CHAPTER 9: Plan Implementation

The 2025 Comprehensive Plan provides a view into a stable yet evolving coastal community. 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, are but a few of the plan's many features.

This Plan is not intended 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 ideas are welcome as to how to achieve this objective, and new guidance has been provided by the Maryland Department of Planning. 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 10-year cycle review of the Comprehensive Plan generally incorporates current information into each chapter and reaffirms core principles without proposing major changes.

MD Sustainable Growth Principle 5 – Equity

Engage all sectors of the community in plan development to ensure diverse voices are heard and the needs of underserved populations are prioritized

MD Sustainable Growth Principle 6 – Resilience

Integrate resiliency measures that will minimize the impacts of rapid and unexpected natural and human caused threats on communities

MD Sustainable Growth Principle 7 – Place

Provide for public spaces that encourage social interaction and value cultural, historical, and natural resources

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. Presenting the document through a public hearing process, and incorporating ideas and requests shared by Ocean City's residents and visitors will build on the past 150 years, and help to prepare for the future.

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

9.1 Complete a 10-year review of the 2017 Comprehensive Plan, update for current data including the 2020 Census, document completed project implementation, and prepare an Action Plan recognizing 150 years of community traditions.

- 9.2 Integrate Comprehensive Plan goals and objectives with all related plan documents such as the Strategic Plan, Hazard Mitigation Plan, Tourism Master Plan, Capital Improvement Plan, Recreation and Parks Master Plan, Special Events Plan, Transportation Development Plan, Water Master Plan, Wastewater Master Plan, Sustainable Communities Plan, etc.
- 9.3 Recognize how all sectors of the community contribute to Ocean City's success as a strong small town, and as a coastal city tourism destination.
- 9.4 Achieve measurable progress on identified Action Plan projects and activities
- 9.5 Initiate small area planning as a tool to define unique neighborhood or district strategies that will meet specific needs or goals

Comprehensive Plans are the foundational basis for local government authority to regulate land use. Implementation of the Plan requires 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. Ocean City faces a future filled with shifting elements: the federal legislative/funding priorities, changing vacationer expectations and needs, a more competitive economy and a challenging environment. The year-round population has stabilized and may grow or decline in the future. However, local planning priorities can maintain the historically steady growth in the tax base, and provide additional resources to maintain the high level of service which makes Ocean City a strong town.

Prospects for tourism remain 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. Marketing and brand promotion are key to maintaining tourism as the driving element of the regional economy.

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 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 has already implemented several innovative regulatory techniques in addition to zoning districts 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 and balanced through the site plan and building permit approval process.

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, have withstood legal 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 Ocean City 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 2024 Strategic Plan summary. A full copy may be viewed on the City Manager's web page.

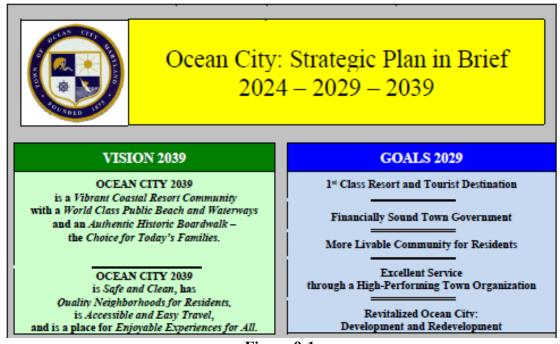


Figure 9-1

POLICY AGENDA MANAGEMENT AGENDA 2024 - 20252024 - 2025Lower Downtown Action Plan: Employee Compensation: Vision/Master Plan Development Update Report, Direction and Funding Sport Complex: Property Acquisition and State Participation/Funding, Task Force Report, Anti-Offshore Wind Farm Advocacy: Next Steps and Town Actions Amateur Sports Capital of the Mid Atlantic Designation Convention Center Expansion: Definition/Scope, Report with Options, Direction and Funding Worcester County Strategy: (including Parking Garage) Relationship Building, Key Issues/Topics for Discussion and Town Actions [Sewer Services, Room Tax, Services to West Management and Employee Succession Planning/Program: Ocean City, Sports Complex, etc.] Update Report and Expansion Baltimore Avenue Project Comprehensive Plan Update: Direction Bond Market Timing, ROW Direction and Timing, Securing Resources for the Project, Construction Funding and Pension: Update Report and Direction Construction (Groundbreaking Fall 2026) Sign Ordinance Revision: Completion and Adoption Room Tax Increase (5% to 6%): Direction and Town Actions Cannabis Business Regulations: Direction and Regulations Adoption Boardwalk Clean-Up Action Plan: Proposal, Direction, Funding and Implementation Fire Vehicles Funding Ownership/Insurance: Research and Direction Short-Term Rental Regulation: Report Golf Course Clubhouse Improvement: Maryland Route 90 Dual Lanes Project: Update, Timing, Direction, Design and Funding Funding, Direction and Town Actions High Priority Financial Policies: Review and Refinement Beach Replenishment Contract Extension: Vehicle Fleet: Direction and Implementation Performance Evaluation, Report with Findings and Recommendations, Direction and Town Actions Public Parking Study and Plan for the Future: Completion and Direction Tourism Marketing Expansion: Next Steps Town Employee Residency Incentive Program: Report, Direction and Funding Corporate Limit Extension/Annexation Strategy and Action Plan: Update Report, Discussion, Direction and Town Actions West Ocean City Strategy:

Copyright © 2024: Lyle Sumek Associates, Inc.

Key Issues/Topics, Discussion, Direction and Actions

Capital Improvement Plan

The Capital Improvement Plan (CIP) identifies and establishes long term priorities for capital improvements in the town's infrastructure. The CIP represents strategic public investment to provide services, and to spur private investment in property maintenance and redevelopment. The town annually prepares a CIP and should use it to implement the capital recommendations of this Plan. The Comprehensive Plan should also be used to 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 (FY25 – FY29) include investment of over \$317M and 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

- OCPD Mixed Use facility on Somerset Street
- City Watch improvements
- IT Department Expansion

General Public Works

- Potential South End Bus Transit Center relocation to 4th Street between Baltimore and Philadelphia Avenues (consolidation with Post Office parcel)
- Boardwalk Comfort Station Renovations

Municipal Facilities

- 65th Street Municipal Campus Plan future parking structure
- 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 17th Street south to 4th Street.
- Baltimore Avenue streetscape improvements from N. Division Street to 15th Street
- 142nd Street Intersection Improvements
- Street paving improvements

Recreation and Parks

- Playground replacements
- Northside Park Improvements
- Eagles Landing Golf Course Renovation
- OC Tennis Center Reimagination
- OC Bowl Skate Park completion

Economic Development/Tourism

- Sports Complex
- Sunset Park Phase 2 Pier

Environmental

- Canal dredging
- Storm Drain annual cleaning

Convention Center

- Convention Center Roof Replacement, Elevators
- Life Saving Museum Elevator and Exit Stairs
- Convention Center Phase 4 master plan

Airport

- Hanger K 3 bay expansion
- Hanger L construction

Water

- Proposed water treatment plant at 66th Street with raw water line extension from well field at existing 44th Street water plant.
- Water main upgrades, Hydrant additions
- Touch Read Meters

Wastewater

- Headworks & Primary Influent Facility replacement
- Maintenance and Repairs of Ocean outfall pipe
- Primary Clarifier Upgrades

Other capital improvements within the corporate limits have been identified for further study as a priority for planning, funding and implementation in partnership with others including:

- Downtown Parking Garage funded by a fee-in-lieu or special tax district
- 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 elevate the Philadelphia Avenue/North Division Street intersection above flood levels, and ultimately replace the Route 50 bridge along the approved Alternative 5A north parallel alignment
- Future Route 90 Dualization by SHA
- Relocation of Transit Stations

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.
- Amend 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. (Refer to appendices D and E in this plan).
- A long-standing recommendation of the Plan is to revise the zoning ordinance to modify the current pyramidal zoning framework. The current zoning framework permits conversion of commercial uses in areas zoned commercial to condominium residential development and allows potentially non-compatible commercial use in established residential areas. 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 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 residential 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 adoption of education and enforcement tools to address impacts of short-term rental housing in established single family 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.

- Amend policy and code regarding non-conforming use to require compliance with alternative minimum standards for parking, floor area ration, open space, etc. with any change of use, renovation, or redevelopment requiring site plan review.
- Promote core principle: Park where you Stay. Consider reduction of off-street parking requirements under limited conditions where appropriate, primarily for commercial uses with access to alternate means of transportation access. 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.
- Continue the practice of strictly enforcing outdoor display of merchandise by retail stores, as it contributes greatly to the 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.

Development Tracking System

Continue integration of the Town's digital records system (Laserfishe) with online GIS mapping tools which are used to track development and record land uses changes as they occur. Such a system should also continue to enhance the following characteristics:

- Complete online permit application and tracking of inspections
- Support online Citizen Reporter web map tool
- 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.
- Improve capabilities for inspection/citation/tracking of development activities

Design Criteria, Standards and Review Process

Across the country, many communities are implementing design guidelines with the development review process to enhance the quality of new development and property renovations. This precedent has demonstrates 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 landowners, developers and the Ocean City Development Corporation. The process has worked well and the use of design standards has already improved the quality of new development and re-development within the downtown area.

Simplified design guidelines were adopted as Code Section 110-181(c) for other areas of Town in 2012 which 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.

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 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.

Housing Element recommendations and current State legislation encourage a variety of housing types to address availability, affordability, and current market demand. In the case of new housing types, such as the hybrid townhouse style condominium with enclosed garages and rear alley access, it is clear that new design standards may be needed to address issues of density, open space, and off street parking.

Economic Development

The Town of Ocean City in its entirety is an area of critical state concern as 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 town should continue to work together to improve Ocean City as a premier resort on Maryland's Coast. 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.

New industries that expand and complement tourism will be encouraged such as: Brewery/Distillery, Water Excursion Tours, and Competitive Sporting Events.

Environmental Resource Management

- The Beach and Dunes The Atlantic Ocean beach serves as one of Ocean City's main recreational assets (* core principle). 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 held in trust under public ownership.
- The Ocean and Bay Waters Water resources are what makes Ocean City a premier resort that is 'naturally cool' (Worcester County Economic Development branding). Ocean City is in partnership with the Maryland Coastal Bays Program to implement a Comprehensive Conservation and Management Plan (CCMP). 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 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 through a Recreation and Parks Master Plan, identification of CIP projects, and encouraging public access easement along bayside boardwalk locations.
- 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 stem. 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 information sources 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. Informed citizens are important to the operation of local government. The Newsletter should continue to be published and distributed as widely as possible.

Annual Report - 2023

The Planning and Zoning Commission 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. Further, a description of upcoming work program elements 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.

Advocacy for Local and Regional Solutions

Elected leaders have the right and responsibility to advocate for the best interests of their community. The Comprehensive Plan is one tool for communicating with County and State leaders how the Town of Ocean City will study, respond and implement shared responsibilities for land use management at the community level. For those specific topics where a clear strategy is not yet defined, the Mayor and City Council will rely on the Planning Commission to prepare a prioritized work list for identifying options and recommendations for the future.

Where the interests and responsibility for local land use control may conflict with State or Federal priorities, the Town of Ocean City will continue to oppose preemption of local land use authority and advocate for cooperative solutions to the challenges ahead.

| Priority | Planning / Zoning Commission 5 Year Prioritized Work List | References Objectives: 0.0 Recommendations: Chapter-number |
|----------|---|--|
| TBD | Chapter One | |
| TBD | Chapter Two | |
| TBD | Chapter Three | |
| TBD | Chapter Four | |
| TBD | Chapter Five | |
| TBD | Chapter Six | |

| TBD | Chapter Seven | |
|-----|----------------|--|
| TBD | Chapter Eight | |
| TBD | Chapter Nine | |
| TBD | Chapter Ten | |
| TBD | Chapter Eleven | |

Figure 9-2 Chart with Summary of Key Objectives and Projects by Chapter

Strategies

- 1) Prioritize goals, objectives and recommendations from all Comprehensive Plan elements to establish a priority work plan on an annual basis
- 2) Align top priorities with Maryland's 8 Planning Principles, Town of Ocean City Strategic Plan, Capital Improvement Plan, Hazard Mitigation Plan and other current planning strategies.
- **3)** Focus action and specific research/study projects toward implementing the 2024-25 Comprehensive Plan.
- 4) Incorporate detailed progress report into annual report to the Mayor and City Council and Maryland Department of Planning (July 1 cycle)

CHAPTER 10: Municipal Growth Element

Ocean City, Maryland is a fully developed barrier island community that measures municipal growth in a variety of ways including recreational experiences, economic opportunity and physical redevelopment.

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.

MD Sustainable Growth Principle 1 – Land

Optimize productivity of working landscapes, including farms and forests and fisheries, and prioritize development within population centers that are in proximity to existing infrastructure and facilities

MD Sustainable Growth Principle 4 – Economy

Allow for adaptive reuse, mixeduse, and context appropriate new development that responds to changing markets and innovations

Population projections and evaluation of build-out potential from previous Plan updates provide land use 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.

Goal:

To implement Ocean City's Strategic Plan Vision and Goals for (1) a 1st Class Resort and Tourist Destination; (2) Financially Sound Town Government; (3) a More Livable Community for Residents; (4) Excellent Service through a High-Performing Town Organization; and (5) Revitalized Ocean City through Development and Redevelopment

Objectives: In order to achieve the municipal growth element goal, the following objectives are adopted:

- 10.1 Expand Ocean City's national reputation as the best beach destination for families, with a safe and clean environment, more conferences, conventions and performances, and quality special events returning value to the community and Town government. Become recognized as 'Maryland's/East Coast Team Sports Capital'.
- 10.2 Manage a strong tourism-based economy with revenue resources, financial reserves and an excellent bond rating necessary to deliver cost-effective and

- efficient services with well-designed, well-maintained Town facilities and infrastructure.
- 10.3 Maintain a safe community with a low crime rate, where year-round residents and Town employees make the choice to live in Ocean City in established neighborhoods, and enjoy improved parks, arts and cultural programs, performances and events, leisure activities and recreational programs for residents of all generations.
- 10.4 Deliver excellent public service through a high performing Town organization and a top-quality workforce dedicated to serving the Ocean City community.
- 10.5 Encourage public and private investment to attract a variety of retail businesses and quality restaurants, continue to revitalize Downtown areas, and build a more walkable/bikeable community with public transportation options
- 10.6 Build on cooperative land use planning efforts outside of the Town's municipal boundary to manage existing Town facilities such as the Ocean City Airport, Eagles Landing Golf Course and the West Ocean City Fire Station, as well as future facilities such as a Youth Sports Complex.
- 10.7 Identify and track measures of growth and improvement that are unique to Ocean City in order to meet the intent of the Municipal Growth Element.

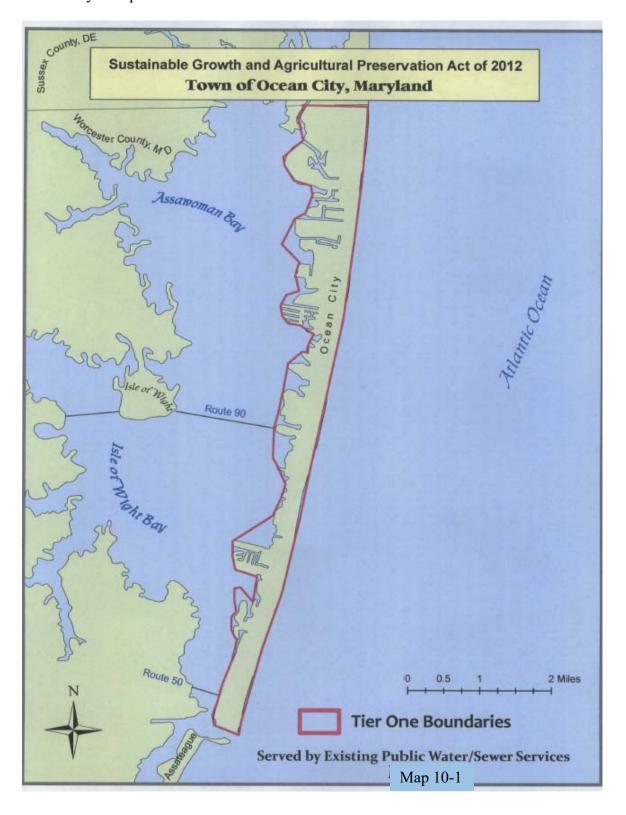
The Sustainable Growth and Agricultural Preservation Act of 2012 (SB 236)

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 #10-1).

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.

The entire municipality is currently shown as an existing sewer service area in the Worcester County 1994 Comprehensive Water and Sewerage Plan as amended, and as the Town of Ocean City has no municipal growth areas designated within the 2006 Worcester County Comprehensive Plan as amended, the Town of Ocean City Sustainable Growth and Agricultural Preservation Act of 2012 Map 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.



Current Legislation

Recent State legislation has placed a priority on infill development, a full range of housing options, and economic development which align well with Ocean City's tourism-based economy and growth strategies.

West Ocean City

The Town of Ocean City shares a community of interest with areas of Worcester County known as West Ocean City with developed land uses along the Route 50 and Route 611 corridors. Ownership and operation of Town properties and facilities outside the municipal town boundary are mutually beneficial for both Worcester County and Ocean City.

Measures of Community Growth

Year-round Population

Chapter 1, Population Characteristics and Trends, of the Comprehensive Plan, contains a detailed analysis of the year-round population of Ocean City. Year-round population, measured in April by the U.S. Census, has remained constant for the last 25 years along with local estimates of seasonal peak population. This stability reflects the physical 'build-out' of the Town, and the need to measure other characteristics for growth and adaptation of the community.

Seasonal Visitor Population

In a resort community such as Ocean City, it is much more important to understand the demographics of the total population, including year-round residents and seasonal visitors. 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 this larger seasonal population. Much of the infrastructure and services are scaled back during the off-season and then operated at full capacity during the peak season. Building on prior methods for estimating peak population, Chapter 5 updates and confirms estimates for planning purposes based on change in water and wastewater use as documented in the 2024 Ocean City Water Master Plan.

The peak population estimate has remained steady for the last 40 years within the range of 294,700 to about 346,062. Ocean City's Water Master Plan refers to metered flow data from the water treatment plants as an indicator of water demand, and analyzes current system demands and patterns to provide a baseline for determining future distribution system upgrades. Reduced water demand since 2010 is attributed water saving fixtures and system improvements rather than peak population loss. Therefore, buildout water

production capacity of 18MGD remains above Year 2040 demand estimates (14.5MGD), assuming a 20% safety factor and a 1.5% annual population growth trend.

Population Projections

Projecting year-round resident and seasonal population in Ocean City is complicated by several factors. Uncertainty about the data collected by the U.S. Census, measured on April 1st, 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 challenges. Vacationers and seasonal workers are not counted by the Census, so historical counts of residents and sample surveys by the ACS are best used for comparative purposes only. Future growth depends on a variety of economic and demographic characteristics. Finally, Ocean City's physical capacity (a geographically confined, largely built community with all of the land developed) and land use policies will have a major effect. Based upon the most recent comparison and analysis contained in the 2024 Ocean City Water Master Plan, populations projections will include a 1.5% annual increase for planning purposes.

| Table 3.1 – Historic Year-Round Population and Projections | | | | | |
|--|-----------------------|--|--|--|--|
| Year | Year-Round Population | | | | |
| 1980 | 4,946 | | | | |
| 1990 | 5,146 | | | | |
| 2000 | 7,173 | | | | |
| 2010 | 7,102 | | | | |
| 2015 | 7,055 | | | | |
| 2020 | 6,869 | | | | |
| 2025 | 7,267 | | | | |
| 2030 | 7,376 | | | | |
| 2035 | 7,486 | | | | |
| 2040 | 7,598 | | | | |

| Table 3.2 – Historic Peak Weekend Population and Projections | | | | | |
|--|--------------------------------------|---|--|--|--|
| Year | Peak Weekend Population ¹ | Adjusted Peak Weekend Population ² | | | |
| 2020 ³ | 323,634 | 275,089 | | | |
| 2021 ³ | 324,602 | 275,912 | | | |
| 2022 ³ | 325,571 | 276,735 | | | |
| 2025 ³ | 328,476 | 279,205 | | | |
| 2030 ³ | 333,403 | 283,393 | | | |
| 2035 ³ | 338,404 | 287,643 | | | |
| 2040 ³ | 343,480 | 291,958 | | | |

¹ Calculated Population Estimate

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. The impact of the nearby area West Ocean City may become greater if growth in Worcester County continues to be directed to existing growth centers. The growth policies of the next Worcester County Comprehensive Plan update will reflect this trend.

²85% Adjusted Calculated Estimate

³ Calculated projections using a 1.5% annual increase

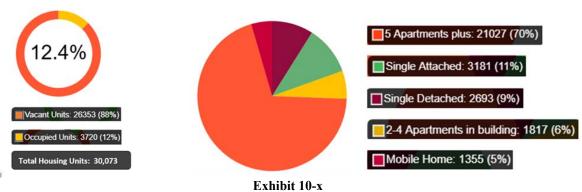


Exhibit 10-x Worcester County Land Use Map – September 2024

Housing Stock and Households

Similar to future population, the housing stock is projected to increase at an incremental pace with redevelopment. This growth is a function of demand for additional seasonal units, while the demand for year-round housing is typically met by the conversion of seasonal units. The majority of the growth of the housing stock will be in the form of redevelopment of older units. Table 3 presents current characteristics of the housing stock.

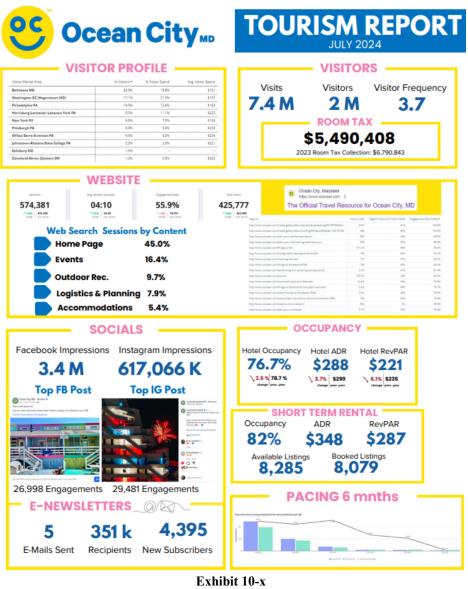
The number of households can only be calculated for year-round residents. It is projected to increase at approximately the same rate as the increase in the year-round population. As is the case with the increase in year-round population, the increase in year-round households has no appreciable impact on town services.



Source: Maryland Department of Planning, 2020 Five Year ACS Housing Data

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 over 10 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.



Source: https://www.ococean.com/media/metric-reports/

Land Use Recommendations

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 2 percent of land in Ocean City is vacant. Therefore 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 2,010 acres of developable land are zoned as follows:

 Residential
 1,173 acres (58%)

 Commercial
 377 acres (19%)

 Municipal/Public
 103 acres (5%)

 Recreation
 55 acres (3 %)

 Open Space
 254 acres (13 %)

 Vacant
 48 acres (2 %)

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.

Land Use 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

Based on Census data and American Community Survey estimates, the year-round population of Ocean City is expected to remain constant or increase slightly, however, 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 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. Planning for a moderate growth rate consistent with both State and County estimates is proposed.

The fact that less than 2% 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.
- o Higher density residential development should continue to be encouraged to locate on the oceanside.
- o 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.
- o 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 over 30,000 dwelling units in the town to accommodate the population of 6,844 (2020 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 re-developable 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.

Table 5 highlights the conversion of commercial zoning to residential use that has occurred since the 2017 Comprehensive Plan was adopted: 280 townhouse condominium units on approximately 14 acres of commercially zoned land.

Table 5 – Build-Out Projection

| | Developable Land | | Permitted | | | | |
|--------------------|------------------|--------|----------------|------------------|-------------------------|----------------|-------------------------------|
| Zoning District | # Parcels | Acres | DU per Acre | Maximum Units | Adjusted Units (75%) | Existing Units | Potential Additional Units |
| B-1 | 73 | 16.11 | 43.6 | 702 | 526 | 410 | 116 |
| BC-2 | 25 | 3.79 | 43.6 | 165 | 124 | 240 | -116 |
| BM-1 | 25 | 8.16 | 43.6 | 355 | 267 | 7 | 260 |
| BMUD | 17 | 37.32 | 43.6 | 1,626 | 1,219 | 5 | 1,214 |
| DM | 23 | 3.97 | 43.6 | 173 | 130 | 30 | 100 |
| DMX | 159 | 20.30 | 43.6 | 884 | 663 | 540 | 123 |
| DR | 4 | 0.82 | 21.8 | 18 | 13 | 21 | -8 |
| I-1 | 5 | 3.06 | 43.6 | 133 | 100 | 2 | 98 |
| LC-1 | 370 | 134 | 43.6 | 6,107 | 4,580 | 900 | 3,680 |
| М | 7 | 3.89 | 43.6 | 169 | 127 | 12 | 115 |
| MH | 44 | 17.12 | 43.6 | 746 | 559 | 30 | 529 |
| R-1 | 398 | 54.36 | 8.7 | 473 | 355 | 321 | 34 |
| R-2 | 432 | 59.47 | 21.8 | 1,296 | 972 | 625 | 347 |
| R-2A | 28 | 2.02 | 10.9 | 22 | 17 | 23 | -6 |
| R-3A | 436 | 74.19 | 43.6 | 3,235 | 2,426 | 3,047 | -621 |
| R-3A | 191 | 22.08 | 30.0 | 663 | 497 | 496 | 1 |
| SC-1 | 18 | 48.97 | 43.6 | 2,469 | 1,851 | 238 | 1,613 |
| Totals | 2,255 | 509.63 | | 19,236 | 14,426 | 6,947 | 7,479 |

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 7,479 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 7,479 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 1.8 persons per unit on one particular day in April, an additional 13,462 people would be added to the Town's resident population. 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 population based on the current State and County growth rate is used. No change is proposed with the 2025 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 (2023-2024) 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.

The Master Plan notes that growth in the general population has plateaued, however resurgence of residential and commercial development is anticipated. Anticipated needs will include additional classrooms, renovation and modernization of aging buildings, and improved technology to meet changing program needs.

Enrollment projections for the North County schools are presented in Table 12. From 2022 to 2027 the North County enrollment for all schools are projected to decrease by 34 students per year.

The school age population of Ocean City under 18 years old (2020 Census) is only about 9.6% of the town's total population compared to about 17.1% of the Worcester County population. 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 constructed in 2008 in Ocean City located on Coastal Highway at 100th 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.

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 – 2024 Update, and in the new Water Resources Element in Chapter 11.

Generally, the existing raw water supply consists of 22 production wells in the Ocean City Aquifer 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 up coning in specific areas. The current available raw water supply safely exceeds the treatment capacity of each associated treatment

plant. As the water supply system is improved in the future, additional wells are planned 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 2040.

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 (15th Street, 44th 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 2040 maximum day demand of 14.5 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 five elevated and one ground level water storage facilities spaced along the near 9-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 1st Street replaced the former 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 was 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 up coning 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.

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 at regular intervals.

The plant's Wastewater treatment design capacity is currently 14 million gallons per day (mgd) based on average daily flow. Additional sludge handling capabilities constructed in 1998 increased the capacity from 12 to 14 mgd. An additional clarifier was installed in 2016/17 which allows an increase in treatment capacity to 16 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. Prior engineering studies have concluded that the future wastewater treatment capacity required will be 16 MGD.

A portion of West Ocean City is now served by a new Worcester County treatment facility. 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.

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 is limited by the island's lack of topographic relief. Without the required change in elevation, water can back up and create flood conditions. Several streets on the bayside are simply sloped toward the bay and canals. At the end of the street, a sediment basin removes pollutants and debris. Tides can 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.

Mitigation for future conditions will benefit from development and redevelopment requirements to meet current, more stringent standards for infiltration, and building standards for freeboard elevation above potential flood levels.

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 recreational 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.

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 1.26% of the actual property value in the Town. The debt limit is 5.2% of assessed value, leaving a legal debt margin of \$392.4 million dollars. (Source: FY24 Annual Comprehensive Financial Report)

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 know 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. 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 7 of the Comprehensive Plan discusses 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) 100-year floodplains, 3) habitats of threatened and endangered species, 4) coastal bays and buffers, 5) wetlands and tidal/nontidal buffers, 6) dunes, and 7) beaches.

Ocean City's land area includes approximately 2,853 acres or 39% areas within a Special Flood Hazard Area. 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 C 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 and environmental change 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 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 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.

Strategies

1) Land

- a. Promote mixed-use redevelopment in Downtown Areas and Commercial zoning districts. Introduce new zoning regulations to limit conversion of commercial property to 100% residential use.
- b. Evaluate redevelopment incentives, and reduction of non-conformity principles to create clear and predictable design standards.
- c. Identify higher development standards that can be accomplished incrementally over time through public and private investment to mitigate future environmental change and flooding impacts.
- d. Study and adopt redevelopment standards and incentive programs to encourage more beneficial open space at the parcel scale.

2) Economy

- a. Enhance event-based tourism strategies to maintain economic activity throughout the year
- b. Advocate for development of a Team Sports Complex that will align with regional infrastructure and tourism resources to expand family vacation experiences
- c. Continue to build on cooperative economic development efforts through active participation with the Tri-County Council and the Comprehensive Economic Development Strategy (CEDS)

Chapter 11: Water Resources Element / Mineral Resources Element

Maryland Land Use Code Sec. 3-102 lists required comprehensive plan elements: 3-106 requires all Maryland municipalities to include a water resources element in the comprehensive plan; and Section 3-107 requires the preparation of a mineral resources element if geologic information is available. For coastal Maryland, these subjects are a related story with layers of sand and clay separating groundwater aquifers, an abundance of coastal waters and critical sand resources for barrier island resilience.

The water resources element must address the following topics:

1. 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

MD Sustainable Growth Principle 8 - Ecology

Protect and restore sensitive ecological systems and conserve natural resources, including forests, agricultural areas, and waterways

MD Sustainable Growth Principle 6- Resilience

Integrate resiliency measures that will minimize the impacts of rapid and unexpected natural and human-caused threats on communities

- 2. 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. Any significant change in water/sewer demand and/or stormwater runoff
- 4. Land use plan implementation and impact on flood prone areas
- 5. Community resilience to changing conditions

The water resources element for the Town of Ocean City, Maryland Comprehensive Plan was originally adopted in October 2009 and has been updated and combined with a new Mineral Resources element with the last Plan update. The chapter relies on extensive prior analyses of land 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 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, adverse effects of future growth or environmental change 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.

Objectives: In order to achieve the water resources/mineral resources goal, the following objectives are adopted:

- 11.1 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 Provide for adequate municipal water, wastewater and stormwater services to facilitate the desired amount and pattern of growth.11.3 Protect and responsibly manage groundwater resources as the primary water supply for the present and future population of Ocean City.
- 11.4 Manage peak season groundwater withdrawal in compliance with State permits and sustainable practices.
- 11.5 Coordinate with State and Federal agencies to meet regional standards for source water protection of critical watersheds, groundwater recharge areas, wells and treatment facilities.
- 11.6 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.



Figure 11-1 Ocean City, MD – Surrounded by Water Photo: Chris Parypa Photography

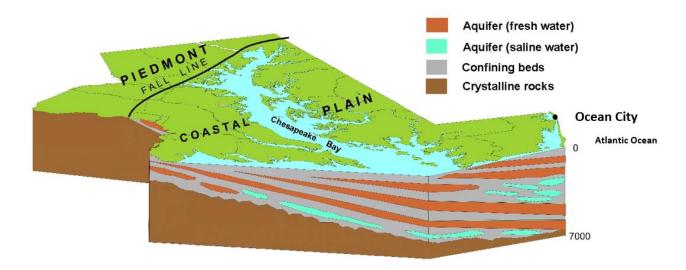
11.7 Implement strategy for incrementally raising structures and land elevation through code requirements to minimize flood risk within the municipal limits as redevelopment occurs.

- 11.8 Continue to manage nutrient loading through the Coastal Bays Critical Area Program implementation by improved stormwater management, required open space, and increased pervious land coverage with redevelopment.
- 11.9 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.
- 11.10 Identify sand resources necessary for long term beach replenishment, and potential emergency dune or breach repairs.
- 11.11 Incorporate climate adaptation and future conditions into water resources research, analysis, and amended plans when updated.

Section 1 - Coastal Geology and Groundwater Resources

Ocean City is located in the Mid-Atlantic 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.

Maryland's Atlantic coast is rich in natural resources. These natural assets are prized 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 for coastal communities, agriculture, forestry and recreation. It would be impossible to *Live*, *Work and Play* in Ocean City without the recreational benefits of these priceless resources.



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.

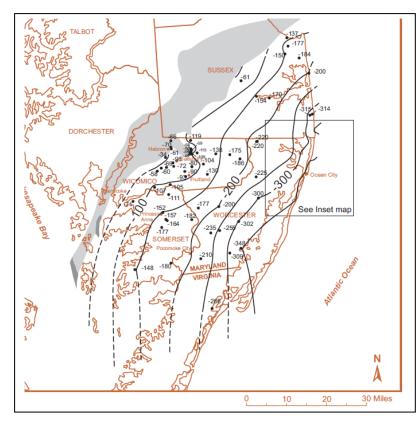
Figure 11-2 Coastal Cross Section http://www.mgs.md.gov/groundwater/md groundwater.html

Groundwater

Four groundwater aquifers underlie Ocean City. The upper two, the Pleistocene and Pocomoke, suffer from vulnerability to salt intrusion. The lower 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.

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 for Ocean City are recharged in the Manokin sub crop. This sub crop is a seven-mile-wide band (shaded area) beginning northwest of Salisbury in the Hebron area and spreading northeast through Laurel, Georgetown, and ending at the coast at Broadkill Beach in Delaware. Maryland Department of Environment has prepared source water assessment studies, including one for Ocean City in 2005. There is limited coordination of this information across jurisdictional boundaries regarding source water protection and groundwater recharge for major aquifers.

FIGURE 11-3 Groundwater Recharge Area

(Source: https://www.mgs.md.gov/groundwater/index.html)

Section 2 - Land Use Plan and Groundwater Use

The comprehensive plan anticipates a slow rate of population growth consistent with the last 20 years with an increasing trend toward retiree primary residents, multifamily second homes and rental property investments continuing to be the majority of new housing structures. Demand for seasonal use and multi unit housing will persist throughout the planning period. Reconstruction of single-family homes and mobile homes has steadily improved and enlarged individual residential units and increased water use fixtures at the same time that overall water use has decreased.

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. The lack of land available for future development in Ocean City reflects a build out condition for future infrastructure and water demand.

Upgrades to infrastructure with regular maintenance 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 continue to be monitored for possible impacts to water demand quantity and peak use periods, along with commercial uses such as a brewery/distillery which may increase water demand and create new wastewater treatment needs.

The existing land use map (Chapter Three, Land Use and Community Character) indicates existing residential and commercial development. Commercial uses on the Oceanside of Coastal Highway 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) reflects a policy to encourage a majority of residential land use east of Coastal Highway which may include new multi-use projects in the future. Larger commercial uses will remain west of Ocean City due to the lack of developable land in Ocean City. Conversion of commercial uses to residential is noted in Chapter 10 - Municipal Growth Element.

Year Round / Seasonal Population Water Use

Very little increase in permanent 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 remains stable with a slight decline in 2020 to 6,912 (U.S. Census Bureau). Nevertheless, the Town maintains focus on the impact of the seasonal population as it affects water demand and wastewater treatment for effective infrastructure to support the maximum demands of the population.

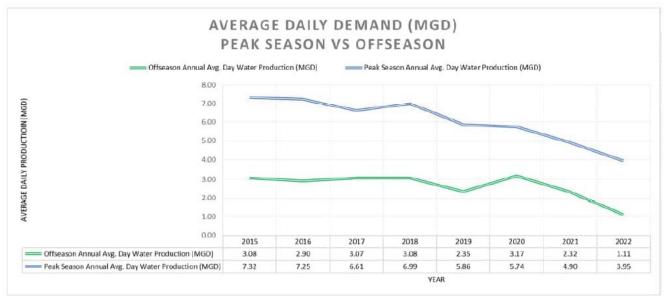


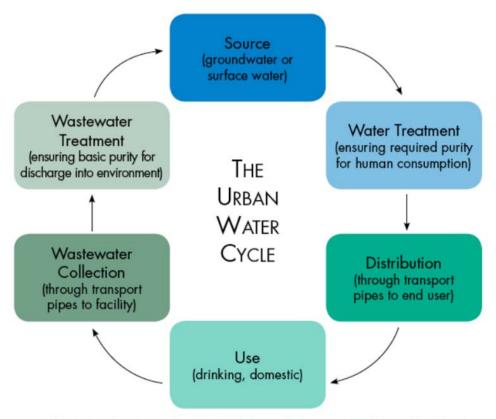
FIGURE 11-4 Average/Peak Seasonal Water Use (Source: Ocean City Water Master Plan 2024 Update)

After 20 years of all metrics demonstrating stability in the year-round population, the long-range population projection has been established to accommodate our local share of projected State and County population growth at an estimated rate of 1.0 to 1.5%, while recognizing a steady reduction of groundwater use. This trend is expected to level off at a new, well managed baseline rate of sustainable water use.

Ocean City's water supply system includes 22 production wells, 3 treatment plants, 5 elevated water storage tanks, 1 ground storage tank, and 96 miles of water pipe.. 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 most recently updated in 2024. The study indicates that the water supply within the Manokin and Ocean City aquifers has been and will remain safe and adequate to supply the Town of Ocean City, Maryland's drinking water needs beyond the planning period, and through 2040. 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.

The Town of Ocean City, MD Water Master Plan -2024 Update is incorporated into Chapter 5 and Chapter 11 of the Comprehensive Plan to meet the requirements of the Water Resource Element.



The urban water cycle. Adapted from Robert B. Sowby, National Geographic.

Source: http://extension.msstate.edu/publications/water-sink-sea

Section 3 - Wastewater Management

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 current and improved collection, treatment and disposal capabilities. The service area includes the boundaries of the Town of Ocean City, Maryland (See Chapter 10 for Tier 1 Map) and additional treatment capacity for West Ocean City by agreement with Worcester County. The treatment plant at 64th Street was constructed in 1969, with maintenance, expansions and secondary treatment upgrades completed as needed.

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. (Map 10-1)

The Town of Ocean City Wastewater Treatment Plant is currently operating under an approved permit by the Maryland Department of the Environment for 14 million gallons per day (MGD) treatment capacity with an Atlantic Ocean discharge of treated secondary effluent. Discharge

point "001" is the Atlantic Ocean off of 64th St. over three quarters of a mile from shore, and located outside of the Maryland Coastal Bays watershed. Outfall point "002" is located at the Northwest corner of the treatment plant complex on the Assawoman Bay. This secondary outfall would only be used in an emergency situation. To date, the Assawoman outfall has never been used. Treated Class "A" biosolids are transported to local farms by Ocean City 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.

A Climate Change Resiliency Report was prepared by the Town of Ocean City in 2024 for MDE that summarizes several points:

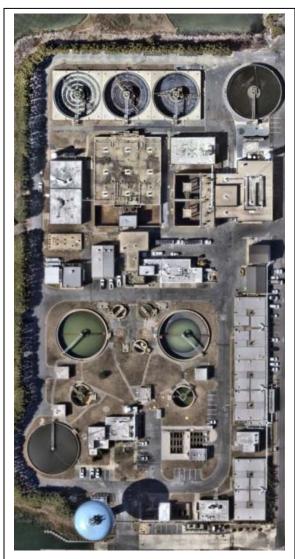


Figure 11-6 Aerial View of Ocean City WWTP Source: NearMap

- 2023 annual average effluent flow was recorded at 4.847 MGD which is 35% of the permitted flow value of 14 MGD
- Maximum monthly average flow was 9.112 MGD, recorded in August which is 65% of the permitted flow of 14 MGD
- Peak daily flow of 11.210 MGD in 2023 occurred on August 12th during a special event weekend which is 80% of the permitted flow of 14 MGD
- Ocean City's storm drains are not tied into the town's sewer system. In 2016 the town contracted AM Liner to clean, evaluate, and line sewer laterals and mains within the collection system reducing infiltration during high tide cycles and rain events. This greatly diminishes effects of tidal flooding and rainfall relative to wastewater surge inflow
- Town of Ocean City WWTP is able to handle the high flow of rain events due to the nature of seasonal flow variations. During the peak season of June, July, and August 2023 average daily flow 8.083 MGD representing 58% of the 14 MGD permitted flow. Utilization of equalization basins assist in buffering diurnal and seasonal flow variations. The WWTP facility has six 250,000-gallon capacity equalization basin cells with total volume capacity of 1.5 million gallons. These basins are used to dampen the effect of high influent flows from storm flow events.
- Ocean City has planned for a fourth secondary clarifier for wastewater treatment at which point, treatment capacity could be increased to 16 MGD if needed to meet the needs of future growth.

The Town of Ocean City, MD Water Master Plan – 2024 Update is incorporated into Chapter 5 and Chapter 11 of the Comprehensive Plan by reference to meet the requirements of the Water Resource Element for wastewater discharge to receiving waters.

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 type of 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 and disposal capabilities to handle projected population increases to the year 2035 and beyond.

Section 4 - Stormwater Management

Stormwater runoff is generated from rain and snowmelt that flows over land or impervious surfaces, such as paved streets, parking lots, and building rooftops, and does not soak into the ground. Runoff can pick up and deposit pollutants like trash, chemicals, and dirt/sediment into streams, lakes, and groundwater. Construction sites, lawns, improperly stored hazardous wastes, and illegal dumping are all potential sources of stormwater pollutants. To protect water resources, the Town of Ocean City employs management practices to control stormwater and prevent pollution at its source.

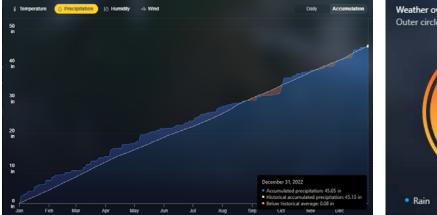




Figure 11- 7 Annual Average Precipitation
Source: https://www.msn.com/en-us/weather/records/in-Ocean-City,MD

Ocean City's annual rainfall averages forty-nine inches, which translates to approximately 200,000 gallons per acre or 23,000 gallons on a typical 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 surface area to allow infiltration. 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 recognizing the coastal area constraints 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 salt water intrusion. 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.

Coastal Bays

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 in the Assawoman Bay and Isle of Wight Bay.

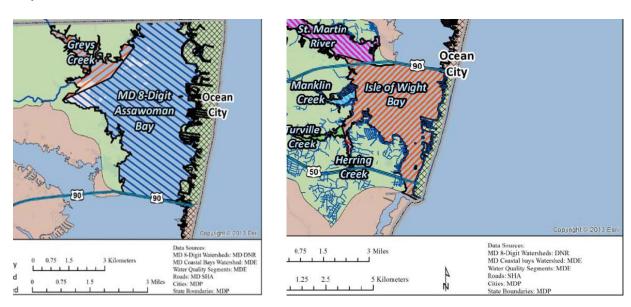


Figure 11-8
Assawoman Bay and Isle of Wight Bay Sub-watersheds

Maryland's Coastal Bays are included in the National Estuary Program. The National Estuary Program (NEP) is an EPA place-based, non-regulatory program to protect and restore the water quality and ecological integrity of estuaries of national significance. In keeping with section 320 of the Clean Water Act, the Maryland Coastal Bays Program (MCBP) develops and

implements a Comprehensive Conservation and Management Plan (CCMP), which includes long-term plans that contain sustained actions to protect and restore water quality and living resources. The 2025 CCMP is incorporated by reference into this Comprehensive Plan element.

Existing water quality impairments to the Coastal Bays led to the EPA approval of a Total Maximum Daily Load (TMDL) report in 2014 to establish water quality standards for the release of nutrients into local waters. The Town of Ocean City is participating with the State of Maryland, Worcester County and the Maryland Coastal Bays Program to advance a watershed implementation plan for nutrient management in the Coastal Bays which is reflective of Ocean City's existing urban development, significant previous efforts to manage nutrient removal, and our Tier One growth area designation.

The <u>Coastal Bays TMDL – Revised Final</u> version, dated September 23, 2014 identifies contributing sources of nitrogen and phosphorus nutrient loading into the Maryland Coastal Bays drainage basin adjacent to Ocean City. Urban land use allocation to a baseline measure of nutrients is estimated at 6% and 9% respectively in MD 8-Digit Assawoman Bay, with 22% and 29% respectively in MD 8-Digit Isle of Wight Bay* (*shared with Ocean Pines and West Ocean City).

A <u>Maryland Coastal Bays Watershed Plan</u> was developed by the Center for Watershed Protection for Worcester County in September 2019 to address water quality impairments, and to meet the nonpoint source TMDL load reductions from the Maryland portions of the Coastal Bays watersheds. The plan follows the nine elements for watershed planning known as the 'ai criteria' established by the US EPA and calculates BMP credit for urban and redevelopment pollution load reduction in Ocean City (page C-8). The Watershed Plan is incorporated by reference into this Chapter.

Maryland Coastal Bays Watershed Plan Including Assawoman Bay "a - i" Subwatershed Plan September 2019







One indicator of the water quality and environmental health trends of the Coastal Bays is an ecological 'report card' prepared by a coalition of the MCBP and research partners [www.marylandcoastalbays.ecoreportcard.org]

THE MARYLAND COASTAL BAYS CONTINUE TO IMPROVE

Coastal Bays health is defined as the progress of four water quality indicators (nitrogen, phosphorus, chlorophyll *a*, dissolved oxygen) and two biotic indicators (seagrass, hard clam) toward scientifically derived ecological thresholds or goals.

The Coastal Bays had an overall score of B- (64%), which is the highest score the Coastal Bays have ever achieved. The letter grade is the same as last year, but improved by two points. Improvements were seen in hard clams and seagrass scores. While seagrass scores are still low, strong improvements were seen in Chincoteague Bay and Sinepuxent Bay, which is promising. Four regions had overall scores in the B range for the first time.

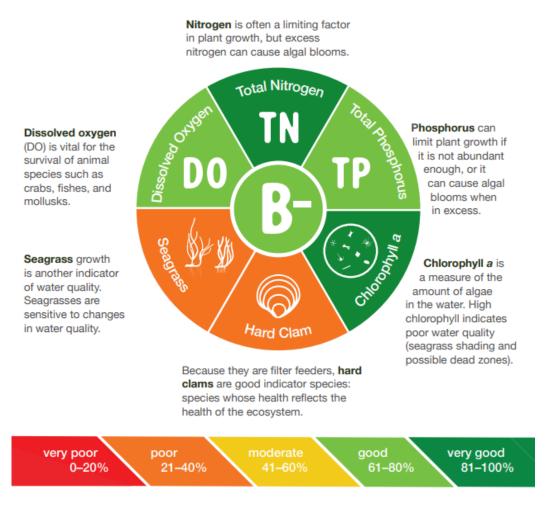


Figure 11-9.1 Maryland Coastal Bays Report Card 2023

ALL REGION SCORES IMPROVED IN 2023

The highest-scoring region was Sinepuxent Bay, with a B+ grade. Despite a declining dissolved oxygen score, Sinepuxent Bay improved due to increases in hard clams and seagrass scores. Assawoman Bay continued to improve, with a B- grade for 2023, the highest score it has ever achieved. This was due to strong improvements in dissolved oxygen scores. Chincoteague Bay and Isle of Wight Bay slightly improved, each scoring a B-. St. Martin River received a C grade, with strong improvements in hard clams. The lowest-scoring region was Newport Bay, with a C-. This was a slight improvement from the previous year due to

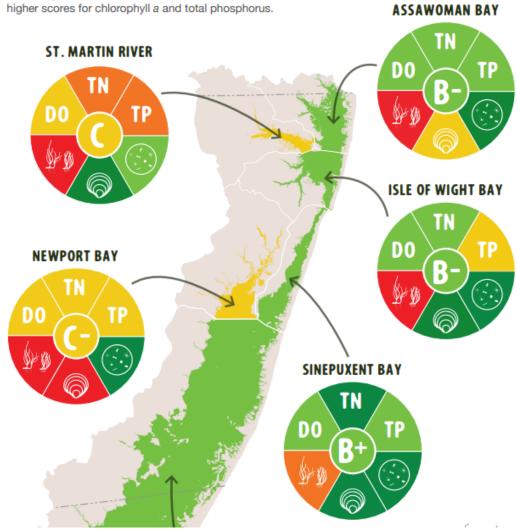


Figure 11-9.2 Maryland Coastal Bays Report Card 2023

In determining water quality impacts to the watershed resulting from development and redevelopment in Ocean City, the Town maintains a database of all Best Management Practices (BMPs) to calculate nutrient removal, and completes periodic inspection for required maintenance.



Ocean City is a fully developed community with a comprehensive stormwater collection system, however there is a limited concentration of flow due to over 330 micro-watersheds and extensive use of site based infiltration systems. Other characteristics of the Town's barrier island location which guide solutions for stormwater discharge to receiving water resources include:

- Stormwater collection system includes over 40 miles of storm drain pipe, over 1,800 inlets and over 300 outfalls
- Stormwater systems flow by gravity from east to west at a slope of no more than half a percent. The largest pipe size at the Coastal Highway end is 24 inches and can sometimes be doubled to increase capacity
- Average elevation of Coastal Highway is around 6 feet above mean low water, with maximum distance to the closest outfall between 1,000 and 2,000 linear feet
- Infrastructure is designed to handle rainfall from a 10-year storm, or about 1 inch per hour during a three-hour storm duration. Higher intensity or longer duration often creates temporary inundation especially during high tide conditions
- Ocean City includes 64 canals and bayside marsh frontage providing waterfront property along approximately 50 miles of bayside shoreline (William & Mary VIMS Coastal Inventory 2006)
- Modified implementation of Statewide stormwater management regulation is needed to account for tidal influence, rapid infiltration rates and shallow depth to water table.

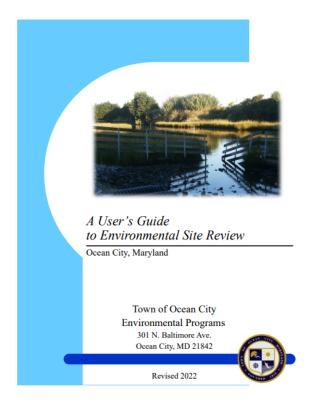
The Ocean City Stormwater Management Ordinance, Article III, Section 30-141 of the City Code was adopted May 17, 2010: "The purpose of this article is to protect, maintain and enhance the public health, safety, and general welfare by establishing minimum requirements and procedures to control the adverse 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, reduce local flooding, and maintain after development, as nearly as possible, the pre-development runoff characteristics."

Redevelopment activities in Ocean City are subject to Stormwater Management and Critical Area Program regulations found in Town Code Chapter 30. Maryland State Law requires that stormwater **water quality** and **water quantity** management be provided for all development activity, including demolition, construction, site improvement and redevelopment, when more than 5,000 square feet of land will be disturbed. Application of Critical Area Program standards to the entire Town allows for incremental **water quality** improvements as each property redevelops over time.

Because a majority of the Town's stormwater runoff discharges to tidally influenced waters at the lowest end of the watershed, water quantity management can be waived, unless historical flooding problems exist. Projects located north of 33rd Street and east of Coastal Highway must provide stormwater quantity management even if the site's stormwater runoff discharges to tidally influenced waters due to lack of stormwater infrastructure in portions of the ocean block and northbound lanes of Coastal Highway. Projects requesting a stormwater management waiver must apply for environmental site review. Water quality and quantity treatment calculations are discussed in more detail in Sections 9.0 and 12.0 of

<u>A User's Guide to Environmental Site Review - Ocean City, Maryland, Revised 2022</u>

(https://oceancitymd.gov/oc/departments/planning-community-development/environmental-programs/)



Environmentally Sensitive Design (ESD) is required to the maximum extent possible in treating the water quality volume. These designs include bio-swales, rain gardens, infiltration trenches, roof drain diversions, pervious paving material, cisterns for water re-use, and/or reducing impervious surfaces. The overall post construction pollutant loads will be reduced to 10% below pre-construction loads with a minimum 50% reduction of existing impervious surface. With redevelopment, current regulations and required stormwater management practices will continue to help protect our groundwater and receiving water resources.

Atlantic Ocean

Ocean City has a strong track record of, and has received national recognition for, recreational beach and ocean water cleanliness. This is due in part to long term planning and development directing all stormwater runoff westward away from the ocean, and limiting Ocean City's one ocean outfall for the receiving waters of treated and disinfected effluent from the town's wastewater treatment plant to be dispersed a mile offshore. Town Public Works also performs daily and seasonal beach maintenance, and the Ocean City Green Team coordinates a Litter Free OC campaign that includes regular community wide beach clean ups.

Water quality is rigorously measured by the Worcester County Department of Environmental Programs and community partners with public information posted on numerous websites.

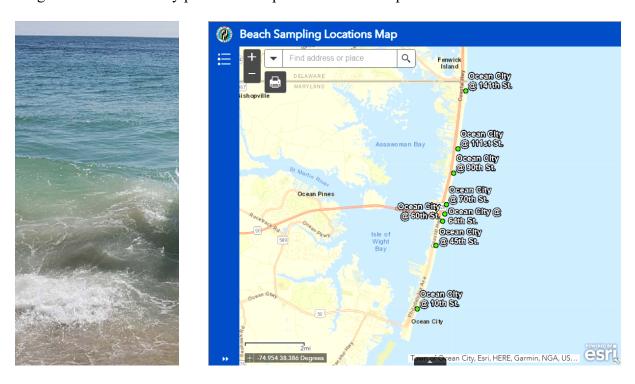


Figure 11–10 Ocean Water Quality Testing

Source: https://www.co.worcester.md.us/departments/environmentalservices/beaches

Section 5 - 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. 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 bays or near shore coastal areas, other than for normal maintenance dredging and shoreline management, poses similar difficulties. Environmental impacts to wildlife habitats, as well as the sport and commercial fisheries must be considered along with potential impacts on tourism.

The US Army Corps of Engineers-Baltimore District manages significant projects in support of Ocean City including the Atlantic Coast of Maryland Shoreline Protection Project. The project provides for a steel sheet pile bulkhead along the boardwalk for approximately 1.4 miles from 4th street to 27th street; the placement of sand along the Ocean City coastline to widen and raise the beach profile for 8.3 miles from 3rd Street north to the Maryland-Delaware state line with an additional 0.3-mile transition into Delaware; and a vegetated sand dune for 6.9 miles from 27th Street north to just beyond the state line. Initial construction of these features was

completed in 1994. 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 US Army Corps of Engineers and State agencies participate in a joint permit process including channel and canal dredging, beneficial use of dredge material, along with many storm risk reduction and navigation projects along the Maryland coast, the Ocean City Inlet and the Coastal Bays.

USGS and the Maryland Geological Survey conduct 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. U.S. Army Corps of Engineers research on potential offshore sand resources for shoreline renourishment is current and inclusive of prior coastal research.

Resource links:

http://www.mgs.md.gov/coastal_geology/offshore.html https://www.boem.gov/marine-minerals

Within ocean coastal areas, the competing demand for both extractive (sand) and renewable (wind) resources are being mapped and evaluated using the MARCO data portal. Along the Atlantic Ocean coast of Maryland, commercial and recreational fishing place an equally important overlay on the use of coastal resources.

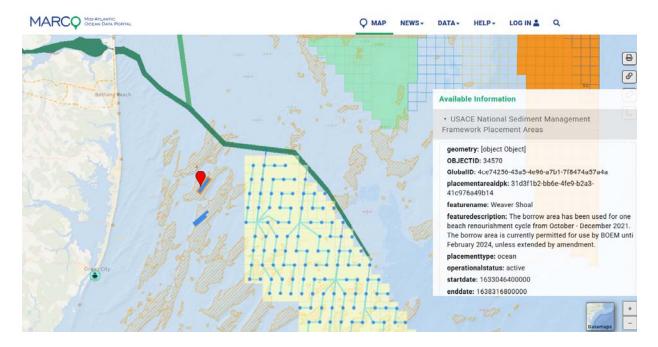


FIGURE 11-1 Ocean Resource Mapping (Source: https://portal.midatlanticocean.org/)

Specifically, the USACE has received approval for use of suitable federal sand resources from the Weaver Shoal in order to implement the long-term Maryland Shoreline Protection program through the year 2044.

Proximity of lease areas for construction and operation of offshore wind energy structures may have unintended consequences and cumulative adverse impacts to the shoal-based sand resources that protect the Ocean City community. Other consequential changes may occur in the seasonal cycle of beach sand nourishment due to the effects of wind and water turbulence from over 140 turbines. Water quality impacts can also reasonably be expected from any offshore energy development.



https://earthobservatory.nasa.gov/images/89063/offshore-wind-farms-make-wakes



https://www.ecoticias.com/en/impact-of-wake-effect-on-wind-power/12872/

In light of potential problems with offshore energy exploration and mineral extraction, proposals for such activity should be cautiously approached with enhanced community participation and full consideration of environmental, economic, and coastal community impacts. Ocean City Mayor and City Council have adopted resolutions in opposition to industrial offshore energy development as a noncompatible use.

The importance of protecting and managing Maryland's Atlantic Coast shoreline with its premier seaside community, exceptional water quality, clean sand beaches, and engineered dune systems is critical for the future.

Section 5 – Community Resilience

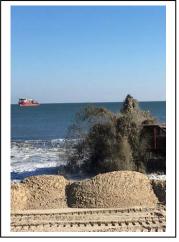
The Town of Ocean City Hazard Mitigation Plan states that 'Resiliency is the capability to quickly 'bounce back' from a disaster event'. For the purpose of the Comprehensive Plan, the

question of community resilience takes a broader view toward building a strong town that lasts for generations, a strong tourism-based economy, and sustainable management of environmental risk and resources. Guidance from the Maryland Department of Planning also encourages local governments to take actions that protect water resources and water infrastructure from extreme and compound climate related impacts.

For these reasons and more, Ocean City has built a network of **partner organizations** and programs to manage the community for build out urban conditions with high peak period use. Successfully adapting to changing climate conditions is a part of the community's 150-year history including the following risk factors or their combined impacts*:

- Shoreline Erosion
- Tidal flooding
- Hurricane and tropical storms
- Nor'easters
- Intense precipitation or drought extremes
- Thunderstorms and high wind conditions
- High heat days
- Sea Level Rise
- Emerging infectious diseases (* see 2023 Hazard Mitigation Plan adopted by reference)





USACE and Maryland DNR - One example of adaptation and resilience began with the Ash Wednesday Storm of 1962 as a late season Nor'easter with damaging wind driven waves superimposed on high spring tides over an extended 5 tide cycle. The US Army Corps of Engineers responded with disaster assistance and ultimately with construction of the existing Atlantic Coast of Maryland Shoreline Protection Project in 1994, which continues to provide risk reduction for Ocean City and is estimated to prevent roughly \$927 million in damages since 1991. (Source: https://www.nab.usace.army.mil/Media/News-Stories/Article/1097937/fifty-five-years-later-ash-wednesday-storm-still-affects-ocean-city-but-not-how/)

FEMA and CRS – Through participation in the National Flood Insurance Program since 1971, Ocean City has continued to build resilience with adoption of international building codes, and higher standards for elevation of structures above flood levels. Adoption of more accurate FEMA RiskMAPs in 2015, recognized the long-term shoreline protection program in partnership with USACE and the State of Maryland, and mapped reduced risk for over half of the properties in Ocean City. Class 6 in the Community Rating System recognizes Ocean City's continued implementation of higher standards for flood risk reduction since 2017 with a 20% discount on flood insurance for applicable properties.

Maryland DNR and Maryland Coastal Bays Program - To enhance the resilience of every coastal jurisdiction in Maryland and to prepare for the future of increased flooding, the State of Maryland requires that every coastal municipality and county that experiences nuisance

flooding submit a nuisance flood plan (NFP) to be updated every five years. Ocean City's <u>2020 Nuisance Flood Plan</u> is incorporated by reference including flood thresholds, community impacts of flooding and how flooding may be minimized moving forward. By incorporating the Maryland Coastal Bays Program CCMP into the Town's Comprehensive Plan, Ocean City joins with the National Estuary Program and EPA's work to prepare communities for changing environmental conditions in the future.

Conclusion

In order to remain a viable and successful community, community leaders will continue to adapt and innovate strategies and best practices to maintain a high-level visitor and resident experience in Ocean City. Meeting the demand for potable water, properly treated wastewater, and fishable/swimmable water quality by managing stormwater runoff are essential for our future. The Town is committed to achieving these mandates as evidenced by monitoring of all water systems, by the periodic updating of the *Comprehensive Water Supply Study*, and rigorous enforcement of environmental regulations.

Strategies

1) Ecology

- a. Future land use planning should continue to manage urban nutrient and pollution loads necessary to assist Worcester County in meeting State water quality standards.
- b. Require site development techniques to meet adopted Critical Area Program standard for Ocean City, minimize impervious area with redevelopment, and incrementally reduce nutrient loads per unit of development.
- c. Advocate for improved State enforceable policies for coastal offshore energy or mining projects under NEPA review, and extension of Maryland's Geographic Location Description (GLD) to require federal consistency review
- d. Support Worcester County efforts to maintain the West Ocean City harbor as a working waterfront for commercial fisheries, and to continue effective navigation channel dredging in partnership with State and Federal agencies

2) Resilience

- a. Complete inventory of all critical facilities identified in the Hazard Mitigation Plan, and identify a program for implementation of resilience-based mitigation measures
- b. Incorporate 5-year recommendations from the Nuisance Flood Plan into Comprehensive Plan elements
- c. Continue to advance partnership with USACE with request to update Benefit Cost Analysis since 2019 based on current property assessment values
- d. Compile USACE coastal storm risk management assessments and back bays studies from Atlantic Coast communities to identify best practices and cost estimates for consideration in Ocean City

e. Review best practice examples of community stormwater management plans, including City of Miami, to identify new strategies for prioritizing building code initiatives, and infrastructure improvements to plan for coastal resiliency



Exhibit 11-xx

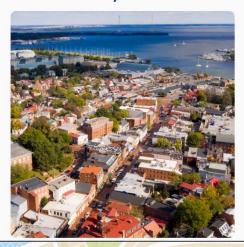
Source: USACE Baltimore District - Ocean City of Maryland Navigation Project Feasibility Study Economic Analysis October 2021

Appendix A

Maryland Economic Growth, Resource Protection, and Planning Policy (2025) – 8 Planning Principles

SUSTAINABLE GROWTH IN MARYLAND SG Policy & Planning Principles: What has been updated?

- Adapted Existing Vision Statements: consolidated, reframed, filled gaps (equity & resilience)
- ▶ Name Change: "Visions" to Planning "Principles", a more common language used in the field of planning for this policy purpose. Align with Subcabinet 2024 amendment from Smart to Sustainable.
- Identified Priority Topic Areas: identified those topics that are directly related to land use and growth policy





PLANNING.MARYLAND.GOV

Wes Moore – Governor | Aruna Miller – Lt. Governor | Rebecca Flora, AICP -Secretary

MARYLAND'S SUSTAINABLE GROWTH POLICY & PLANNING PRINCIPLES (SGP3)

Next Steps:

- Planning Director Roundtables
- Implementation Guide Development
- Sustainable Growth Network





PLANNING.MARYLAND.GOV

Wes Moore – Governor | Aruna Miller – Lt. Governor | Rebecca Flora, AICP - Secretary

Department of Legislative Services

Maryland General Assembly 2025 Session

FISCAL AND POLICY NOTE Enrolled - Revised

Senate Bill 266

(Chair, Education, Energy, and the Environment Committee)(By Request - Departmental - Planning)

Education, Energy, and the Environment

Environment and Transportation

Local Comprehensive Planning and State Economic Growth, Resource Protection, and Planning Policy - Planning Principles

This departmental bill replaces the 12 "visions" – that a local planning commission must implement through a local jurisdiction's comprehensive plan – with 8 "planning principles." The bill establishes (1) the goals of the planning principles and (2) that the goals should be accomplished through public participation and stewardship. Correspondingly, the bill (1) alters identical text – that makes up the State Economic Growth, Resource Protection, and Planning Policy – in the same manner, so that the policy consists of the 8 "planning principles," and (2) references the new policy under specified criteria for State funding of growth-related transportation projects that are not in a priority funding area, as described below.

Fiscal Summary

State Effect: The bill does not directly affect State finances.

Local Effect: The bill is not expected to have a direct, material impact on local government finances.

Small Business Effect: The Maryland Department of Planning (MDP) has determined that this bill has a meaningful impact on small business (attached). The Department of Legislative Services (DLS) generally concurs with this assessment, noting that the meaningful impact of the bill on small business occurs indirectly. (The attached assessment does not reflect amendments to the bill.)

Analysis

Bill Summary/Current Law:

Local Comprehensive Plans and the State Economic Growth, Resource Protection, and Planning Policy – Planning Principles

The bill replaces the 12 "visions" – that a local planning commission must implement through a comprehensive plan, and that make up the State Economic Growth, Resource Protection, and Planning Policy – with 8 "planning principles," as shown in **Exhibit 1**.

The bill establishes – with respect to implementation of the planning principles through a comprehensive plan – that the collective intent of the planning principles is to create sustainable communities and to protect the environment in order to foster a high quality of life for all residents of the State. To accomplish these goals, residents should be active partners in the planning and implementation of community initiatives and sensitive to their responsibilities as stewards in balancing and achieving community goals.

Under current law (and under the bill), counties and municipalities must review and update their comprehensive plan at least once every 10 years.

Transportation Projects Outside of Priority Funding Areas

Under current law (and under the bill), the State may not provide funding for a growth-related project (defined in § 5-7B-01 of the State Finance and Procurement Article) if the project is not located within a priority funding area (defined in § 5-7B-02 of the State Finance and Procurement Article), subject to exceptions if specified criteria are met. Among various criteria under current law for the State to provide funding for a growth-related transportation project that is not in a priority funding area, is a criterion that adequate access control or other measures are in place to prevent development that is inconsistent with specified elements of the current State Economic Growth, Resource Protection, and Planning Policy. The bill instead requires, under that criterion, that adequate access control or other measures are in place to prevent development that is inconsistent with the full, new State Economic Growth, Resource Protection, and Planning Policy established by the bill (the 8 new planning principles, shown in Exhibit 1).

Cross-references

The bill requires the publisher of the *Annotated Code of Maryland*, in consultation with and subject to the approval of DLS, to (1) correct cross-references and terminology rendered incorrect by the bill and (2) describe any correction made in an editor's note following the section affected.

Exhibit 1

Local Comprehensive Plans - and - the State Economic Growth, Resource Protection, and Planning Policy

"Visions" (Under Current Law) Are Replaced by "Planning Principles" (Under the Bill)

Current Law – Visions

(1) **quality of life and sustainability** – a high quality of life is achieved through universal stewardship of the land, water, and air resulting in sustainable communities and protection of the environment;

- (2) **public participation** citizens are active partners in the planning and implementation of community initiatives and are sensitive to their responsibilities in achieving community goals;
- (3) **growth areas** growth is concentrated in existing population and business centers, growth areas adjacent to these centers, or strategically selected new centers;
- community design (4) mixed-use, walkable design consistent with existing community character and located near available or planned transit options is encouraged to ensure efficient use of land and transportation resources and preservation and enhancement of natural systems, open spaces, recreational areas, and historical. cultural, and archaeological resources;
- (5) **infrastructure** growth areas have the water resources and infrastructure to accommodate population and business expansion in an orderly, efficient, and environmentally sustainable manner;
- (6) **transportation** a well-maintained, multimodal transportation system facilitates the safe, convenient, affordable, and efficient movement of people, goods, and services within and between population and business centers;

Under the Bill – Planning Principles

- (1) **land** optimize productivity of working landscapes, including farms and forests, and fisheries, and prioritize development within population centers that are in proximity to existing infrastructure and facilities;
- (2) **transportation** prioritize transportation networks that create energy efficient, affordable, and reliable access to jobs, housing, and services;
- (3) **housing** enable a mix of quality housing types and affordability options to accommodate all who want to live in the State;
- (4) **economy** allow for adaptive reuse, mixed-use, and context appropriate new development that responds to changing markets and innovations;
- (5) **equity** engage all sectors of the community in plan development to ensure diverse voices are heard and the needs of underserved populations are prioritized;
- (6) **resilience** integrate resiliency measures that will minimize the impacts of rapid and unexpected natural- and human-caused threats on communities;
- (7) **place** provide for public spaces that encourage social interaction and value cultural, historical, and natural resources; and
- (8) **ecology** protect and restore sensitive ecological systems and conserve

- (7) **housing** a range of housing densities, types, and sizes provides residential options for citizens of all ages and incomes:
- (8) **economic development** economic development and natural resource-based businesses that promote employment opportunities for all income levels within the capacity of the State's natural resources, public services, and public facilities are encouraged;
- (9) **environmental protection** land and water resources, including the Chesapeake and coastal bays, are carefully managed to restore and maintain healthy air and water, natural systems, and living resources;
- (10) **resource conservation** waterways, forests, agricultural areas, open space, natural systems, and scenic areas are conserved:
- (11) **stewardship** government, business entities, and residents are responsible for the creation of sustainable communities by collaborating to balance efficient growth with resource protection; and
- (12) **implementation** strategies, policies, programs, and funding for growth and development, resource conservation, infrastructure, and transportation are integrated across the local, regional, State, and interstate levels to achieve these visions.

Source: Department of Legislative Services

natural resources, including forests, agricultural areas, and waterways.

Background: MDP indicates that replacing the 12 "visions" with 8 "planning principles" (1) clarifies and simplifies the State's growth/planning policy; (2) expands the policy's focus to sustainable growth through the inclusion of principles on resilience and equity; and (3) addresses practical difficulty experienced by local planning officials and their staff in implementing the 12 visions alongside other comprehensive plan requirements.

Additional Information

Recent Prior Introductions: Similar legislation has not been introduced within the last three years.

Designated Cross File: HB 286 (Chair, Environment and Transportation Committee)(By Request - Departmental - Planning) - Environment and Transportation.

Information Source(s): Board of Public Works; Department of Commerce; Department of Housing and Community Development; Baltimore City; Kent, Montgomery, Washington, and Worcester counties; Maryland Association of Counties; Maryland Department of Emergency Management; Maryland Department of Planning; Maryland Department of Transportation; Maryland Municipal League; Towns of Bel Air and Riverdale Park; Department of Legislative Services

Fiscal Note History: First Reader - January 17, 2025 rh/sdk Third Reader - March 17, 2025

Revised - Amendment(s) - March 17, 2025

Enrolled - April 7, 2025

Revised - Amendment(s) - April 7, 2025

Analysis by: Joanne E. Tetlow Direct Inquiries to:

(410) 946-5510 (301) 970-5510

ANALYSIS OF ECONOMIC IMPACT ON SMALL BUSINESSES

TITLE OF BILL: Local Comprehensive Planning and State Economic Growth,

Resource Protection, and Planning Policy - Planning Principles

BILL NUMBER: SB 266

PREPARED BY: Andrew Wilson, Department of Planning Government Affairs

Specialist

PART A. ECONOMIC IMPACT RATING

This agency estimates that the proposed bill:

____ WILL HAVE MINIMAL OR NO ECONOMIC IMPACT ON MARYLAND SMALL BUSINESS

OR

X WILL HAVE MEANINGFUL ECONOMIC IMPACT ON MARYLAND SMALL BUSINESSES

PART B. ECONOMIC IMPACT ANALYSIS

This proposal aims to rebuild the State's Economic Growth, Resource Protection, and Planning Policy (Policy) by consolidating the Policy's "visions" into eight planning principles that will guide and inform State and local planning practices. Given that this rebuilding focuses on aspects that touch substantial pillars of small business operations, from land use and transportation to economy, equity, and housing, this proposal will have a meaningful, positive impact on Maryland small businesses. This positive impact will be realized due to increased attention, understanding, and usage of the Policy by planners and throughout planning practices in the State.

Appendix B

Lower Eastern Shore / Regional CEDS - Strengths, Weaknesses, Opportunities and Threats (SWOT Analysis 2023)

SWOT ANALYSIS

The following SWOT analysis was developed through CEDS Committee discussions as well as the results of a 2018 regional focus group and branding survey. It is built upon a revised SWOT analysis conducted for the update of the 2016 CEDS document. The following is a summary of the key Strengths and Weaknesses of the region as well as the Opportunities and Threats the region may face in the future.

STRENGTHS

- Natural Resources
- Cost of Living
- Proximity to Major Markets
- Cultural Events

- Community Involvement Programs
- Higher Education Offerings
- Regional Cooperation
- Agribusiness

- Quality-of-life
- Sense of Community
- Moderate Climate

• Innovative Healthcare

Aging Infrastructure

Tourism

WEAKNESSES

- Substance Abuse
- Limited Retail Amenities
- Quality of Public School Education
- Retention of Talent

- Public Transportation and Airport Services
- Insufficient Pool of Skilled Workers

OPPORTUNITIES

- Growth of Entrepreneurial Base
 - Regional Branding and Marketing
- Diversification of Industries
- Workforce Training

- Access to Capital
- Tourism Niche Markets heritage tourism, sports tourism, etc.

THREATS

- Poorly Planned Growth and Urban sprawl
- Rising Sea Level
- Natural Disaster

Economic Recession

The Lower Eastern Shore CEDS was developed to address regional priorities and needs. Consideration was given to priorities at the state, county, and local level that impact the Lower Eastern Shore.



COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY FOR THE LOWER EASTERN SHORE OF MARYLAND









| • Pp. 3-4 ACKNOWLEDGEMENTS |
|----------------------------|
|----------------------------|

- Pp. 5-6 LETTER FROM THE TRI-COUNTY COUNCIL AND MAP OF REGION
- Pp. 7-8 2021-2022 CEDS COMMITTEE TIMELINE AND MEMBERSHIP
- Pp. 9-12 INTRODUCTION
- Pg. 13 VISION STATEMENT
- Pg. 14 SUMMARY BACKGROUND
- Pg. 15 SWOT ANALYSIS
- Pp. 16-33 INDUSTRY SUMMARIES
- Pp. 34-36 COUNTY FACT SHEETS
- Pp. 37-39 ECONOMIC RESILIENCE
- Pp. 40-58 GOALS, STRATEGIES, SPECIFIC PROJECTS
- Pg. 59 APPENDIX



ACKNOWLEDGEMENTS

Funding assistance for this planning process was provided by the United States Department of Commerce, Economic Development Administration and the Maryland Department of Commerce.





Funding for the Delmarva Index and the LESMD.net Regional Economic Development website was provided by the Rural Maryland Council through the Rural Maryland Prosperity Investment Fund.









ACKNOWLEDGEMENTS—cont.

Information updates and additional data are provided by the following LESMD partners:

Private Sector Companies in the Utilities, Transportation, Agriculture and Manufacturing Sectors

The Lower Shore Workforce Alliance and Shore Transit divisions of the Tri-County Council for the Lower Eastern Shore of Maryland

Salisbury-Wicomico Economic Development, Wicomico County Parks & Tourism

Somerset County Economic Development, Somerset County Recreation, Parks & Tourism, Somerset County Sanitary District

Worcester County Tourism and Economic Development

City of Salisbury

Wor-Wic Community College, University of Maryland Eastern Shore, Salisbury University

Somerset County Technical High School, Worcester Technical High School, Parkside Career and Technical High School

Wallops Flight Facility (NASA), Salisbury-Wicomico Regional Airport

Pocomoke Chamber of Commerce, Snow Hill Chamber of Commerce, Berlin Chamber of Commerce, Greater Ocean City Chamber of Commerce

Crisfield Chamber of Commerce, Princess Anne Chamber of Commerce, Greater Salisbury Chamber of Commerce, Greater Salisbury Committee

Ronald E. Powell Convention Center

Atlantic General Health System, Tidal Health System

Forest Service—Maryland Department of Natural Resources

Maryland Department of Commerce

LETTER FROM EXECUTIVE DIRECTOR

The Tri-County Council for the Lower Eastern Shore of Maryland is pleased to introduce the 2023-2024 Comprehensive Economic Development Strategy for the Lower Eastern Shore (CEDS). In 2003, shortly after its creation by the Maryland legislature, the Council submitted the first CEDS for the Lower Eastern Shore. Since then the CEDS has undergone consistent five year restructurings as well as annual updates such as this one. In 2009 the Council was designated an Economic Development District (EDD) by the Economic Development Administration (EDA) of the U.S. Department of Commerce.

In addition to being a hallmark of the CEDS process, the terms "region" and "regionality" increasingly are a component of contemporary economic development throughout Maryland and the United States. Consequently, the original 2003 Lower Eastern Shore CEDS identified one of its goals as the creation of "comparative advantages for the region, otherwise im-

possible for a single county to accomplish on its own."

This concept of comparative advantages has continued to develop since that first CEDS, and in fact has deep roots in the Lower Eastern Shore's history. More than 350 years earlier, in 1666, the Province of Maryland established the county of Somerset, which encompassed the area now known as Somerset, Wicomico and Worcester counties. Two later sub-divisions of Somerset created the counties of Worcester (1742) and Wicomico (1867), thus solidifying the Lower Eastern Shore's current tri-county configuration while retaining its identity as a *region*.

Today, the concept of a multi-county region with identifiable comparative advantages over a single county is worthy of renewed emphasis. This manifests not only in the increasing competition for federal funds, but as part of a comprehensive notion of economic development paired with branding and cultural identity.

Cognizant of history, yet mindful of contemporary economic forces, it is therefore easy to imagine the comparative advantages of a *single county* with the following attributes:

- A centrally located commercial/ manufacturing hub with a river port;
- Two universities in the State system, three technical high schools, and a first-rate community college;
- Two innovative and rapidly developing healthcare systems;
- More than one thousand miles of Chesapeake Bay shoreline;
- A world class ocean resort town on thirty miles of Atlantic coast;
- Historic riverside hamlets and towns with a rich cultural and architectural tradition;
- Large swaths of open space comprised of farms and forest;
- An eager and innovative workforce;
- Transportation linkages throughout.

This year's annual update continues the format changes initiated in the previous year. First among these changes is the transition toward an emphasis on specific named infrastructure projects in the strategies and action plans section after each of the four stated goals. In keeping with EDA instructions and guidelines, a separate section on "Economic Resiliency" provides contemporary insight to the notions of economic diversification and preparedness. Users of the CEDS who wish to reference additional detail and supporting data can do so by referencing the DelMarVa Index Economic Dashboard, a project resulting from a partnership between the Tri-County Council, the Mid-Shore Regional Council and the Eastern Shore Regional GIS Cooperative of Salisbury University. Supplemental information is also available at LESMD.net, the Lower Shore's regional economic development website.

Finally, I would ask everyone who utilizes the 2023-2024 CEDS to remember its identified priorities are entirely local in nature, arrived at by local residents who live or work on the Lower Eastern Shore. This goes hand in hand with the ultimate goal of the CEDS — that all residents of the Lower Eastern Shore will enjoy a high quality of life with fulfilling educational and employment opportunities supported by access to housing in a sustainable environment.

Sincerely,

Gregory E. Padgham

Tri-County Council for the Lower Eastern Shore of Maryland



New regional branding logo, 2019

OUR REGION





CEDS COMMITTEE TIMELINE

The following timeline highlights the process used to develop this 2022—2023CEDS Report.

- 1) **September 2022—October 2022:** Tri-County Council Economic Development Division will meet separately with the Economic Development Directors of each county to identify county-specific projects for inclusion in the CEDS and to revise and review progress indicators (progress, progression, and status timeline);
- 2) **October 2022:** Tri-County Council will facilitate the first of two CEDS meetings to review the CEDS Goals/County-specific projects/Progress indicators;
- November 2022—January 2023: Tri-County Council will interpret and update statistical hard data and revise Goals/County-specific Projects/Progress indicators based on input from CEDS Committee and County Directors of Economic Development;
- 4) **January 2023:** Tri-County Council will facilitate the second of two CEDS Committee meetings for evaluation, review and final vote on revisions proposed at first CEDS Committee meeting;
- 5) **January 2023—March 2023:** Tri-County Council will execute final revisions and graphic layout based on input from the second of two CEDS Committee meetings;
- 6) **March 15, 2023**: Executive Director presented the final revised CEDS projects to the Tri-County Council Full board at quarterly meeting and request ratification.
- 7) **April 30, 2023:** Tri-County Council will submit final revised CEDS to EDA via Grants Online Government Portal, update LESMD.net, and update the Tri-County Council Administrative website with the new document.

2023-2024 CEDS COMMITTEE MEMBERSHIP

TRI-COUNTY COUNCIL VOTING MEMBERS

Commissioner Charles Laird—Somerset County Commission Commissioner Randy Laird—Somerset County Commission Commissioner Craig Mathies—Somerset County Commission Commissioner Darryl Webster—Somerset County Commission Commissioner Eldon Willing—Somerset County Commission Julie Giordano—Wicomico County Executive Councilman James Winn—Wicomico County Council Councilman Jeff Merritt—Wicomico County Council Councilwoman Shaine Shields—Wicomico County Council Councilman Shane Baker—Wicomico County Council Commissioner Ted Elder—Worcester County Commission Commissioner Joe Mitrecic—Worcester County Commission Commissioner Caryn Abbott—Worcester County Commission Commissioner Eric Fiori—Worcester County Commission Commissioner Diana Purnell—Worcester County Commission Councilwoman Lavern Johnson—Somerset County Municipal Matthew Schneider—Wicomico County Municipal Mayor Zack Tyndall—Worcester County Municipal Senator Mary Beth Carozza—Maryland State Senate Delegate Carl Anderton—Maryland House of Delegates Delegate Wayne Hartman—Maryland House of Delegates Delegate Charles Otto—Maryland House of Delegates Delegate Sheree Sample-Hughes—Maryland House of Delegates

County Administrators

Doug Taylor—Somerset County Laura Hurley—Wicomico County Weston Young—Worcester County

County Economic Development Directors

Danny Thompson—Somerset County Economic Development Commission
Dave Ryan—Salisbury Wicomico Economic Development
Melanie Pursel—Worcester County Economic Development and Tourism

County Tourism

Clint Sterling—Somerset County Tourism
Steve Miller—Wicomico Recreation, Parks & Tourism
Kelly O'Brien-Rados—Worcester County Recreation & Parks

Chambers of Commerce and Greater Salisbury Committee

Stevie Ritchey—Crisfield Area Chamber of Commerce
Lynnell Fletcher—Pugh—Princess Anne Chamber of Commerce
Bill Chambers—Salisbury Area Chamber of Commerce
Mike Dunn—Greater Salisbury Committee
Ryan Nellans—Berlin Chamber of Commerce
Amy Thompson—Greater Ocean City Chamber of Commerce
Kerrie Bunting—Ocean Pines Area Chamber of Commerce
Lisa Taylor—Pocomoke Area Chamber of Commerce
Carrie Phillips—Snow Hill Chamber of Commerce

Higher Education

David Balcom—University of Maryland Eastern Shore, Vice President Institutional Advancement

Dr. Ray Hoy—Wor-Wic Community College, President
Dr. Michael Scott—Salisbury University, Dean Henson School of Science
William Burke—Salisbury University, Director of Entrepreneurial Activities

Maryland Small Business Development Center—Eastern Region

John Hickman—Salisbury University, BEACON Director

Regional Geographic Information System (ESRGC)

Erin Silva—Eastern Shore Regional GIS Cooperative, Project Manager

Lower Shore Workforce Alliance

Leslie Porter-Cabell—Lower Shore Workforce Alliance Director Robert Hendricks—Business Services Manager



2022-2023 CEDS COMMITTEE MEMBERSHIP CONT.

Regional Public Transit

Andrew Wile—Shore Transit Director

REPRESENTATIVE OF SALISBURY-WICOMICO REGIONAL AIRPORT

Tony Rudy—Airport Manager

EX OFFICIO

Kristen Goller—Wicomico County Tourism Director
Brett Dobelstein— Data Scientist, ESRGC
Alma Plummer—EDA Philadelphia Regional Office
Scott Warner—Mid-Shore Regional Council Executive Director
Mindie Burgoyne—Maryland Department of Commerce
Alyssa Hastings—Office of Senator Chris Van Hollen
Kimberly Kratovil—Office of Senator Ben Cardin
Bill Reddish—Office of Congressman Andy Harris
Jeremy Mason—Pocomoke City Manager

Michele Burke—Business Development Retentions Specialist, Worcester County Economic Development & Tourism

Ivy Wells—Berlin Economic and Community Development Director

CEDS FACILITATION

Gregory Padgham—Tri-County Council Executive Director

Monique Snyder—Tri-County Council Regional Communications Developer
Stephanie Wilkins—Tri-County Council Economic Development Coordinator

INTRODUCTION

The Tri-County Council for the Lower Eastern Shore of Maryland is an independent rural-based state agency formed by an Act of the Maryland General Assembly in 2001. The purpose of the Council is to facilitate regional planning and economic development in Somerset, Wicomico and Worcester counties on the Lower Eastern Shore of Maryland. The Council membership is made up of municipal, county, and state elected officials as well as the county administrators from the three counties.

The Council is a designated Economic Development District (EDD) through the U.S. Economic Development Administration (EDA) of the U.S. Department of Commerce. As the region's EDD, the Council is responsible for developing a CEDS designed to identify regional priorities for economic development. In addition to acting as a planning tool for a region, the CEDS allows an EDD to engage with the EDA and other federal partners to receive infrastructure and technical assistance grants.

To receive designation as an EDD a multijurisdictional entity (such as the combined three counties of the Lower Shore) must have an EDAapproved CEDS and meet certain regional distress criteria identified in federal regulations. As a practical matter, the CEDS is required to undergo a complete reevaluation every five years with updates on an annual basis.



WHAT MAKES THE CEDS AN EFFECTIVE TOOL?

A well-developed CEDS has a purpose not served by single-jurisdiction planning documents. By its very nature, the CEDS process leverages the resources and input of all entities within a multi-jurisdictional unit, in this case Somerset, Wicomico and Worcester counties and their municipalities. The final document is truly regional in both its outlook and its analysis of hard data. The end result is a document that actually augments the planning process of individual jurisdictions by providing a comprehensive look at the total resources of a region.



More important, the CEDS is the result of a locally based, "regionally owned" planning process. Despite the requirement of EDA that there be a CEDS, the document and the process are not created or dictated by EDA. The regional priorities outlined in the CEDS are the result of deliberation by the CEDS stakeholder committee comprised of individuals and organizations who live or are located in the region and who have specific knowledge and experience rooted in the region and its communities.

The goal of the CEDS is to articulate input from all the citizens of the region. To this end the CEDS process leverages the involvement of the public, private, and non-profit sectors while providing a mechanism for stakeholders to engage in vigorous and meaningful conversation and debate about the economic direction of the region.



In summation, the CEDS document is:

- Comprehensive in its approach as it employs
 the input and experience of persons and organizations with a wide range of expertise and backgrounds
 within the entire multi-jurisdictional entity;
- Economic-focused in that it surveys a broad range of specific economic sectors while considering trends and employing hard data in its analysis;
- Pevelopment-oriented as it considers the range of variables effecting economic activity and its impact and benefits to citizens, and
- Strategy-based in its underlying attention to economic resiliency and diversification while exploring the retention and further development of traditional and existing industries, all within a framework of regional planning.







Finally, the ultimate goal of the CEDS and its process is to create a pathway to opportunities for all residents of the Lower Eastern Shore of Maryland, specifically:

- Excellent education and workforce development;
- Fulfilling and financially rewarding employment;
- Adequate and affordable housing;
- A sustainable environment;
- A high quality of life;
- A range of healthcare options.



VISION STATEMENT FOR THE LOWER EASTERN SHORE OF MARYLAND

- To manifest a commitment to a prosperous, healthy and fulfilled life for all the citizens of the Lower Shore.
- To leverage the cultural and natural resources of the Lower Eastern Shore as the foundation for an instantly identifiable and unique regional identity.
- To create an economically vibrant region by utilizing flexible and resilient development strategies to create quality jobs, a trained workforce, thoughtful infrastructure investments and critical resource protection.



SUMMARY BACKGROUND

The Eastern Shore of Maryland is a part of the U.S. state of Maryland that lies predominantly on the east side of the Chesapeake Bay and consists of nine counties. As of the 2010 census, its population was 449,226, with just under 8 percent of Marylanders living in the region. The term "Eastern Shore" distinguishes a territorial part of the state of Maryland from the Western Shore of Maryland, land west of the Chesapeake Bay.

The southern part of Maryland's Eastern Shore is called the Lower Eastern Shore and is characterized by its predominately rural landscape which features farmland, pine forests, marshes, and beaches. The counties comprising the Lower Eastern Shore are Somerset, Wicomico, and Worcester counties. Population centers include Berlin, Crisfield, Ocean City (particularly during summer months), Ocean Pines, Pocomoke City, Princess Anne, Salisbury (Metro Core includes Fruitland and Delmar, MD), and Snow Hill.

Numerous small streams and larger creeks can be found throughout the area. The Atlantic Ocean, Tangier Sound, Chincoteague, and Sinexpuxent bays and the Nanticoke, Wicomico, Manokin, and Big Annemessex rivers are the major waterways in this area. The Salisbury-Ocean City Wicomico Regional Airport in Salisbury is the only commercial airport on the entire Delmarva Peninsula. Piedmont Airlines, a regional airline, is headquartered in unincorporated Wicomico County, on the grounds of Salisbury-Ocean City Wicomico Regional Airport near Salisbury. Airports for private planes include the Crisfield Municipal Airport in Crisfield and the Ocean City Municipal Airport in Ocean City. The Port of Salisbury is located at the headwaters of the Wicomico River and in the heart of the City of Salisbury. The channel approach is an average of 14 feet at low tide and 19 feet at high tide. This port is the second busiest in Maryland.

According to the U.S. Conference of Mayors, the Salisbury MD-DE Metropolitan Statistical Area had the 7th fastest rate of job growth in the nation in 2016, with a 4.2% increase in employment. Perdue Farms, a multinational poultry corporation, is headquartered in Salisbury. Other industries in the region include healthcare, accommodation and foodservice, electronic component manufacturing, pharmaceuticals, shipbuilding, and agriculture. Some of the major employers are: Salisbury University, Peninsula Regional Medical Center, Atlantic General Hospital, Encompass Health, Sysco Corporation, and the University of Maryland Eastern Shore. The labor market for the Lower Eastern Shore is 86,798 (as of May 2017).



SWOT ANALYSIS

The following SWOT analysis was developed through CEDS Committee discussions as well as the results of a 2018 regional focus group and branding survey. It is built upon a revised SWOT analysis conducted for the update of the 2016 CEDS document. The following is a summary of the key Strengths and Weaknesses of the region as well as the Opportunities and Threats the region may face in the future.

STRENGTHS

- Natural Resources
- Cost of Living
- Proximity to Major Markets
- Cultural Events

- Community Involvement Programs
- Higher Education Offerings
- Regional Cooperation
- Agribusiness

- Quality-of-life
- Sense of Community
- Moderate Climate

• Innovative Healthcare

Aging Infrastructure

Tourism

WEAKNESSES

- Substance Abuse
- Limited Retail Amenities
- Quality of Public School Education
- Retention of Talent

- Public Transportation and Airport Services
- Insufficient Pool of Skilled Workers

OPPORTUNITIES

- Growth of Entrepreneurial Base
 - Regional Branding and Marketing
- Diversification of Industries
- Workforce Training

- Access to Capital
- Tourism Niche Markets heritage tourism, sports tourism, etc.

THREATS

- Poorly Planned Growth and Urban sprawl
- Rising Sea Level
- Natural Disaster

Economic Recession

The Lower Eastern Shore CEDS was developed to address regional priorities and needs. Consideration was given to priorities at the state, county, and local level that impact the Lower Eastern Shore.



INDUSTRY SUMMARIES

1. Resource Based Industries (Includes agriculture, forestry, fishing, & hunting)



The industries described in this segment include the agriculture, forestry, fishing and hunting sectors of the economy. The types of facilities and employees included in this grouping primarily engage in commercial fishing, farming, animal husbandry and the harvest of timber. These occupations are almost exclusively found in rural areas where there is easy access to natural resources like forests and rivers that naturally support habitats. The population of the Lower Eastern Shore has traditionally been known for its agricultural expertise to stimulate economic growth, provide employment and produce marketable goods from raw materials to the community.

The greatest advantage of the Lower Eastern Shore is its rural landscape and agricultural capabilities in very close proximity to 10 major metropolitan areas with very dense populations within a day's truck drive.

| NUMBER OF ESTABLISHMENTS | | | | | | | | | |
|--------------------------|----|----|----|----|----|--|--|--|--|
| 2012 2013 2014 2015 2016 | | | | | | | | | |
| Somerset | 9 | 8 | 8 | 9 | 9 | | | | |
| Wicomico | 14 | 15 | 14 | 13 | 15 | | | | |
| Worcester | 10 | 12 | 12 | 12 | 13 | | | | |
| LES | 33 | 35 | 34 | 34 | 37 | | | | |

© Dave Willman-stock.adobe.com

These close markets and a very robust transportation infrastructure once the trucks leave the Delmarva Peninsula are advantages that need to be further exploited. Conversely, the transportation infrastructure on the Peninsula itself needs improved and enhanced resilience. There are only two major transportation pathways (Route 13 for North-South and Route 50 for East-West). This has the potential for routine as well as catastrophic bottlenecks. While water and rail transport options exist, they are marginal at best. Air transportation is also not fully developed for this rapidly developing region. Integration of the emerging economic sector of environmental stewardship into the overall resource based industries ecosphere is a trend.

From 2012 to 2016, the number of establishments in the agriculture, forestry, fishing and hunting sectors remained relatively the same. Yet, the number of paid employees nearly doubled in that same time period from 165 to 238, meaning establishments are growing in size and productivity. Additionally, while the total number of farms in each of the three counties declined from 2012 to 2017, the total acres in harvested cropland rose from 149,567 to 161,071. This statistic indicates there are fewer individual farms but that those still in operation are expanding their acreage per farm. The aggregated value of these farms totaled to \$1.48 billion in 2017.

Source: U.S. Census Bureau, 2016 County Business Patterns



1. Resource Based Industries (Includes agriculture, forestry, fishing, and hunting) con't.

Looking forward, there remains a variety of ways for resource based industries to diversify and improve their farm management operations. Of concern is the growing popularity of solar arrays that take valuable tillable acreage from productive farm lands for generating electricity. Renewable energy providers, local governments and agriculture stakeholders must collaborate with each other in order to find a beneficial solution for both parties. Additionally, agricultural businesses are traditionally family-owned and operated, with each new generation taking on the planting and harvesting of crops, caretaking of animals, and other responsibilities. This can give rise to a degree of stagnant knowledge of farm production data analytics and the like. On the other hand, many multi-generational farmers on the Lower Eastern Shore themselves manage hundreds or even tens of thousands of acres using highly sophisticated equipment and methods. Animal feed and ethanol production have contributed to decades of high demand for commodity products such as wheat, corn and soybean, which in turn has driven decisions governing crop choice. Greater diversification of crops into areas such as organic vegetables and hemp could demand a higher market price than traditional commodities. Predictably, and despite increasing demand, market forces and other factors associated with production not traditionally associated with row-crops has continued to discourage efforts at such diversification.

The lack of significant agricultural growth in this region can perhaps be attributed to technological and regulatory barriers. Broadband Internet service is not available to most of the rural areas of the Lower Eastern Shore counties. The limited access to this increasingly critical resource further hinders agricultural collaboration, innovation, and growth. Additionally, regulations regarding land use and its access creates further restrictions on farmers. This in turn prevents farmers from diversifying their land use, even if it would be more profitable. Land access restrictions limit the areas in which to hunt and fish which also affects the tourists that come to the area to take advantage of the plethora of wildlife. Another hurdle that grain farmers are facing is lack of buyers for their crops. Locally, they can only sell grain as feed to the poultry industry. Alternatively, the remaining product must be exported to a buyer out of state.

The Lower Shore's forestry industry is highly integrated into other industries in the local economy, with the value of standing timber being multiplied when converted into further processed products. As a practical matter nearly all timber supplying local mills is grown locally, with the majority of the resulting products sold outside the region. Changes in the market and regulatory challenges have significantly impacted the industry locally. Changes in technology and energy sources, such as a proposed natural gas pipeline extension south along the U.S. Route 13 corridor (see pp. 17-18), though crucial to the long-term economic development of the region, would in turn create a ripple-affect to an existing combined-heat-and-power (CHP) system. A significant reduction in the demand for low value wood would in turn affect foresters managing for higher value saw timber, as well as a source of residual materials such as bedding for the poultry industry, mulch and paper. Responsive initiatives from the state, such as a proposed Economic Adjustment Strategy for the Forest Products Sector (EAS), would be a step toward the goal of retaining existing and traditional industries as part of an overall strategic approach to economic resiliency.



2. Utilities and Information Technology (includes energy & technology)



The industries described in this segment include companies that provide electric, wood, and gas heating systems, cooling systems, renewable energy programs, and Internet services in the Lower Eastern Shore region. Geothermal is still the most popular source of renewable energy in the region, yet the implementation of offshore wind-generated energy has recently experienced some investment. Broadband Internet access, in the rural areas of Somerset County especially, continues to limit the types of industries and employment opportunities there. The inability to access the Internet means individuals are unable to work from their residence. In turn lack of high speed internet services discourages companies from locating in the region. Increasing the availability of broadband Internet is critical in attracting entrepreneurs and start-ups to the area. Additionally, large scale farming reliant on sophisticated equipment may also be hindered by the availability of broadband internet resources.

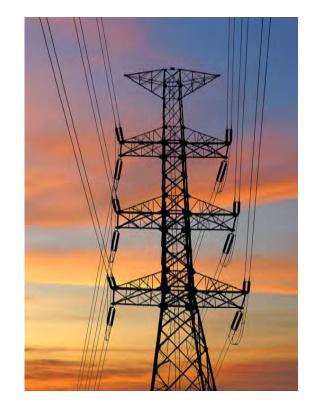
In terms of Utilities and Information Technology, the

Lower Eastern Shore has both a unique geographic disadvantage and a unique advantage that need to be addressed. The main transmission lines coming from the north and ending at the southern tip of the Delmarva Peninsula have the potential for creating major economic disruptions if the supply is disrupted. The need for other pathways and/or for increased local generation is an ongoing concern. On the other hand, the proximity of the region to major urban metropolitan clusters of the Mid-Atlantic region provides a potential opportunity for back-office or back-up centers to be located here if the IT infrastructure can be improved and enhanced.

The highest percentage of those with broadband Internet access possess a Bachelor's degree or higher, with the lowest percentage being those with less than a high school diploma or equivalent. The Eastern Shore Regional GIS Cooperative (ESRGC) at Salisbury University is currently compiling more extensive research on the technological landscape of the Lower Eastern Shore. This research should be completed in the summer of 2019.

Over \$19 million was invested in 569 renewable energy projects in the Lower Eastern Shore in 2017. Energy efficiency projects in the region also contributed to

over 4 million kWh of electricity savings in 2017. Another encouraging finding from the energy industry is the total number of households on public assistance income in the past 12 months in all 3 counties has decreased from 2013 to 2017.





2. Utilities and Information Technology (includes energy & technology) con't.

The rising cost of producing electricity has contributed to the level of energy poverty on the Lower Eastern Shore. While the use of renewable energy in the production of electricity is a viable option, there remain concerns regarding reliability due to its dependence on weather patterns. These variables limit its impact on energy prices and create more instability within the grid. Renewable energy also requires large plots of land to set up and monitor the energy-producing technology such as solar. This creates competition for cleared land with the agriculture industry as well as additional maintenance to ensure the panels remain functional throughout their lifespans.



On the other hand, the renewable energy industry as a whole tends to creates high-tech jobs that positively affect the region's workforce and economic development, while remaining up-to-date with the nation's movement towards more environmentally friendly energy sources.

Investment in nuclear energy continues to face political challenges, with the main controversy being the safety of nuclear power plants. However, the cheaper costs associated with producing nuclear energy is a critical benefit and bargaining point for utility companies and politicians in favor of nuclear energy use.

| NUMBER OF HOUSEHOLDS WITH PUBLIC ASSISTANCE | | | | | | | | |
|---|------|------|------|------|------|--|--|--|
| | 2013 | 2014 | 2015 | 2016 | 2017 | | | |
| Somerset | 213 | 198 | 232 | 251 | 308 | | | |
| Wicomico | 1083 | 1167 | 1068 | 1133 | 1068 | | | |
| Worcester | 659 | 647 | 631 | 432 | 448 | | | |
| LES | 1955 | 2012 | 1931 | 1816 | 1824 | | | |

| RENEWABLE ENERGY - 2017 | | | | | | | | | |
|-------------------------|----------------|---------------|--------------------|-----------------|--|--|--|--|--|
| | Total Projects | Project Costs | Project Percentage | Cost Percentage | | | | | |
| Somerset | 66 | \$2,644,202 | 11.6% | 13.3% | | | | | |
| Wicomico | 273 | \$8,767,433 | 48.0% | 44.2% | | | | | |
| Worcester | 230 | \$8,424,769 | 40.4% | 42.5% | | | | | |
| LES | 569 | \$19,836,404 | 147 | 2 | | | | | |

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-yr. Estimates

A specific energy sub-sector with growing economic importance for the region is natural gas. This growing importance requires a more in-depth look at how this energy option fits into the region's economy. Existing economic development on the Lower Eastern Shore of Maryland is concentrated in a highly disproportionate manner. Relatively speaking there are two economic clusters in the region. They are Salisbury (Wicomico County) in the northwest quadrant of the region and Ocean City/Berlin/Ocean Pines (Worcester County) in the northeast quadrant of the region. To varying degrees each quadrant has access to natural gas pipeline infrastructure. The two southern quadrants of the region (all of Somerset County and the southern portion of Worcester County) do not have access to natural gas pipeline infrastructure.

2. Utilities and Information Technology (includes energy & technology) con't.

Consequently, there is a marked absence of an economic cluster in those quadrants relative to the two northern quadrants. Extension of natural gas pipeline infrastructure from Salisbury south along the US 13 transportation corridor would significantly balance the distribution of this resource. This in turn would lead to the creation of two additional economic clusters in the region (Princess Anne, Somerset County) for the first stage of pipeline extension and Pocomoke City (Worcester County) for the second stage. Later incremental extensions east along MD State Highway 413 to communities including Westover, Marion Station and Crisfield would further improve distribution of this energy resource.

Such an extension would have the following consequences:

- More proportionate distribution of economic development in the region
- Increased choices of energy sources
- Less expensive energy source for persons of limited means
- Fewer emissions than other fossil fuel generated electrical sources
- Carbon offsets
- Improved resiliency of economy following natural disasters
- Ability to convert refuse to natural gas and feed distribution system
- \bullet Grant availability to help subsidize installation and first five years of implementation

| НО | HOUSEHOLDS WITHOUT INTERNET - 2017 | | | | | | | | | |
|-----------|------------------------------------|-------------------|------------|--|--|--|--|--|--|--|
| | County Total | No Internet Total | Percentage | | | | | | | |
| Somerset | 19,771 | 2,814 | 14.2% | | | | | | | |
| Wicomico | 97,919 | 13,424 | 13.7% | | | | | | | |
| Worcester | 50,781 | 3,860 | 7.6% | | | | | | | |
| LES | 168,471 | 20,098 | 11.9% | | | | | | | |

| HOU | HOUSEHOLDS WITHOUT A COMPUTER - 2017 | | | | | | | | | |
|-----------|--------------------------------------|-------------------|------------|--|--|--|--|--|--|--|
| | County Total | No Computer Total | Percentage | | | | | | | |
| Somerset | 19,771 | 2,915 | 14.7% | | | | | | | |
| Wicomico | 97,919 | 7,872 | 8.0% | | | | | | | |
| Worcester | 50,781 | 5,034 | 9.9% | | | | | | | |
| LES | 168,471 | 15,821 | 9.4% | | | | | | | |

| ACCESS TO BROADBAND INTERNET - 2017 | | | | | | | | | |
|---|---------|---------|-------|--|--|--|--|--|--|
| County Total Broadband Total Percentage | | | | | | | | | |
| Somerset | 19,771 | 13,850 | 70.1% | | | | | | |
| Wicomico | 97,919 | 76,164 | 77.8% | | | | | | |
| Worcester | 50,781 | 41,446 | 81.6% | | | | | | |
| LES | 168,471 | 131,460 | 78.0% | | | | | | |

Sources: U.S. Census Bureau, American Community Survey, Types of Internet 2013-2017, MEA Smart Investment Dashboard, U.S. Census Bureau, 2013-2017 American Community Survey 5-yr. Estimates

3. Heavy Industries (includes construction, manufacturing, transportation and warehousing)

The industries described in this segment include construction, manufacturing, transportation, and warehousing. The construction and transportation industries include both commercial and residential construction and transportation. The manufacturing sector is divided by type of occupation within the manufacturing sector, including management, service, sales, production and maintenance. The warehousing industry is extremely small in the region, with only three privately-owned public warehouses in Wicomico County, one in Worcester County, and none in Somerset County.

The Lower Eastern Shore is in the middle of a 50-year economic transition. As a consequence some heavy industries may gradually give way to technology-based economic sectors. This does not mean a divestment in heavy industries. Instead, it indicates the region will need to prepare for the differing economic and workforce development requirements of the emerging sectors.

The construction industry had over 570 businesses and employed 3,545 people in 2017. Additional data on the construction industry specific to the Lower Eastern Shore region is available from various fee-based online sources.

The resiliency of overland freight transportation is low due to limited north-south and east-west corridors. Rail service, while important to the agricultural sector, suffers from tracks in need of repair and upgrading.

Waterborne commerce is also important for agriculture as well as the construction industries (aggregate), however, the region's waterways need more frequent dredging. The upcoming offshore wind farm construction and future operations and maintenance of the turbines may increase the importance of West Ocean City for waterborne commerce. The region's commercial airport, the Salisbury-Ocean City-Wicomico Regional Airport, has commercial air service, a FedEx station and private FBO activity.

The manufacturing industry within the three counties varies considerably. Somerset County has increased the number of civilians employed by the manufacturing sector from 2013 to 2017. Management occupations within the manufacturing industry substantially decreased in Somerset County while maintenance and production occupations significantly increased. Yet, both Wicomico and Worcester have decreased their total workforce in the same time period.

An issue in this industry grouping, as in others, is the lack of broadband Internet access to rural areas. This hinders the ability to introduce new technology reliant on Internet connectivity to the area. An aging workforce in the manufacturing industry is a concerning trend, with the ability to attract workers to available jobs being one of the most significant issues. To mitigate this, manufacturing stakeholders need to revamp their recruiting strategy by using job training and development programs to fill these vacant positions. Employing a more demographically diverse workforce will bring a fresh perspective for business development and innovation to the industry. Digitalization, artificial intelligence, and virtual reality will drive manufacturing improvements in processes and engineering.

3. Heavy Industries (includes construction, manufacturing, transportation and ware-housing) con't.

Manufacturers have also begun to vertically integrate into distribution and retail channels. These business model changes will impact other distributors and retailers that rely on these products to fill their trucks and stock their shelves. As a consequence, distributors will face higher transportation costs associated with underutilized load capacity and backhaul. Retailers' implementation of various techniques of diversification is a response to the low-cost vertical integration strategies of manufacturers.

| NUMBER OF EMPLOYEES IN MANAGEMENT OFFICES | | | | | | | | | | | |
|---|--------------------------|------|------|------|------|--|--|--|--|--|--|
| | 2013 2014 2015 2016 2017 | | | | | | | | | | |
| Somerset | 167 | 100 | 69 | 60 | 57 | | | | | | |
| Wicomico | 1100 | 1154 | 1069 | 1210 | 1119 | | | | | | |
| Worcester | 253 | 240 | 300 | 329 | 288 | | | | | | |
| LES | 1520 | 1494 | 1438 | 1599 | 1464 | | | | | | |

| NUMBER OF EMPLOYEES IN MAINTENANCE AND PRODUCTION OPERATIONS | | | | | | | | | |
|--|------|------|------|------|------|--|--|--|--|
| | 2013 | 2014 | 2015 | 2016 | 2017 | | | | |
| Somerset | 44 | 7 | 65 | 45 | 135 | | | | |
| Wicomico | 374 | 389 | 376 | 374 | 288 | | | | |
| Worcester | 244 | 191 | 123 | 18 | 39 | | | | |
| LES | 662 | 587 | 564 | 437 | 462 | | | | |

| NUMBER OF CIVILIANS EMPLOYED IN MANUFACTURING | | | | | | | |
|---|------|------|------|------|------|--|--|
| | 2013 | 2014 | 2015 | 2016 | 2017 | | |
| Somerset | 345 | 408 | 395 | 253 | 362 | | |
| Wicomico | 4729 | 4694 | 4618 | 4801 | 4422 | | |
| Worcester | 1094 | 1079 | 1089 | 1002 | 1010 | | |
| LES | 6168 | 6181 | 6102 | 6056 | 5794 | | |

| | MANUFACTURING INDUSTRY | | | | | | | | | | | |
|-----------|------------------------|--------------|----------------|--------------------|----------------|---------------|----------------|----------------------|----------------|---------------|--|--|
| | 2014 2015 | | 2016 | | 2017 | | 2018 | | | | | |
| | Establishments | Avg Employee | Establishments | Avg Establishments | Establishments | Avg Employees | Establishments | Avg Employees | Establishments | Avg Employees | | |
| Somerset | 14 | 188 | 13 | 198 | 12 | 210 | 14 | 250 | 16 | 245 | | |
| Wicomico | 98 | 3608 | 97 | 3448 | 97 | 3005 | 97 | 2940 | 94 | 2950 | | |
| Worcester | 46 | 672 | 46 | 657 | 42 | 662 | 46 | 698 | 47 | 712 | | |
| LES | 158 | 4468 | 156 | 4303 | 151 | 3877 | 157 | 3888 | 157 | 3907 | | |

| | CONSTRUCTION | | | | | | | | | | | |
|-----------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|--|--|
| | 2014 2015 | | 2016 | | 2017 | | 2018 | | | | | |
| | Establishments | Avg Employee | | |
| Somerset | 67 | 303 | 69 | 287 | 66 | 279 | 66 | 337 | 64 | 334 | | |
| Wicomico | 281 | 1858 | 269 | 1926 | 260 | 1998 | 275 | 2071 | 289 | 2219 | | |
| Worcester | 237 | 1005 | 240 | 1095 | 236 | 1150 | 233 | 1137 | 236 | 1162 | | |
| LES | 585 | 3166 | 578 | 3308 | 562 | 3427 | 574 | 3545 | 589 | 3715 | | |

Sources: Bureau of labor Statistics, U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates, U.S. Census Bureau Means of Transportation 2013-2017 American Community Survey



4. Tourism and Leisure (including accommodation and food services, arts, entertainment, and recreation)



Tourism and leisure on the Lower Eastern Shore consists of travel accommodations, food services, arts, entertainment and recreation. Travel accommodations include hotels and motels, bedand-breakfast inns and RV parks. Food services include food service contractors, bars, restaurants, caterers, special food services and mobile food services. Tourism and leisure has been a key component to the regional economy for many years due to the large diversity of tourism offerings. This in turn has provided the opportunity to attract many individuals with a variety of interests. Ocean City is the most well-known summer resort town in the industry; however, there are a growing number of sports, natural, cultural, and historical tourism attractions.

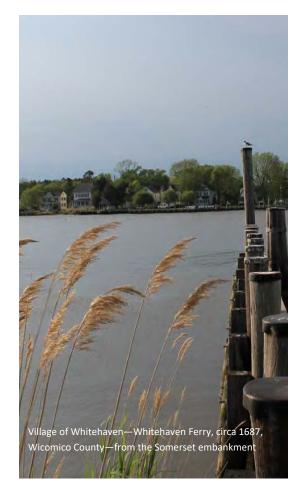
Undoubtedly the Lower Eastern Shore of Maryland is one of the most attractive playgrounds for

the Mid-Atlantic Region. From the beaches to the rivers, from the bustling nightlife in Ocean City to the quiet elegance and serenity of historic landscapes and the state and national parks, there is a host of outstanding options for all segments of the region's population. The region is now exploring ways to leverage these assets in a more deliberate and data driven way to extend and enhance the high and shoulder seasons.

According to the U.S. Census, from 2012 to 2016 the overall number of tourism and leisure establishments in the region remained relatively constant; however, there was a 57% increase in the number of food service contractor establishments and a 36% increase in the number of special food service establishments. Tourism is weighted very heavily in Worcester and Wicomico County compared to Somerset County. In 2016, there were 123 hotel and motel establishments in the region and 95% of them were located in either Worcester or Wicomico County, with 79% of them being located in Worcester County alone. Out of all the restaurants in the region, 96% of them were located in Worcester or Wicomico County, with 63% of them located in Worcester County alone.

Ocean City is the primary reason tourism destinations are weighted so heavily in Worcester County . It should be noted the

total number of paid employees in Worcester County increased by roughly 6% from 2012 to 2016. This is a good sign for the region. As expected, the majority of employees are located in Worcester and Wicomico Counties.





The year-over-year change in number of rooms sold in the region in 2018 decreased for the first time in five years (-2.9%) and the year-over-year change in the number of rooms available increased in 2018 by 0.9%. The increase in the number of rooms available, but decrease in the number of rooms sold indicates there were a larger number of vacant rooms in 2018 than any of the five previous years. The year-over-year change in room price also increased in 2018 by 1%.

The tourism and leisure industry within the region does well during summer months, particularly on the weekends; however, the lack of fresh marketing promotions and experiential tourism attractions has caused a downturn in tourism during the offseason in the region. As opposed to simply visiting the beach Millennials in particular are attracted to areas offering experiences not found elsewhere.

| ROOM RATE PERCENT CHANGE | | | | | | | | |
|--------------------------|-------|-------|-------|-------|------|--|--|--|
| | 2014 | 2015 | 2016 | 2017 | 2018 | | | |
| Somerset | - | - | - | - | - | | | |
| Wicomico | 3.80% | 1.50% | 1.60% | 2.80% | - | | | |
| Worcester | 1.00% | 2.20% | 1.00% | 5.60% | - | | | |
| LES | 1.50% | 2.10% | 0.80% | 2.60% | - | | | |



Marketing tactics therefore need to be adjusted to address changing demand and address additional trends that should be implemented within the region to attract a more diverse group of visitors. This can be done in a variety of ways, including boat excursions, sports marketing, and agricultural tourism. An increase in experiential tourism will also address the issue of midweek weakness by providing a wider breadth of activities for individuals and families of all ages. There is also a push to increase the number of large events hosted in the region in order to further expand the range of attractions. Tourism and leisure has traditionally been viewed as the backbone of economic development on the Lower Eastern Shore. Because of its high performance over a long period of time it is possible it may have previously escaped a more detailed analysis. As with any segment of the economy it is important to address not only the challenges in this area, but also build off its strengths, particularly as competition for tourists continues to increase.

| | NUMBER OF RESTAURANTS AND EMPLOYEES | | | | | | | | | | |
|-----------|-------------------------------------|--|-----|----------------|-----------|----------------|-----------|------|-----|------|--|
| | 2012 2013 2014 | | | | 2015 | | 2016 | | | | |
| | Establishments | stablishments Employees Establishments Employees Establishments Employees Establishments | | Establishments | Employees | Establishments | Employees | | | | |
| Somerset | 24 | 258 | 21 | 241 | 19 | 266 | 20 | 241 | 17 | 248 | |
| Wicomico | 177 | 3628 | 175 | 3538 | 172 | 3566 | 167 | 3608 | 163 | 3507 | |
| Worcester | 289 | 3211 | 293 | 3447 | 303 | 3481 | 318 | 3476 | 303 | 3797 | |
| LES | 490 | 7097 | 489 | 7226 | 494 | 7313 | 505 | 7325 | 483 | 7552 | |

Sources: U.S. Census Bureau County Business Patterns; visitmaryland.org

4. Tourism and Leisure (including accommodation and food services, arts, entertainment, and recreation) con't.

| | FOOD AND DRINK SERVICES | | | | | | | | | | |
|-----------|-------------------------|-----------|----------------|--|------|----------------|------------------|----------------|-----------|------|--|
| | 2012 2013 | | 2014 | | 2015 | | 2016 | | | | |
| | Establishments | Employees | Establishments | tablishments Employees Establishments Employees Establis | | Establishments | Employees | Establishments | Employees | | |
| Somerset | 24 | 258 | 21 | 241 | 20 | 268 | 21 | 281 | 19 | 358 | |
| Wicomico | 189 | 3819 | 190 | 3774 | 185 | 3820 | 180 | 3878 | 178 | 3721 | |
| Worcester | 310 | 3505 | 314 | 3730 | 320 | 3775 | 338 | 3743 | 324 | 4076 | |
| LES | 523 | 7582 | 525 | 7745 | 525 | 7863 | 539 | 7902 | 521 | 8155 | |

| | SPECIAL FOOD SERVICES | | | | | | | | | | |
|-------------------------------------|-----------------------|-----------|----------------|---|----|------|----|------------------|----------------|-----------|--|
| | 2012 | | | 2013 | | 2014 | | 2015 | | .6 | |
| | Establishments | Employees | Establishments | tablishments Employees Establishments Employees Establish | | | | Employees | Establishments | Employees | |
| Somerset | 0 | 0 | 0 | 0 | 1 | 0-19 | 1 | 20-99 | 1 | 100-249 | |
| Wicomico | 10 | 128 | 11 | 154 | 10 | 166 | 9 | 186 | 11 | 116 | |
| Worcester 4 61 3 20-99 3 20-99 4 45 | | | | | | 7 | 56 | | | | |
| LES | 14 | 189 | 14 | 154 | 14 | 166 | 14 | 231 | 19 | 172 | |

| | NUMBER OF HOTELS | | | | | | | | | | |
|-----------|------------------|-----------|----------------|--|-----|----------------|------------------|----------------|-----------|------|--|
| | 2012 2013 2014 | | 4 | 2015 | | 2016 | | | | | |
| | Establishments | Employees | Establishments | blishments Employees Establishments Employees Esta | | Establishments | Employees | Establishments | Employees | | |
| Somerset | 5 | 8 | 5 | 0-19 | 5 | 0-19 | 5 | 16 | 6 | 10 | |
| Wicomico | 19 | 240 | 19 | 270 | 20 | 289 | 22 | 303 | 20 | 284 | |
| Worcester | 99 | 1807 | 99 | 1834 | 100 | 1758 | 95 | 1788 | 97 | 1825 | |
| LES | 123 | 2055 | 123 | 2104 | 125 | 2047 | 122 | 2107 | 123 | 2119 | |

| | | | ROOM DEMAN | D AND SUPPLY | | | |
|-----------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------------|--|
| | 20 | 14 | 20: | 15 | 2016 | | |
| | Room Demand Change | Room Supply Change | Room Demand Change | Room Supply Change | Room Demand Change | Room Supply Change | |
| Somerset | - | - | - | - | - | - | |
| Wicomico | 5.10% | 0.00% | 7.80% | 0.00% | 8.30% | 0.00% | |
| Worcester | 4.50% | 0.00% | 7.30% | 1.50% | 4.20% | 1.20% | |
| LES | 4.70% | 0.10% | 7.50% | 1.30% | 4.80% | 1.00% | |
| | 20 | 17 | 20: | 18 | | | |
| | Room Demand Change | Room Supply Change | Room Demand Change | Room Supply Change | | | |
| Somerset | - | - | - | - | | | |
| Wicomico | 1.10% | 0.00% | - | 0.00% | | | |
| Worcester | 2.90% | 1.10% | _ | 1.40% | Sources: III | S. Census Bureau, Cour | |
| LES | 2.60% | 0.90% | <u>-</u> | 1.10% | Sources: U.S | s. Cerisus bureau, Cour | |

Sources: U.S. Census Bureau, County Business Patterns, Visit Maryland. Org



5. FIRE (Finance, Insurance, Real Estate)



The industries described in this segment include finance, insurance and real estate. The finance industry consists of all types of financial institutions, including commercial banks, savings institutions, credit unions, non-depository credit intermediaries, brokerages, investment banks, portfolio managers, and other activities related to credit intermediation. The insurance industry consists of insurance carriers of all kinds and insurance agencies and brokerages. The real estate industry consists of various lessors of real estate, offices of real estate agents and brokers, and any activities related to real estate such as property managers.

The Lower Eastern Shore is not particularly known for its strong finance, insurance and real estate industries. However, there is an opportunity for growth in these industries, particularly in real estate, due to the large amount of tourism in region.

From 2012 to 2016 the number of financial establishments in the region remained only constant with three fewer establishments. In contrast the number of paid employees increased by roughly 25%, which indicates the establishments are growing in size and productivity. From 2012 to 2016 the number of insurance establishments decreased by 4.7%, but the number of paid employees increased by 5.2%. Out of the total population in the region with private health insurance alone or in combination in 2017, 77% of the population has employerbased health insurance, 20% has directpurchase health insurance and 3% has Tricare/military health insurance. Out of the total population living below the 138% poverty threshold, 31% of them have private health insurance coverage alone or in combination, which indicates the remaining 69% have either public health insurance coverage or no coverage at all.

There has been an upward trend in the number of homes sold and the average sale price in the region. The number of active and new listings of homes in the region has remained constant the last five years, but the number of homes sold in 2018 was 3,848, an increase of 34% from 2014. This is a positive indicator for the housing market in the region because the number of homes being sold has increased even though the number of homes

listed remained constant. The average sales price in 2018 was \$235,466, which was a 13% increase from 2014. This indicates more homes are going to closing and at a higher selling price overall.

Moving forward, there are concerns regarding the ability of the finance and insurance industries to attract young workers from within the area or to attract them to the region. As a result, many students are not staying in the area following graduation from post-secondary schools such as Wor-Wic Community College, University of Maryland Eastern Shore, and Salisbury University. Because of the higher median wage and buying power of college graduates the financial, insurance and real estate industries rely on them as clientele. In order to keep these students in the area, business leaders need to work with institutions of higher education to recruit students looking for a job post-graduation. There is also a concern regarding the commercial real estate industry. Some observers note that the perceived value of a number of commercial real estate assets are lower than their list prices. This could become a cause for concern if the economy cools down. There is also an upward trend on auto and health insurance premiums in the region.



5. FIRE (Finance, Insurance, Real Estate) con't.

| | HEALTH INSURANCE (PRIVATE COVERAGE) - 2017 | | | | | | | | | |
|-----------|--|---------------|-----------------|---------------|------------------|---------------|--|--|--|--|
| | Employer Based | Percent Total | Direct-Purchase | Percent Total | Tricare/Military | Percent Total | | | | |
| Somerset | 10624 | 48.70% | 2109 | 9.70% | 481 | 2.20% | | | | |
| Wicomico | 53712 | 53.30% | 12528 | 12.40% | 2398 | 2.40% | | | | |
| Worcester | 27936 | 54.90% | 9334 | 18.30% | 1306 | 2.60% | | | | |
| LES | 92272 | | 23971 | | 4185 | | | | | |

| NUMBE | NUMBER OF FINANCIAL AND INSURANCE ESTABLISHMENTS | | | | | | | | |
|-----------|--|------|------|------|------|--|--|--|--|
| | 2012 | 2013 | 2014 | 2015 | 2016 | | | | |
| Somerset | 38 | 38 | 34 | 33 | 31 | | | | |
| Wicomico | 299 | 293 | 270 | 262 | 267 | | | | |
| Worcester | 242 | 233 | 258 | 237 | 237 | | | | |
| LES | 579 | 564 | 562 | 532 | 535 | | | | |

| | NUMBER OF FINANCIAL EMPLOYEES | | | | | | | | |
|-----------|--------------------------------------|------|------|------|------|--|--|--|--|
| | 2012 2013 2014 2015 2016 | | | | | | | | |
| Somerset | Somerset 91 89 85 76 80 | | | | | | | | |
| Wicomico | 1182 | 1221 | 1171 | 1169 | 1183 | | | | |
| Worcester | Worcester 466 447 511 572 538 | | | | | | | | |
| LES | 1739 | 1757 | 1767 | 1817 | 1801 | | | | |

| | NUMBER OF REAL ESTATE ESTABLISHMENTS | | | | | | | | |
|-----------|--------------------------------------|------|------|------|------|--|--|--|--|
| | 2012 | 2013 | 2014 | 2015 | 2016 | | | | |
| Somerset | 124 | 123 | 130 | 121 | 115 | | | | |
| Wicomico | 838 | 843 | 850 | 889 | 891 | | | | |
| Worcester | 1104 | 1108 | 1122 | 1165 | 1182 | | | | |
| LES | 2066 | 2074 | 2102 | 2175 | 2188 | | | | |

| NUMBER OF REAL ESTATE EMPLOYEES | | | | | | | | |
|---------------------------------|-------------------------------|-------|-------|-----|-----|--|--|--|
| 2012 2013 2014 2015 2016 | | | | | | | | |
| Somerset | 44 | 20-99 | 20-99 | 34 | 33 | | | |
| Wicomico | 472 | 425 | 424 | 469 | 442 | | | |
| Worcester | Worcester 385 378 370 409 443 | | | | | | | |
| LES | 901 | 803 | 794 | 912 | 918 | | | |

| NUMBER OF HOUSEHOLDS ABOVE OR BELOW POVERTY THRESHOLD (PRIVATE COVERAGE) - 2017 | | | | | | | | |
|---|------------------------------|-------------------------|-----------------------------------|---------------------------|--|--|--|--|
| | Below 138% Poverty Threshold | Percent Below Threshold | At or Above 138% Poverty Threshol | d Percent Above Threshold | | | | |
| Somerset | 1858 | 28.80% | 8857 | 66.90% | | | | |
| Wicomico | 7087 | 31.50% | 55552 | 73.50% | | | | |
| Worcester | 2401 | 30.10% | 33283 | 77.70% | | | | |
| LES | 11346 | | 97692 | | | | | |

| NUMBER OF HOMES SOLD | | | | | | | | | |
|----------------------|------|------|------|------|------|--|--|--|--|
| | 2014 | 2015 | 2016 | 2017 | 2018 | | | | |
| Somerset | 176 | 204 | 225 | 206 | 232 | | | | |
| Wicomico | 1278 | 1203 | 1123 | 1029 | 926 | | | | |
| Worcester | 2338 | 2385 | 2089 | 1981 | 1759 | | | | |
| LES | 3792 | 3792 | 3437 | 3216 | 2917 | | | | |

| | AVERAGE HOME SALES PRICE | | | | | | | | |
|-----------|--------------------------|--------------|--------------|--------------|--------------|--|--|--|--|
| | 2014 2015 2016 2017 2018 | | | | | | | | |
| Somerset | \$112,085.00 | \$92,035.00 | \$115,440.00 | \$122,937.00 | \$127,106.00 | | | | |
| Wicomico | \$148,059.00 | \$155,771.00 | \$151,910.00 | \$161,505.00 | \$165,412.00 | | | | |
| Worcester | \$250,127.00 | \$255,135.00 | \$262,855.00 | \$274,118.00 | \$284,503.00 | | | | |
| LES | \$170,090.33 | \$167,647.00 | \$176,735.00 | \$186,186.67 | \$192,340.33 | | | | |

Sources: U.S. Census Bureau, County Business Patterns, American Fact Finder, Census Bureau, American Community Survey; Private Health Insurance Coverage, Bright Multiple Listing Service;

Coastal Association of REALTORS

6. Services (includes professional, scientific and technical services; management of companies and enterprises; administrative and support services; waste management and remediation services)



The services industry described in this segment consists of professional, scientific, and technical management of companies services; and enterprises; administrative and support services, and waste management and remediation services. Professional services include accountants and lawyers while scientific and technical services range from electronics engineering technicians to support specialists. computer user Network administrators and customer services representatives are examples of administrative and support services positions. Maintenance and repair workers, inspectors, testers, and sorters are examples of waste management and remediation services.

As mentioned in previous industry and economic activity sector discussions, the proximity of the

Lower Eastern Shore of Maryland to major Mid-Atlantic Metropolitan areas offers unique opportunities to grow the Services sector. An obvious way to do this is through the establishment of back-office and backup operations for entities located in said major metropolitan areas.

Professional and business related services have 730 establishments, which is the largest number of service establishments in the region. Education and health related services have 534 establishments, while other services make up the remaining 414 establishments. Although education and health related services do not have the largest number of establishments, they do have the largest number of annual average employees of 12,501. The annual average number of employees for professional and business related services is 5,929 and all other services in the region have an annual average of 2,629 employees. Peninsula Regional Medical Center (PRMC) is the largest employer of services in the region with roughly 2,900 employees. Network Administrators have the highest median hourly wage in the region at around \$35 an hour. Accountants and electronics engineering technicians have the second highest median hourly wage at around \$28 an hour. The average weekly professional and business related services wage is \$936, while the average weekly wage for education and health related services is \$844. The average weekly wages for all remaining services is \$572.

Healthcare in the region provides an opportunity for growth in the services industry due to the aging population and growth in healthcare innovation. Healthcare innovation also provides an opportunity to increase entrepreneurial enthusiasm and support in areas such as Salisbury and Berlin. While the presence of healthcare innovation is exciting, such entrepreneurial enthusiasm needs to manifest in other areas of the Lower Eastern Shore as well. The aging population in the region creates an opportunity for the services industry to focus on expanding and diversifying their offerings for this demographic. Peninsula Regional Medical Center's prominence in the healthcare industry also provides an opportunity to attract top physicians and nurses, as well as patients seeking their expertise. Of concern for the services industry is the decreasing number of qualified vocational and trade workers. Furthermore, the gap between what is taught in universities and what employers are expecting graduates to know as they enter the workforce continues to increase.

6. Services (includes professional, scientific and technical services; management of companies and enterprises; administrative and support services; waste management and remediation services) con't.

| PROFESSIONAL AND BUSINESS SERVICE ESTABLISHMENTS | | | | | | | | | |
|--|------|------|------|------|------|--|--|--|--|
| | 2014 | 2015 | 2016 | 2017 | 2018 | | | | |
| Somerset | 46 | 42 | 38 | 38 | 41 | | | | |
| Wicomico | 424 | 423 | 430 | 423 | 420 | | | | |
| Worcester | 238 | 247 | 269 | 273 | 284 | | | | |
| LES | 708 | 712 | 737 | 734 | 745 | | | | |

| PROFESSIONAL AND BUSINESS SERVICE EMPLOYMENT | | | | | | | | | |
|--|--------------------------|------|------|------|------|--|--|--|--|
| | 2014 2015 2016 2017 2018 | | | | | | | | |
| Somerset | 211 | 176 | 146 | 146 | 193 | | | | |
| Wicomico | 4178 | 4225 | 4285 | 4357 | 4364 | | | | |
| Worcester | 1429 | 1425 | 1426 | 1502 | 1530 | | | | |
| LES | 5818 | 5826 | 5857 | 6005 | 6087 | | | | |

| EDUCATION AND HEALTH SERVICE ESTABLISHMENTS | | | | | | | | |
|---|------|------|------|------|------|--|--|--|
| | 2014 | 2015 | 2016 | 2017 | 2018 | | | |
| Somerset | 56 | 56 | 57 | 60 | 62 | | | |
| Wicomico | 315 | 318 | 318 | 326 | 327 | | | |
| Worcester | 152 | 148 | 148 | 149 | 150 | | | |
| LES | 523 | 522 | 523 | 535 | 539 | | | |

| EDUCATION AND HEALTH SERVICE EMPLOYEES | | | | | | | | |
|--|-------|-------|-------|-------|-------|--|--|--|
| 2014 2015 2016 2017 2018 | | | | | | | | |
| Somerset | 1044 | 1088 | 1107 | 1172 | 1135 | | | |
| Wicomico | 8482 | 8897 | 9175 | 9028 | 9245 | | | |
| Worcester | 2189 | 2161 | 2301 | 2508 | 2566 | | | |
| LES | 11715 | 12146 | 12583 | 12708 | 12946 | | | |

| ANNUAL AVG # OF EMPLOYEES IN PROFESSIONAL/BUSINESS SERVICE | | | | | | | | |
|--|------|------|------|------|------|--|--|--|
| | 2013 | 2014 | 2015 | 2016 | 2017 | | | |
| Somerset | 235 | 211 | 176 | 146 | 146 | | | |
| Wicomico | 4182 | 4178 | 4225 | 4285 | 4357 | | | |
| Worcester | 1488 | 1429 | 1425 | 1426 | 1502 | | | |
| LES | 5905 | 5818 | 5826 | 5857 | 6005 | | | |

| ANNUAL AVE | RAGE NUMBER | OF EMPLOYEES | IN EDUCATION | NAND HEALTH | H SERVICES |
|------------|-------------|--------------|--------------|-------------|------------|
| | 2013 | 2014 | 2015 | 2016 | 2017 |
| Somerset | 1069 | 1044 | 1088 | 1107 | 1172 |
| Worcester | 8643 | 8482 | 8897 | 9175 | 9028 |
| Wicomico | 2130 | 2189 | 2161 | 2301 | 2508 |
| LES | 11842 | 11715 | 12146 | 12583 | 12708 |

| ANNUAL AVERAGE NUMBER OF EMPLOYEES IN OTHER SERVICES | | | | | | | | |
|--|------|------|------|------|------|--|--|--|
| | 2013 | 2014 | 2015 | 2016 | 2017 | | | |
| Somerset | 155 | 150 | 147 | 102 | 73 | | | |
| Wicomico | 1772 | 1714 | 1618 | 1509 | 1488 | | | |
| Worcester | 743 | 702 | 681 | 772 | 758 | | | |
| LES | 2670 | 2566 | 2446 | 2383 | 2319 | | | |

| AVERAGE WEEKLY WAGES FOR PROFESSIONAL AND BUSINESS RELATED SERVICES | | | | | | | | |
|---|------|------|------|------|------|--|--|--|
| | 2013 | 2014 | 2015 | 2016 | 2017 | | | |
| Somerset | 750 | 814 | 885 | 710 | 675 | | | |
| Wicomico | 1300 | 937 | 1106 | 1227 | 1320 | | | |
| Worcester | 736 | 737 | 775 | 813 | 775 | | | |
| LES | 2786 | 2488 | 2766 | 2750 | 2770 | | | |

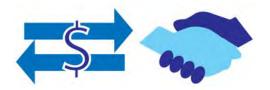
| AVERAGE WEEKLY EARNINGS FOR EDUCATION AND HEALTH SERVICES | | | | | | | | |
|---|------|------|------|------|------|--|--|--|
| | 2013 | 2014 | 2015 | 2016 | 2017 | | | |
| Somerset | 634 | 673 | 830 | 700 | 700 | | | |
| Wicomico | 898 | 938 | 930 | 950 | 971 | | | |
| Worcester | 788 | 830 | 872 | 862 | 831 | | | |
| LES | 2320 | 2441 | 2632 | 2512 | 2502 | | | |

| AVERAGE WEEKLY WAGES FOR OTHER SERVICES | | | | | | | | |
|---|------|------|------|------|------|--|--|--|
| 2013 2014 2015 2016 2017 | | | | | | | | |
| Somerset | 444 | 494 | 558 | 587 | 623 | | | |
| Wicomico | 509 | 487 | 511 | 517 | 515 | | | |
| Worcester | 506 | 516 | 560 | 577 | 574 | | | |
| LES | 1459 | 1497 | 1629 | 1681 | 1712 | | | |

Sources: Maryland Department of Labor, Licensing, and Regulation Quarterly Census of Employment and Wages



7. Trade (includes wholesale and retail)



The industries described in this segment relate to the wholesale and retail sectors of the economy. The type of facilities in this grouping can vary from clothing and clothing accessories stores, to motor vehicles and parts dealers, to food and beverage stores. These occupations are popular among all areas and are vital components in boosting the economy. The Lower Eastern Shore region has various retail stores and sectors, but expanding these offerings would allow them to employ more people. This would stimulate economic growth in the area by creating a ripple effect in the form of vendor payments, real estate vacancy rate reduction, fiscal impacts, etc.

From 2014 to 2016, the number of retail establishments remained relatively the same, with only the occasional decrease in certain subsectors. The number of paid employees mimicked that trend by remaining relatively the same with the occasional decrease in subsectors. This was further reflected in the number of establishments.



The subsector seeing the greatest decrease in the number of establishments and paid employees was electronics and appliance stores. The Lower Eastern Shore had a total of 37 electronics and appliance stores with around 229 paid employees in 2014, but dropped to 26 establishments with around 187 paid employees by 2016. These findings can in part be attributed to the rise in online retail outlets.

The demographic classification of business owners also changed from 2007 to 2012. In Somerset and Wicomico County there was an increase in female owned firms, with an additional 3 and 19 female owned firms respectively from 2007 to 2012. However, in that same time span there was a decrease of 59 female owned firms in Worcester County. In addition, Wicomico County saw an additional 152 veteran owned firms from 2007 to 2012, while Somerset and Worcester County remained the same in number of

veteran owned firms.

Looking forward, there remains a variety of ways for trade based industries to stimulate growth. Of concern is the growing popularity and trend towards ecommerce shopping compared to brick and mortar retailers. Big box stores should aim toward providing experiences (an added value) to attract people to shop at retail stores instead of online. Retail stores should also use technology to help impact direct sales and attract customers. Two ways technology can help business owners implement these strategies is by using online outlets to help encourage inperson shopping and using "ShopBots" to influence consumer behavior. These techniques can be used to discover consumer behavior and trends, allowing business owners to offer items and products that customers want to buy.



7. Trade (includes wholesale and retail) con't.

Some of the issues affecting industry growth in the trade sector are seasonality and infrastructure. Many persons lack a post-secondary education, resulting in lower disposal income to spend in the trade industry. In addition, there is insufficient infrastructure to promote the growth of the trade industry. Though the region boasts ample land and open space large investment is required to start the process of creating new infrastructure. On the other hand, redevelopment and upgrading of existing trade industry infrastructure would promote economic growth in this area.



| NUMBER OF WHOLESALE AND RETAIL ESTABLISHMENTS | | | | | | | |
|---|------|------|------|------|------|--|--|
| | 2012 | 2013 | 2014 | 2015 | 2016 | | |
| Somerset | 59 | 61 | 54 | 54 | 52 | | |
| Wicomico | 388 | 387 | 394 | 388 | 376 | | |
| Worcester | 401 | 407 | 409 | 396 | 384 | | |
| LES | 848 | 855 | 857 | 838 | 812 | | |

| NUMBER OF PAID WHOLESALE AND RETAIL EMPLOYEES | | | | | | |
|---|-------|-------|-------|-------|-------|--|
| | 2012 | 2013 | 2014 | 2015 | 2016 | |
| Somerset | 412 | 423 | 452 | 440 | 441 | |
| Wicomico | 6516 | 6745 | 6558 | 6621 | 6683 | |
| Worcester | 3405 | 3375 | 3648 | 3584 | 3676 | |
| LES | 10333 | 10543 | 10658 | 10645 | 10800 | |

| FEMALE OWNED FIRMS | | | | | | |
|---------------------------------|----|----|----|-----|--|--|
| Somerset Wicomico Worcester LES | | | | | | |
| 2007 | 21 | 31 | 95 | 147 | | |
| 2012 | 24 | 50 | 36 | 110 | | |

| VETERAN OWNED FIRMS | | | | | | |
|---------------------------------|---|-----|-----|-----|--|--|
| Somerset Wicomico Worcester LES | | | | | | |
| 2007 | 3 | 32 | N/A | 35 | | |
| 2012 | 3 | 184 | 30 | 217 | | |

Sources: U.S. Census Bureau, County Business Patterns

8. Government and Nonprofit (includes education, healthcare, and social assistance)



The industries described in this segment include the education, healthcare, and social assistance sectors of the economy. The types of employees included in this grouping are focused on providing assistance to other groups and individuals. This industry also looks at the individuals who use these various sectors. The Lower Eastern Shore region employs various facilities of all sizes



within this industry, ranging from the institutions of higher education to healthcare and housing assistance. Collectively the number of jobs supported by this sector is greater than any other segment in the region's economic landscape.

The Lower Eastern Shore region has three higher education facilities: Salisbury University, University of Maryland Eastern Shore (UMES), and Wor-Wic Community College. From 2013 to 2017 the number of undergraduates enrolled in these schools has decreased every year. Salisbury University saw a decrease in undergraduate enrollment from 8,004 to 7,782, UMES saw 3,530 to 2,861, and Wor-Wic saw 3,416 to 3,109 during that time period. However, Salisbury University has seen the number of graduate and professional enrollments steadily increase from 639 to 932 during the same period. High school graduation rates remained constant during this time at 87%. In the healthcare subsector the Lower Eastern Shore region has seen an improvement in emergency department visits related to mental health and addiction-related conditions. From 2012 to 2017 the amount of emergency department visits related to mental health conditions decreased from 17,585 to 9,097 respectively. Over the same time period of 2012 to 2017 the number of emergency department visits related to addiction-related conditions decreased from 5,525 to 5,159 respectively.

Going forward, there are a variety of ways the government and nonprofit industry can promote economic growth. One way is through developing the most effective way to connect the school systems with the private sector. One important method is to increase apprenticeship opportunities for students or individuals seeking a career change to gain industry experience. If the nonprofit sector can tap into the growing population of students enrolled in CTE courses it can help to coordinate both sectors.

8. Government and Nonprofit (includes education, healthcare, and social assistance) con't.

Further collaboration between educational facilities and the private sector will prove highly beneficial to the workforce needs of the region. Closer coordination would result in greater responsiveness on the part of the educational sector with regard to program development in line with the needs of employers. In turn there would be greater opportunities for private sector employers to articulate their specific needs to the educational sector. Collaborative efforts should include highlighting the positive aspects of trade schools. These include immediate employment and wage earning coupled with the option to continue on a path to additional higher education at any time in the future.



An aging population in the region can be attributed to the challenges faced by nonprofits and healthcare. A disproportionate aging population has created a shortage of physicians specializing in elderly care. In addition, for the non-profit sector the value of donations is increasing while the number of actual donations is decreasing. This in part related to age demographics in that younger persons generally believe it is more beneficial to donate their time rather than money.



| UNDERGRADUATE ENROLLMENT | | | | | | |
|--------------------------|--------|--------|--------|--------|--------|--|
| | 2013 | 2014 | 2015 | 2016 | 2017 | |
| Salisbury University | 8,004 | 7,997 | 7,849 | 7,861 | 7,782 | |
| UMES | 3,530 | 3,570 | 3,742 | 3,277 | 2,861 | |
| Wor-Wic | 3,416 | 3,104 | 3,128 | 3,098 | 3,109 | |
| LES | 14,950 | 14,671 | 14,719 | 14,236 | 13,752 | |

| HIGH SCHOOL GRADUATION RATE | | | | | | | |
|-----------------------------|--------|--------|--------|--------|--------|--|--|
| | 2014 | 2015 | 2016 | 2017 | 2018 | | |
| Somerset County | 85.57% | 87.98% | 82.58% | 85.95% | 84.53% | | |
| Wicomico County | 84.44% | 83.53% | 81.51% | 83.79% | 83.22% | | |
| Worcester County | 91.15% | 93.10% | 91.65% | 91.79% | 92.53% | | |
| LES Average | 87.05% | 88.20% | 85.25% | 87.18% | 86.76% | | |

Sources: Maryland State Department of Education; Salisbury University; University of Maryland Eastern Shore; Wor-Wic Community College



SOMERSET COUNTY

12

10

20

417

16

65

14

5

27

60

44

30

[Establishments] Annual Avg. Empl. | Emp.% | Avg. Wkly. Wage

48

1,833

3,890

941

154

336

250

1054

16

188

146

417

155

1,172

.7

14

27.3

57.9

2.3

3.7

15.7

.2

2.8

2.2

17.5

6.2

2.3

5

951

865

713

739

697

852

650

723

675

700

248

623

1,051

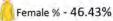
1,174

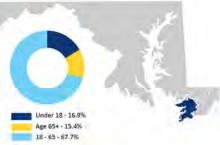


2010 - 26,470 2018 Est. - 25,675 2020 Proj. - 28,300

Age 65+-3,958 Age Under 18 - 4,344 2030 Proj. - 29,350 Minority - 46.89%

Male % - 53.57%









HOUSING

\$108,426

| do | | | | ИIC |
|----|----|----|---|------|
| 4 | EC | ON | 0 | MIC |
| W | EC | | | VIIC |

Per Capita Personal Income 2017 \$31,327

Percentage of Families Whose last 12 Month Income is **Below Poverty Line**

18.0%

Average Weekly Wage \$862

Free Reduced Meals 60.27%

County Property Tax .75%

Food Insecurity Rate 18.3%

Sources

U.S. Census Annual Estimates of Resident Population Maryland.gov

U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

U.S. Bureau of Economic Analysis, 2017 Regional GDP and Personal Income Maryland State Department of Assessments and Taxation

MD Department of Commerce



Industry Government

Federal Government

State Government

Local Government

Natural Resources & Mining

Education & Health Services

Leisure and Hospitality

Trade, Transportation & Utilities 114

Professional & Business Services 38

Private Sector

Construction

Information

Other Services

Manufacuturing

Financial Activities

LARGEST PRIVATE SECTOR EMPLOYERS

| Employer | Product/Service | Employment |
|---|----------------------------|------------|
| UMES | Higher Education | 855 |
| Sysco Eastern Shore | Food Products Distribution | 450 |
| Somerset Community Services | Services for Disabled | 425 |
| McCready Health | Medical Services | 300 |
| Aurora Senior Living of Manokin | Nursing Care | 175 |
| Sherwin Williams / Rubberset | Paint Brushes | 150 |
| Southern Connection Seafood | Seafood Distribution | 130 |
| Three Lower Counties Community Services | Medical Services | 105 |



WICOMICO COUNTY

27

13

48

27

97

22

250

326

238

239

274

2497

| Establishments | Annual Avg. Empl. | Emp.% | Avg. Wkly. Wage

0.6

6.1

10.8

82.5

0.7

4.6

6.5

21.4

1.1

4.1

9.7

20

10.5

3.9

1227

865

809

839

667

943

882

746

1168

970

1320

971

308

515

281

2749

4885

37193

299

2072

2940

9670

476

1841

4357

9028

4737

1772



2010 - 98,733 2018 Est. - 103,195 2020 Proj. - 107,450

2020 Proj. - 107,450 Age 2030 Proj. - 117,550 Mino

Male % - 46.66

Median Age - 35.8 Age 65+ - 15,015

Age Under 18 - 22,476 Minority - 32.30%

Under 18 - 21,789 Age 65+ - 14.55% 18 - 65 - 63.67%

Female % - 52.34



2017 Median Sales Price

Occupied their

Docupled Units 88,77% Vacant Units 11.23%*

\$ ECONOMIC

Per Capita Personal Income 2017 \$40,896

Percentage of Families Whose last 12 Month Income is Below Poverty Line

10.2%

Average Weekly Wages

\$839

Free Reduced Meals

41.2%

County Property Tax

.78%

Food Insecurity Rate

14.1%

Sources

U.S. Census Annual Estimates of Resident Population Maryland.gov
U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates
U.S. Bureau of Economic Analysis, 2017 Regional GDP and Personal Income
Maryland State Department of Assessments and Taxation

MD Department of Commerce



LARGEST PRIVATE SECTOR EMPLOYERS

| Employer | Product/Service | mployment |
|---|-----------------------------|-----------|
| Peninsula Regional Medical Center | Medical Services | 2900 |
| Salisbury University | Higher Education | 1865 |
| Perdue Farms | HQ / Poultry Processing | 1500 |
| Wor-Wic Community College | Higher Education | 435 |
| Jubilant Cadista Pharmaceuticals | Generic Pharmaceuticals | 340 |
| Genesis HealthCare/Rehab & Nursing Center | | 340 |
| Delmarva Power | Energy Products and Service | 300 |
| K & L Microwave | Electronics Assembly | 265 |

Industry Government

Federal Government

State Government

Local Government

Natural Resources & Mining

Education & Health Services

Leisure and Hospitality

Trade, Transportation & Utilities 597

Professional & Business Services 423

Private Sector

Construction

Information

Other Services

Manufacuturing

Financial Activities



WORCESTER COUNTY



POPULATION

2010 - 51,454 2018 Est. - 51,823

2020 Proj. - 56,250 2030 Proj. - 60,000

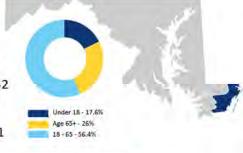
Male % - 48.49

Median Age - 49.7 Age 65+ - 13,509

Age Under 18 - 9,132

Minority - 17.31%

Female % - 51.11





HOUSING

| | N |
|-------|---|
| | _ |
| - | |
| - 100 | - |

ECONOMIC

Per Capita Personal Income 2017 \$58,191

Percentage of Families Whose last 12 Month Income is **Below Poverty Line**

7.8%

Average Weekly Wage \$635

Free Reduced Meals 77.32%

County Property Tax

.62%

Food Insecurity Rate

11.7%

Sources

U.S. Census Annual Estimates of Resident Population Maryland.gov

U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

U.S. Bureau of Economic Analysis, 2017 Regional GDP and Personal Income

Maryland State Department of Assessments and Taxation

MD Department of Commerce

*This reflects the significant number of properties that are used for seasonal, recreational, or occasional use.

| Industry Establishr | nents An | nual Avg. Emp | l. Emp.% | Avg. Wkly. Wage |
|---------------------------------|------------|---------------|------------|-----------------|
| Government | | | | |
| Federal Government | 14 | 178 | 0.7 | 1082 |
| State Government | 6 | 157 | 0.6 | 826 |
| Local Government | 45 | 3148 | 12.6 | 916 |
| Private Sector | 2136 | 21477 | 86 | 589 |
| Natural Resources & Mining | 24 | 98 | 0.4 | 800 |
| Construction | 232 | 1136 | 4.6 | 785 |
| Manufacuturing | 45 | 697 | 2.8 | 797 |
| Trade, Transportation & Utiliti | es 468 | 4321 | 17.3 | 506 |
| Information | 19 | 176 | 0.7 | 922 |
| Financial Activities | 261 | 1101 | 4.4 | 796 |
| Professional & Business Service | ces 273 | 1502 | 6 | 775 |
| Education & Health Services | 149 | 2508 | 10 | 831 |
| Leisure and Hospitality | 508 | 9192 | 36.8 | 458 |
| Other Services | 154 | 743 | 3 | 574 |



LARGEST PRIVATE SECTOR EMPLOYERS

| Employer | Product/Service | Employment |
|---|-------------------------------|------------|
| Harrison Group | Hotels and Restaurants | 1170 |
| Atlantic General Hospital | Medical Services | 860 |
| Bayshore Development | Entertainment, Recreation | 520 |
| OC Seacrets | Hotel and Restaurant | 470 |
| Dough Roller | Restaurant | 360 |
| Ocean Enterprise 589 / Casino Ocean Downs | Casino Gambling | 350 |
| Carousel Resort Hotel & Condominiums | Hotel and Condominiums | 340 |
| Clarion Resort Fontainebleau | Hotel and Restaurant | 340 |



ECONOMIC RESILIENCE



For the purposes of this document, we define economic resilience as the ability to anticipate threats to our economy, reduce the impact of these threats by taking preemptive action, respond appropriately and efficiently when these threats materialize, and have a plan in place for recovery.

Generally speaking, these threats can be economic events such a plant closures, infrastructure disruptions, financial shocks; they can be natural events (weather-related), or they can be technological threats, such as hazardous material accidents, pandemic diseases, terrorism, etc., and can greatly cause an economic disruption or collapse within a community.

According to the U.S. Economic Development Administration, establishing economic resilience in a local or regional economy requires the ability to anticipate risk, evaluate how that risk can impact key economic assets, and build a responsive capacity.

During the past 25 years, the Lower Eastern Shore of Maryland has endured multiple economic disruptions. Some of these have been due to:

- National economic downturns with detrimental local and regional economic impacts;
- Key economic activity sector downturns in particular industries that constitute a critical component of the region's economic activity, such as construction and real-estate;
- Other external shocks such as hurricanes, flooding, snow and ice storms, avian influenza scares, fish kills, etc.

In almost all of these cases, the local economy was harmed but eventually recovered, sometimes with state and federal help.





ECONOMIC RESILIENCE cont'd

During these 25 years, the region's economy has become more diversified, thanks to deliberate efforts of our county economic development decision makers. In addition, our workforce development programs have become more industry specific, more employer driven, and more outcomes based. Our emergency management agencies have greatly enhanced their disaster preparedness plans and have conducted many exercises including desktop simulations. Area health care organizations and public and non-profit sector social service organizations have also collaborated to improve their preparedness and recovery plans. However, the opportunity do more to increase the region's economic resilience still exists. As a result, the Lower Eastern Shore of Maryland is committed to becoming resilient with respect to all predictable and unforeseen economic disruptions. To this end, we have established the following three economic resilience goals:

- 1. We will be developing a task force to economic disruptions, whether they are ancontinually scan the environment for leading ticipated or unexpected. These contingency indicators of economic disruptions. This will plans will combine preemptive actions with enable us to better anticipate potential deliberate steps designed to help us respond economic disruptions before they occur. At to events as they happen, mobilize resources, the outset of this effort, we will administer an and coordinate relief efforts. Economic Resilience Survey to our CEDS Committee members and our stakeholders. This survey will be a locally adapted version of a similar survey developed by our sister region to our immediate north, the Mid-Shore Regional Council. The goal of the survey will be to determine a baseline of economic resilience and/or preparedness efforts already taking place in the region as well as the level of awareness of economic resilience.
- 2. The task force will also develop contingency plans for a variety of potential economic disruptions based on our physical, economic, and social vulnerabilities. These contingency plans will help us undertake mitigating actions to reduce the impact of different types of

- 3. Finally, the task force will help organize key organizations and stakeholders to prepare for various stages of emergency response, restoration, reconstruction, and community betterment to ensure rapid and complete recovery after an economic disruption takes place.





ECONOMIC RESILIENCE cont'd

In all these activities we will emphasize the fact that, at the regional or community level, economic development practitioners are instrumental in building the capacity for economic resilience. Economic development professionals and organizations often become the focal point for post -incident coordination, information dissemination, responding to external inquiries, and the lead grant administrator for federally-funded recovery initiatives.

The task force activities will be focused around:

- 1. **Steady-state** initiatives, which are long-term efforts that seek to bolster our ability to withstand or avoid a shock. Some examples include:
- Engaging in comprehensive planning efforts that includes the integration and/or alignment of other planning efforts (e.g., hazard mitigation plans) and funding sources;
- Undertaking efforts to broaden the industrial base with diversification initiatives, such as targeting the development of emerging clusters or industries that (a) build on the region's unique assets and competitive strengths; and (b) provide stability during downturns that disproportionately impact any single cluster or industry;

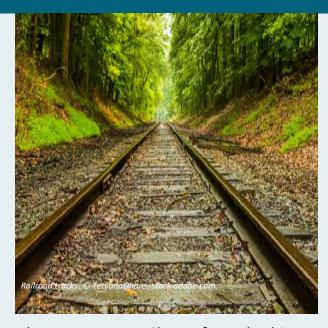
- Adapting business retention and expansion programs (e.g., economic gardening or other enterprise supports) to assist firms with economic recovery post-disruption;
- Building a resilient workforce that can better shift between jobs or industries when their core employment is threatened through job-driven skills strategies and support organizations;
- Ensuring redundancy in telecommunications and broadband networks to protect commerce and public safety in the event of natural or manmade disasters;
- Promoting business continuity and preparedness (i.e., ensuring businesses understand their vulnerabilities—including supply chains—in the face of disruptions and are prepared to take actions to resume operations after an event); and
- Employing safe development practices in business districts and surrounding communities.
- 2. *Responsive* economic resilience initiatives which could include:
- Conducting pre-disaster recovery planning to define key stakeholders, roles, responsibilities, and key actions;

- Establishing a process for regular communication, monitoring, and updating of business community needs and issues (which can then be used after an incident);
- Establishing/using a capability to rapidly contact key local, regional, state, and federal officials to communicate business sector needs and coordinate impact assessment efforts; and
- Establishing/using coordination mechanisms and leadership succession plans for short, intermediate, and long-term recovery needs.

The goals outlined in the following pages were developed through a series of focus group meetings with stakeholders from all industries. The goals are numbered for ease of reference and do not indicate priority among the goals. The success of each of these goals will help promote the success of the other goals.

Grow a strong and healthy economy through helping resident businesses increase their competitiveness, supporting the growth of the entrepreneurial base, and attracting new industry sectors that are compatible with our socio-economic environment.





The Lower Eastern Shore of Maryland is an attractive region for both businesses and residents. The region must welcome new businesses and provide strong support for the expansion of existing businesses in order to strengthen the health of the local economy. A business-friendly environment creates a region that attracts and retains talented employees and provides quality jobs for local residents. Support for entrepreneurship continues to grow with organizations such as Hotdesks, the Ratcliffe Shore Hatchery Competition, and Salisbury University's

Downtown Center for Entrepreneurship opening in 2020. Given the prominence of family and closely-held businesses in the region, providing support and training in areas such as succession and contingency planning is important to the long-term economic viability of the local economy.

Healthcare innovation offers one area for entrepreneurial focus in the region. With strong and growing healthcare systems in the region and a growing aging population there are ample opportunities for the growth of healthcare innovation.

Agriculture and agribusiness has long been one of the mainstays of the local economy. New opportunities for diversification of crops should continue to be explored. Thoughtful consideration should be given to land use policies that impact the access to productive farmland while also protecting the region's vast and varied environmental assets.

Regional tourism ranges from the large summer resort town of Ocean City to a growing number of sports tourism opportunities, including the Salisbury Marathon and the

USSSA East tournaments. Regional events also include a long list of natural, cultural and historical tourism activities.

An underutilized but powerful mechanism for economic growth in the region is Public Private Partnerships or "P3." These partnerships spread the risk and the rewards among the public and private sector partners. The concept to completion timelines are faster, the financing obstacles are lower and, when designed appropriately, the overall costs can also be lower. Some examples of local P3 relationships include dorm construction at the University of Maryland Eastern Shore and Salisbury University, as well as the collector road near the Aydelotte Farms development in Salisbury, MD.



Grow a strong and healthy economy through helping resident businesses increase their competitiveness, supporting the growth of the entrepreneurial base, and attracting new industry sectors that are compatible with our socio-economic environment.



Strategies and action plans supporting Goal 1:

Strategy 1: Promote and support local and diverse entrepreneurship initiatives in an effort to strengthen the local economy.

- ⇒ 1.1 Strengthen and expand support networks for entrepreneurs.
- ⇒ 1.2 Promote learning and collaboration opportunities.

<u>Strategy 2:</u> Assist local private sector entities with navigating the regulatory process for business creation, expansion, and development.

- ⇒ 2.1 Encourage increased transparency in regulatory processes.
- ⇒ 2.2 Provide easy access to regulatory information.

<u>Strategy 3:</u> Facilitate collaborative partnerships between public and private entities to support economic growth.

- ⇒ 3.1 Identify priority opportunities for P3's.
- ⇒ 3.2 Facilitate collaboration between partners and assist in leveraging resources.

Strategy 4: Encourage and support the entry and growth of new industries and sub-industries to diversify business opportunities.

- ⇒ 4.1 Identify target areas for growth in both new industries and ancillary businesses for existing industries.
- ⇒ 4.2 Collaborate with partners to improve urban-rural market connections throughout the region.

<u>Strategy 5:</u> Support economic clustering as a feeder for innovation, diversification, and job creation.

⇒ 5.1 Coordinate access to incentives, capital, workshops, learning and collaboration opportunities.

<u>Strategy 6:</u> Increase affordable and workforce housing options throughout the region.

- ⇒ 6.1 Facilitate coordinated planning efforts to encourage housing investments near job markets.
- ⇒ 6.2 Provide technical assistance to promote fair housing standards.
- ⇒ 6.3 Support and promote efforts to incentivize affordable and workforce housing.

Grow a strong and healthy economy through helping resident businesses increase their competitiveness, supporting the growth of the entrepreneurial base, and attracting new industry sectors that are compatible with our socio-economic environment.

Specific Projects Supporting Goal 1:

McCready/Peninsula Regional Health System (PRHS) Merger (Regional—Somerset, Wicomico, Worcester Counties): Cost N/A. Transition toward regionalization of healthcare with increased quality of care and services due to greater resources.

⇒ Summer 2019: Agreements to merge signed.

⇒ March 2020: Federal and State regulatory process completed and transition completed.

⇒ Phase I McCready transitions to a free-standing medical facility (FMF) while new facility (McCready Health Pavilion) is constructed nearby—expected to be completed second half of 2022. Pushed back to 2023.

⇒ Phase II TidalHealth McCready Pavilion will operate out of the new facility, while the nursing home and assisted living facilities will remain on existing site.

⇒ Late 2022/2023: TidalHealth conducting information sessions with key stakeholders regarding patient volumes in Pavilion. Decision regarding construction to be made in 2023.

Somerset County Industrial Park (Regional—Somerset, Wicomico, Worcester Counties): Cost Unknown. Will acquire approximately 175 acres of developable land in the County's Priority Funding Area, complete a site evaluation to include wetland and forest delineation and survey of the developable portion for a single or multiple site, extend utilities to the site, and produce marketing materials to be used to educate site selection consultants. The anticipated land acquisition cost is \$1.5 Million, with almost \$2.0 Million budgeted for site preparation and extension services.

- ⇒ Land acquisition and initial infrastructure development funded by MD Department of Commerce Rural Maryland Economic Development Fund (\$3.3 Million)
- ⇒ Fall 2022: Property Acquisition
- ⇒ Summer 2023: Marketing materials
- ⇒ Summer-Winter 2023: Potential client inquiries/visits
- ⇒ Fall 2023: Completed site survey
- ⇒ July 2024: Discussion with potential clients to set needs, fiber, natural gas, water/sewer, and electric.
- ⇒ Spring 2024: Road improvements/Property Entrance.



Salisbury University Dave and Patsy Rommel Center for Entrepreneurship (Regional—Somerset, Wicomico, Worcester Counties): Cost N/A. Places for 12 resident entrepreneurs, shared co-working space, small offices/garages, makerspace, science oriented wetlab, retail display, meeting areas and individual seating throughout the facility for 100 entrepreneurs.

- ⇒ August 2019: 700 sq. ft. "pop-up space" prototype facility opened and will remain open until March 2021 as all services transfer to the Dave and Patsy Rommel Center for Entrepreneurship.
- ⇒ August 2020: 6,000 sq. ft. facility scheduled to open. Grand Opening scheduled for 2021 as health protocols allow. Change to Community Open House scheduled for 2022 as health protocols allow.
- ⇒ April 2021: Student Entrepreneurship Competition (SU Student) held virtually. Next completion scheduled in-person at Center May 2022.
- ⇒ May 2020, October 2020, and April 2021: Shore Hatchery Biannual Business Competition held virtually. May 2022 next competition to be held in-person.
- ⇒ Application process for community applicants begin in 2022 as health protocols allow.
- ⇒ 2022: Makerspace equipment fully utilized in Rommel Center, six businesses have been assigned space, three have launched from the Rommel Center, Entrepreneurial SU Faculty from the Sciences, Art, and Education assigned space; SU Design Agency operating out of Rommel Center. Ratcliffe Foundation Shore Hatchery Competitions are held each Fall and Spring.

Ocean City Convention Center Access Channel (Regional—Somerset, Wicomico, Worcester Counties): Cost of \$675,000. Dredge a navigable channel to the Convention Center Pier Area. Add floating docks and a water taxi terminal at the convention center boardwalk. Not rated—enhancement of Convention Center Phase III rated top priority in 2018.

⇒ FY24-FY25

Grow a strong and healthy economy through helping resident businesses increase their competitiveness, supporting the growth of the entrepreneurial base, and attracting new industry sectors that are compatible with our socio-economic environment.



Specific Projects Supporting Goal 1—cont.

Somerset Crossing on Route 13 across from UMES Blvd in Princess Anne (Regional—Somerset, Wicomico, Worcester Counties): Cost Unknown. A mixed use commercial development to include hotel/lodging, professional office space, retail and highway pad sites. Royal Farms currently planned as tenant. Specific plans include medical/office space 42,000 sq. ft. proposed hotel 42,000 sq. ft., retail up to 80,000 sq. ft. flex pad sites 1-4 acres, future development. Full Stop Light Intersection of US 13 and UMES Blvd. will provide access to existing and future business and increase safety.

- ⇒ 2021: Architectural/engineering process pushed back to 2022.
- ⇒ December 2021: NG junction completed
- ⇒ Summer 2022: Lateral extension to UMES completed.
- ⇒ December 2022: Royal Farms completed.
- ⇒ Late 2022—2023: Site selectors and business attraction process for remainder of site.
- ⇒ March 2023: construction began on full four-way stop light on US 13 connecting project to UMES Blvd and the University of Maryland Eastern Shore.

Arthur W. Perdue Stadium MLB Modifications (Regional - Somerset, Wicomico, and Worcester): Cost N/A. Wicomico County has hosted professional baseball in Salisbury, MD since 1996 at Arthur W. Perdue Stadium. The stadium currently serves as the home field for the Delmarva Shorebirds, the Single A affiliate of the Baltimore Orioles, and hosts over 100 events each year which attract an annual attendance of more than 225,000 from all over the region. Stadium events infuse an estimated \$13.4M into local economic activity yielding more than \$600,000 in State tax revenue annually and supporting hundreds of local jobs. Though many improvements have been made in recent years, the Stadium will require additional renovations in order to meet recently adopted Professional Development League (PDL) standards, as required by Major League Baseball in order to keep the franchise in the region. Other stadium improvements, including those specifically requested by the Baltimore Orioles, are also needed to make the stadium more modern and viable long-term, and to deliver a first-class product to players, coaches and fans.

- ⇒ A variety of funding sources will be pursued.
- ⇒ Engagement with the Maryland Stadium Authority was initiated in the fall of 2022.
- ⇒ Estimated time for construction to begin is 2024.

Renewable Energy Ventures (Regional—Somerset, Wicomico, Worcester Counties): Cost unknown. Two facilities employing anaerobic digestion process to convert agricultural waste to biogas.

- ⇒ Parcel in Princess Anne industrial park purchased 2020.
- ⇒ Permit process for Princess Anne location to be completed in 2021 with construction to begin with official ground breaking in early 2023.
- ⇒ Existing facility in Westover currently undergoing upgrades.
- ⇒ Fall 2022—Planet Found Energy Development LLC acquired by Chesapeake Utilities
- ⇒ Engineering work on roadway, water and sewer to be completed by County in early 2023.

Sage Policy Study—Economic Analysis (Somerset County) Funded by Hurricane Sandy related federal funds.

- ⇒ Mid-2020: Completed
- ⇒ 2020: Condemnation of two existing buildings in Crisfield damaged by Hurricane Sandy.
- ⇒ Recommendations regarding critical infrastructure upgrades being considered. Recommendations being used to assist in demo efforts in uptown area of Crisfield.
- \Rightarrow 2022/2023: Discussing recommendations with interested parties.

Nanticoke Foods Redevelopment (Wicomico County): Cost unknown. Redevelop the former Nanticoke Foods processing facility and three-acre site located at 20363 Harbor Road, Nanticoke, MD 21840. The harbor is owned and operated by Wicomico County, Maryland. The site was served as a major employer in Nanticoke but now has fallen into disarray.

- ⇒ Currently exploring funding for a study to determine what can or cannot be salvaged or repurposed and exploration of future potential.
- ⇒ Exploring funding for demolition, new construction and improvements to the site

Ensure that workers and job seekers of all ages have awareness of and access to the education and training opportunities needed to succeed in both our existing and emerging industries.





The Lower Eastern Shore boasts a strong education continuum that includes workforce development and training. The region is home to three institutions of higher education including Wor-Wic Community College, Salisbury University, and the University of Maryland Eastern Shore. Proper training opportunities must be in place to prepare individuals for careers in a variety of existing and potential future careers. Education should be responsive to the needs of the local, national, and global markets while being forward thinking and open to the integration of technology across all fields. Affordability and accessibility are key to providing opportunities to individuals of all socio-economic classes.

The region has a very robust career and technology education backbone comprising the three school systems and Wor-Wic Community College. There are, however, opportunities for further improving these activities through well planned, coordinated, and managed internships, apprenticeships,

and on-the-job training programs and activities. Of the three technical high schools in the region, it is worth noting the scheduled October 2019 opening of the new \$43 million Somerset County J.M. Tawes Career and Technology Center in the community of Westover.

The Maryland EARN program and the Maryland DLLR Apprenticeship programs are examples of such programs that can be further utilized and serve as a model for local workforce programs. To bolster the success of economic and workforce development programs, case management and support services must be available and accessible. Similarly, employer driven Skill Acquisition/Skill Development programs and activities can be developed and the existing ones can be further enhanced with strategic public subsidies and incentives to further develop the local workforce.

To meet the needs of all age cohorts,

adequate opportunities for the aging population to remain engaged in the community through educational, workforce, and volunteer opportunities should remain a priority. The presence of a competitive workforce is critical to the region's ability to attract and sustain existing businesses and serves as a key piece to fulfilling Goal 1: Health Economy and Goal 4: Vibrant Communities.

Support for the public school systems in the region is somewhat mixed. Generally, available resources have declined in the past ten year period in Somerset and Wicomico counties. In Worcester, the support seems relatively stable. Given the evolving career and college readiness needs of the local populations, additional strategic investments are needed to address various skill gaps (Source: Eastern Shore of Maryland Educational Consortium Report 2018). Investing in public education remains the best and fastest way to improve the economy of a region. Such investments also yield some of the highest ROIs among public expenditures.

Ensure that workers and job seekers of all ages have awareness of and access to the education and training opportunities needed to succeed in both our existing and emerging industries.



Strategies and Action Plans Supporting Goal 2:

<u>Strategy 1:</u> Facilitate collaboration between educational partners and industry partners to ensure students are acquiring the skills and knowledge needed to be competitive in the workforce.

⇒ **1.1** Coordinate a CEDS Workforce Development Task Force involving all partners to assess current needs and gaps.

Strategy 2: Strengthen and diversify education and workforce development programs throughout the region.

⇒ **2.1** Delegate these tasks to the CEDS Workforce Development Task Force.

<u>Strategy 3:</u> Implement a campaign to grow awareness of the variety of industries and workforce opportunities in the region.

⇒ **3.1** Delegate these tasks to the CEDS Workforce Development Task Force.

<u>Strategy 4:</u> Develop a clearinghouse to compile and share regional job and workforce development opportunities.

⇒ **4.1** Delegate these tasks to the CEDS Workforce Development Task Force.

Metrics: Annual Task Force Survey

Ensure that workers and job seekers of all ages have awareness of and access to the education and training opportunities needed to succeed in both our existing and emerging industries.



Specific Projects Supporting Goal 2:

Worcester County Economic Development STATT_AP—Skilled Trades, Agriculture, Technology (STEM) and Tourism Apprenticeship Program (Regional—Somerset, Wicomico, Worcester Counties): Cost N/A. Program is partnership between the County Economic Development Office, Worcester Technical High School, Worcester BoE, and private businesses. Proved work-based learning experience for high school students and recent graduates of Worcester County to explore skilled trades, agriculture, tourism, and hospitality related careers through paid internships, apprenticeships, and permanent employment opportunities.

- ⇒ Initial Pilot program executed with STEM in 2021. Meetings with Worcester BoE in October.
- ⇒ Spring 2022: Full executed and functioning program to be in place.
- ⇒ April 2022: Worcester Co. Econ Dev. Applied to TCC for FY23 RMPIF.
- ⇒ October 2022: FY23 RMPIF Grant Agreement fully executed.
- ⇒ Fully executed and functioning program to be in place by Spring 2024.

Applied Technology Building "Guerrieri Technology Center" —Wor-Wic Community College (Regional—Somerset, Wicomico, Worcester Counties): 50,000 sq. ft., \$36 million facility with strengthen alignment of programs and courses with local employer needs and will house programs in logistics, transportation, multiple industrial technologies—air condition heating and refrigeration, welding, plumbing, construction, and alternative energy—as well as a makerspace and the information technology department. Additional improvements will be made to the related roadways and parking lots. State funding approved in April 2019.

- ⇒ June 2019: County funding approved.
- ⇒ July 2020: Design began and completion scheduled for July 2021.
- ⇒ August 2021: Construction began.
- ⇒ September 2021: Groundbreaking
- ⇒ Fall 2023: Completion
- ⇒ Spring 2023: Scheduled to open.

Salisbury-Ocean City-Wicomico Regional Airport Growth and Development Project (Regional—Somerset, Wicomico, Worcester Counties): Cost approx. \$5.7 million from COVID relief funds and MD Department of Commerce Rural MD Economic Development Fund. Project will provide a comprehensive approach to retain and enhance scheduled airline service for the region, grow the aviation and aeronautical sector for a more diverse and sustainable economy, create a pipeline of talent for area employers in general and Piedmont Airlines (dba American Eagle) in particular, offer a pathway to meaningful job opportunities for area residents, retain and increase jobs and plan for future development at the regional airport (SBY). The project consists of three primary aspects:

- 1. Establishing an FAA Part 147 Certified Aviation Maintenance Technician (AMT program at SBY;
- 2. Developing a strategic plan for SBY;
- Creating shovel-ready site(s) at SBY business/aviation park for future development
- ⇒ August 2022: Submitted application for the Rural Maryland Economic Development Fund in September 2022
- ⇒ September 2022: UMES Personnel Requisition submitted
- ⇒ December 2022: \$3.3 million in funding received from MD Department of Commerce Rural MD Economic Development Fund grant through the Tri-County Council for the Lower Eastern Shore; Consultant hired for curriculum development; Curriculum packet submitted to Faculty Assembly Academic Standards Committee for approval; UMES search committee found.
- ⇒ December 2022: UMES Faculty Assembly vote and approval.
- ⇒ January 2023: Submission of AMT packet to University System of Maryland (USM) and Maryland Higher Education Commission (MHEC).
- ⇒ March 2023: USM Board of Regents Committee on Education Policy and Student Life Approval.
- ⇒ April 2023: UMES Full Board Regents Approval; MHEC approval; RFP for Hangar Renovations; Program Director hired.
- ⇒ May 2023: Middle States Commission on Higher Education approval; Renovations to hangar being; Equipment & tooling ordered.
- ⇒ June 2023: Instructors hires.
- ⇒ Fall 2023: Program start; Strategic Plan begins for SBY.
- Spring 2024: Shovel-Ready site(s) process begins for SBY business/aviation park.

Ensure that workers and job seekers of all ages have awareness of and access to the education and training opportunities needed to succeed in both our existing and emerging industries.



Specific Projects Supporting Goal 2:

Seasonal Workforce Housing Ocean City (Regional—Somerset, Wicomico, and Worcester Counties) - Build and provide housing for seasonal workforce in Ocean City. Initial estimates call for \$20 million investment in residence halls at several locations housing up to several thousand J1 and other seasonal workers.

- ⇒ September 2021 presentation to Mayor and City Council resulted in approval to explore specifics of the project with national-level J1 housing contractor on City-owned parcels in Ocean City and West Ocean City.
- ⇒ Parcels identification ongoing in 2022 and 2023.
- ⇒ Site plan owned by Phoenix Properties at 205 Dorchester Street has been approved. OCDC has been requested to provide a grant to this project towards preliminary soft costs.
- ⇒ 205 Dorchester St. project is entering building plan phase. Ocean City Development Corporation (OCDC) is providing a \$25,000 predevelopment grant towards this project.

Offshore Wind Workforce Training (Regional—Somerset, Wicomico and Worcester Counties): State of Maryland has initiated through the Good Jobs Challenge grant from the Economic Development Administration (EDA) of the US Department of Commerce an approximately \$24 Million program entitled Maryland Works for Wind (MWW). Program will facilitate training Lower Shore workforce in skilled trades for future entry into the offshore wind industry through apprenticeships and other methods. Training will utilize the participation of local employers in industries not directly associated with the MWW program resulting in immediate benefit to existing industries in need of skilled workers.

- ⇒ August 2022—Tri-County Council for the Lower Eastern Shore applied for a \$750,000 grant through its Lower Shore Workforce Alliance Division to begin implementing the program on the Lower Shore.
- ⇒ December 2022—Tri-County Council received Notice of Award from Maryland Department of Labor.
- ⇒ January 2023—Kickoff meeting Tri-County Council/Lower Shore Workforce Alliance with training providers, labor unions, organizations to begin discussions regarding implementation.

Somerset County Technical High School (Regional—Somerset, Wicomico and Worcester Counties): \$42 million LEED Gold Status project to provide Somerset County with educational and facilities infrastructure to participate in region-wide instructional program development. Will encourage and incentivize greater collaboration between Somerset Regional Advisory Committee and other county advisory committees. Provides significant community focal point for MD 413 between Westover and Crisfield, including community events.

- ⇒ September 2019: Opened for classes
- ⇒ Fall 2019: Capital improvements completed
- ⇒ Capacity building ongoing.
- ⇒ Development partnerships with regional universities, Wallops Island Flight Facility, and employers to meet regional workforce needs.
- ⇒ January 2022: Rural Maryland Prosperity Investment Funds (RMPIF) monies awarded through TCC for expansion of Somerset County Career and Technology Enrichment Program
- ⇒ April 2022: Somerset County Technical High School applied to Tri-County Council for FY23 RMPIF monies. Programs to be initiated are the Summer Enrichment Camps, SkillsUSA, Student Internships, and Drivers Education.
- ⇒ October 2022: FY23 RMPIF Grant Agreement with Tri-County Council executed.

Crisfield Airport Instructional Component (Somerset County): To add University of Maryland Eastern Shore (UMES) instructional component to facility in order to assist in operations.

- ⇒ 2019: negotiations between UMES and local government commenced.
- \Rightarrow Private sector company has expressed interest in program.
- ⇒ October 2021: Project ongoing.
- ⇒ October 2022: UMES flight program begins using Crisfield as a transient, satellite location for the pilot change-out and quick turns between flight lessons.

Ensure the stable and growing infrastructure needed for economic diversification and growth, while adhering to guidelines that coincide with the goals of the region to help protect our environment, quantity of open spaces, and quality of life.



The region's transportation infrastructure includes a network of roads, rail, water, and air. Efforts to enhance and grow the current infrastructure of the region will make a healthy economy and thriving region possible.

Additions to the transportation network that connect the current activity nodes will further integrate the region and help to manage sprawl. More transit options will allow residents greater access to employment and leisure opportunities while also reducing the environmental impact that results from the transport of a growing population.

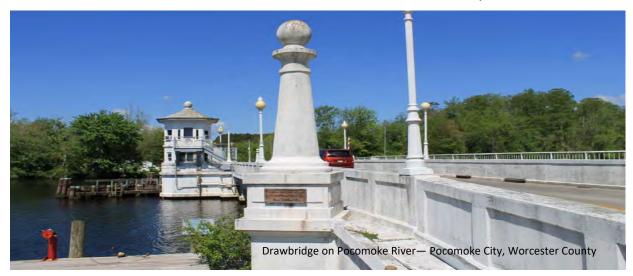
The existing railway system is aging and in need of a funding mechanism to ensure its viability into the future. The system has great potential that will be wasted if such a mechanism is not identified in the near future.

Waterway infrastructure includes the Port of Salisbury and the West Ocean City Harbor. The Port of Salisbury, Maryland's second largest port, has benefited from recent revitalization efforts and plans for continued development are underway. Maintaining proper dredging of the commercial waterways is essential to the

long-term viability of commercial water transport and the related industries. In the case of West Ocean City, the coming installation and operation of two offshore wind farms will increase the use and importance of the harbor and the channels.

The region should continue to strive to utilize the full capacity of infrastructure assets like the Salisbury-Ocean City-Wicomico Airport Business Center. The new regional jet service has definitely helped the airport but it also resulted in the local maintenance facility being closed with the local FBO moving to Philadelphia. Additional funding for further runway extensions is needed for the facility to reach its full potential. Reliance on a single carrier is also a concern.

Water and sewer infrastructure is an area of critical need in the region. Efforts to upgrade and expand the water/sewer infrastructure must continue to move forward in order to support existing development as well as future commercial and residential growth. Failure to do so will limit business expansion and continue to strain the existing system.



GOAL 3: INFRASTRUCTURE cont'd.

Ensure the stable and growing infrastructure needed for economic diversification and growth, while adhering to guidelines that coincide with the goals of the region to help protect our environment, quantity of open spaces, and quality of life.





Broadband internet access is a key component of the region's ability to create, attract, and retain job-creating businesses and institutions. Access improves the productivity and competitiveness of local business and provides additional teleworking opportunities for residents. It also provides better access to local government agencies and educational resources. While

broadband access has grown over the past decade, efforts to continue expansion and provide last mile infrastructure is needed to reach currently unserved and underserved populations.

Ensuring appropriate soft infrastructure, including healthcare, education, and government facilities, are in place is necessary to properly fulfill the current needs and support the future growth of the local population and business base. Existing facilities should be continuously monitored in order to proactively plan for growing capacity needs. School facilities should be upgraded, where necessary, to ensure students are provided with the optimum environment for learning in an increasingly digital era.

Renewable energy investments such as solar farms and the two offshore wind farms planned to be installed off the coast of Ocean City are positive developments for the region. However, the region still has a major transmission line deficit, with a single major line coming down south from the north. Capacity concerns during very cold and very hot days and a general inability of industrial, commercial, and residential users to reduce daily usage are ongoing issues. It is hoped that the expanding natural gas infrastructure

will help alleviate some of these concerns. Additional resiliency in the regional transportation and energy infrastructure is an important consideration for the overall health of the local economy. This issue is discussed further in the resiliency section of this document.

In the transportation industry, roughly 22% of residents in Somerset County arrive to work by driving, carpooling, using public transportation, or by walking less than 10 minutes. Only roughly 17% and 16% of Wicomico County and Worcester County residents respectively arrive to work in less than 10 minutes. Yet, in all three counties, only roughly 6% of residents take longer than 60 minutes to get to work. These findings seem to indicate that a majority of Lower Eastern Shore residents work within the state.

Lastly, the human capital of the region is an asset that cannot be overlooked when examining the local infrastructure needs. A trained and trainable workforce is a necessary component of the region's ability to support and grow its economic base. Efforts to address the human capital component can be found in Goal 2 above.

Ensure the stable and growing infrastructure needed for economic diversification and growth, while adhering to guidelines that coincide with the goals of the region to help protect our environment, quantity of open spaces, and quality of life.



Strategies and action plans supporting Goal 3:

<u>Strategy 1:</u> Reconvene and restructure a regional Waste Water Committee in order to provide a comprehensive analysis of the water/sewer issues.

- ⇒ 1.1 Coordinate planning efforts to identify infrastructure issues as well as recommendations and goals with measurable milestones for addressing critical issues.
 - * Metric: Milestone Matrix
- ⇒ 1.2 Provide technical assistance to identify strategies for implementation of recommendations
 - * Metric: CEDS Annual Survey

Strategy 2: Continue to expand broadband access throughout the region.

- ⇒ 2.1 Identify areas in need of last mile broadband
 - * Metric: Broadband Map

Strategy 3: Support the development of alternative fuel sources in the region with emphasis on underserved areas.

- ⇒ 3.1 Grow awareness of alternative fuel sources, benefits, costs, economic, and environmental implications
 - * **Metric**: CEDS Annual Survey
- ⇒ 3.2 Provide technical assistance to assist partners and local jurisdictions implement alternative fuel infrastructure
 - * **Metric**: CEDS Annual Survey
- \Rightarrow 3.3 Support the expansion of the natural gas infrastructure.

<u>Strategy 4:</u> Promote utilization of existing US Route 13/Rail Transportation Corridor for Infrastructure Projects.

Ensure the stable and growing infrastructure needed for economic diversification and growth, while adhering to guidelines that coincide with the goals of the region to help protect our environment, quantity of open spaces, and quality of life.



Specific Projects Supporting Goal 3: Transportation

Salisbury – Wicomico Port Development (Regional - Somerset, Wicomico, Worcester Counties) – Cost unknown. To ensure commercial navigation along the Wicomico River. The U.S. Army Corps of Engineers designates navigational projects that support more than 1 million tons annually as 'economically significant' and provides more consistent dredging support for these projects. A third of the Wicomico is dredged every year. Ensuring that tonnage remains over 1 million tons each year is important for the continuation of the area's marine transportation system.

- ⇒ Acquire acreage to support current and new water transport users.
- ⇒ Invest in a shared, multi-user pier.
- ⇒ Create a water-commerce industrial park for a variety of water transport users'.
- ⇒ Repurpose existing facilities to support enhanced marine transportation along the Wicomico River

Construction of Additional Aircraft Hangars at Salisbury-Ocean City-Wicomico Regional Airport (Regional—Somerset, Wicomico, Worcester Counties): Project leverages proposed upgrades and extension of utilities for airport campus, including Airport Technology Park. Benefits include helping to meet current and future requirements of aviation companies, logistics and distribution firms and other ancillary commercial and general aviation needs, as well as responding to a significant shortage of large hangars on the east coast in areas near universities and within a short drive of large metropolitan areas.

- ⇒ 2022: High speed fiber optic cable and municipal water extended.
- ⇒ Some site preparation anticipated by 2024 to be funded with Rural MD Economic Development Grant from MD Department of Commerce .
- ⇒ County has bonded \$3 Million for extension of sewer through adjacent technology park—facilitating connections to future hangars.
- ⇒ Natural gas extension in progress

Development of Fire Suppression Infrastructure at Salisbury-Ocean City-Wicomico Regional Airport (Regional—Somerset, Wicomico, Worcester Counties): Design and construct a water tank in SBY business/aviation park.

- ⇒ January 2022: meetings to take place with engineering firm.
- ⇒ Water tanks and pumps needed for large hangars or other development on hold due to expense—funding being sought.

Crisfield Regional Passenger Ferry Service (Regional—Somerset, Wicomico, Worcester Counties): Suggest removing Crisfield and inserting Eastern Shore. Cost unknown. Establish a ferry service to and from various ports along the Chesapeake Bay, both North, South, East, and West. Service would utilize existing ports/terminals and future sites. Facilities in Crisfield would make use of existing Crisfield City Dock, docking port and parking area, with proposed administration terminal and tourism/recreational amenities supporting visitors and local businesses. Total area of facility would occupy approximately 3-4 acres. Project would support small businesses, promote tourism/outdoor recreation and related travel, and facilitate increased access to coastal communities isolated or marginalized by a combination of geography and shifting economic trends.

- ⇒ Sources of funds will include local, state, and federal funds, including Rebuilding American Infrastructure and Sustainability and Equity (RAISE) discretionary program.
- ⇒ EDA Grant awarded March 2023 for feasibility study participants includes several counties on Eastern Shore and Visit Annapolis.
- ⇒ September 2023: RFP for feasibility study will be ready for advertising.
- September-October 2023: Estimated completion of feasibility study.
- ⇒ July 2024: Estimated completion of public meetings
- ⇒ July 2025: Estimated completion of engineering/design and acquisition of land.
- ⇒ July 2026: Estimated completion of construction and initiation of service.

Ensure the stable and growing infrastructure needed for economic diversification and growth, while adhering to guidelines that coincide with the goals of the region to help protect our environment, quantity of open spaces, and quality of life.



Specific Projects Supporting Goal 3: Transportation

West Ocean City Commercial Harbor (Worcester County): Cost Needed. Repair and replace commercial bulkhead and correct 900 lineal feat of falling bulkhead.

- ⇒ 2019: Preliminary costs estimates provided by J. Stacy Hart Engineering.
- ⇒ Project considered critical.
- ⇒ Project should be completed as soon as possible with bulkhead failure determined by natural weather patterns.
- ⇒ FY2021: Engineering/Design
- ⇒ September 2021: Permit Applications submitted.
- ⇒ March 2022: Approval expected
- ⇒ 2022: Construction Estimated to begin.
- ⇒ 2022: Permit issued, starting within next few weeks, need to wait until boat ramp customers fade (Harbor Day at the Docks) to start.
- \Rightarrow 2022-2023: 1000 ft. to be completed.

Crisfield Airport Hanger (Somerset County): Construction of hangers to attract business. Cost N/A.

- ⇒ Funding received from MAA and FAA for upgrading of terminal.
- ⇒ Tree removal by FAA to enhance safety per Crisfield Airport Plan to be completed Mid-2021.
- ⇒ October 2021: Project still on-going.
- ⇒ Improvements completed at airport terminal include ADA compliant restroom, ADA compliant parking, internet service, security cameras, new flooring, new furniture, new television, and exterior painting.
- ⇒ Improvements completed at airport facility include automated, security gate, automated fueling system and wind locks. The obstruction removal project is nearly complete. Fuel prices have been advertised on AirNav and ForeFlighte
- ⇒ State funding has been obtained for the proposed ten unit hanger which when full will allow restoration of FAA funding. AECOM is under contract to perform the necessary engineering work.
- ⇒ An Airport Advisory Board was formed to provide guidance on the airport planning and operations
- ⇒ The City, County, and UMES are working on a cooperative agreement for an aviation training program
- ⇒ The City and EDC are working on a marketing program to promote use of the airport.

53

Ensure the stable and growing infrastructure needed for economic diversification and growth, while adhering to guidelines that coincide with the goals of the region to help protect our environment, quantity of open spaces, and quality of life.



Specific Projects Supporting Goal 3: Utilities

Regional Broadband Expansion (Regional—Somerset, Wicomico, Worcester Counties): Cost N/A. Continued and heightened pace of broadband expansion throughout entire region, both with regard to middle mile networks and last mile ISP service. Funding sources include State, federal, and local governments.

- ⇒ Late 2021: Updated Broadband Access Feasibility Studies completed in Somerset, Wicomico, and Worcester counties.
- ⇒ 2021-2022: negotiated agreements with ISP's being executed with individual county governments.
- ⇒ 2022: ISP buildouts continuing. Middle mile networks continuing to expand through MD Broadband Cooperative and others.

Natural Gas Pipeline Extension (Regional—Somerset, Wicomico, Worcester Counties): Extend from Fruitland to Pocomoke City along US Route 13 corridor—Maryland portion of DelMar Energy Pathway Project. Phase I of construction would run from Fruitland in Wicomico to the junction of Route 13 and MD-413 in Somerset. Anchor customers are University of MD Eastern Shore and Eastern Correctional Institution. Additional customers are Princess Anne Industrial Park, Moutaire Farms, and Clean Bay Renewables, LLC. In Princess Anne/Westover.

- ⇒ 2019: State of MD issued RFP and award made the same year.
- ⇒ Local governments and Chesapeake Utilities currently working through franchise agreement.
- ⇒ Summer 2020: Equipment purchase for Eastern Correctional Institution to transition form wood-burning to natural gas approved.
- ⇒ 2020: BPW permit process for wetlands for Wicomico portion approved, Somerset portion is ongoing. Construction commenced on Delaware portion
- ⇒ January 2021: construction commenced in Wicomico County and Somerset County.
- ⇒ January 2022—Spring 2022: Construction to be completed.
- ⇒ Spring 2022: Service suppled to UMES.
- ⇒ Summer 2022: Conversion process begun in Pocomoke City in preparation for further extension along US 13 transportation corridor.
- ⇒ September 2022: Wetlands license approved by Board of Public works
- ⇒ October 2022: Extension is on-going.

Extension of Natural Gas Line to SBY Airport and Airport Technology Park (Regional—Somerset, Wicomico, Worcester): 31,000 ft. from Perdue Stadium along Hobbs Road and the SBY Airport and the Airport Technology Park.

- ⇒ February 2021: RFP issued with quotes
- ⇒ Responses received
- ⇒ Wicomico County seeking grant funding in partnership with Chesapeake Utilities and the Maryland Energy Infrastructure Program—new round of potential grants announced Summer 2021.
- ⇒ Bonding for the rest of the funds are needed in order to complete project.

Ocean City Baltimore Ave Streetscape Improvements (Worcester County): Division Street to 15th Street. Cost of \$550,000 (plus utility undergoing \$15M estimate). Improvements of Baltimore Ave. between North Division and 15th Street. Enhancements for consideration include undergrounding utilities, wider sidewalks, utility strips, and land-scaping to take better advantage of the existing 75' right of way. Cost estimates included at this time are widening sidewalks on the east side only with no utility undergrounding and cost shared with SHA. Addition of utility undergrounding would add value to the Ocean City gateway arrival experience, increase pedestrian safety, improve event management, and enhance the property values in the corridor.

- ⇒ Conceptual design completed with capital improvement funding of \$1.5 million (local match) and 1st public meeting in 2021.
- ⇒ FY22—FY23 Engineering/Construction.

Ensure the stable and growing infrastructure needed for economic diversification and growth, while adhering to guidelines that coincide with the goals of the region to help protect our environment, quantity of open spaces, and quality of life.



Specific Projects Supporting Goal 3: Utilities

Regional—Somerset, Wicomico, and Worcester continued:

MarWind Offshore Wind Farm Project: Proposed project would see construction on a 80,000 acre offshore wind farm off the coast of Ocean City, Maryland, creating jobs and spurring economic activity in the Region. This project will have 22 turbines, generating 300MW and will power 92,000 homes per year. The project would be located on federal leased land and is in line with the goals set by the Maryland Offshore Wind Energy Act of 2013 and the Maryland Renewable Portfolio Standard (RPS).

- ⇒ Federal permits currently pending
- ⇒ 2026: Project to be operational.
- ⇒ October 2022: Moving to the next stage of permits.

Momentum Wind: Situated 15 miles off the Maryland Coast. This project will generate 808.5 MW of total energy, enough to power 210,000 homes in Maryland.

- ⇒ 55 turbines will be placed off Maryland's Coast.
- ⇒ 2026: Expected operation date.

Skipjack Wind 1 & 2 Wind Farm Project: Proposed project would see construction on 26,332 acre offshore wind farm off the coast of Fenwick Island, Delaware, creating jobs and spurring the economy of the Region. The project will be located on federal land that is leased and in line with goals set by the Maryland Offshore Wind Energy Act of 2013 and the Maryland Renewable Portfolio Standard (RPS).

- ⇒ 2017: Public Service Commission awarded project
- ⇒ Federal permits currently pending
- ⇒ October 2021: Announcement of site acquisition on Harbor Road for \$20 Million West Ocean City operations and maintenance (Q&M) facility.
- \Rightarrow 2026: Project to be operational by 2026.
- ⇒ Skipjack 1: 9 wind turbines to produce 120 MW of total energy to power 40,000 homes.
- ⇒ Skipjack 2: 60 wind turbines to produce 846 MW and power 275,000 homes.

Ensure the stable and growing infrastructure needed for economic diversification and growth, while adhering to guidelines that coincide with the goals of the region to help protect our environment, quantity of open spaces, and quality of life.



Specific Projects Supporting Goal 3: Water & Sewer

Salisbury-Ocean City-Wicomico Regional Airport Sewer Extension to Technology Park (Regional—Somerset, Wicomico, Worcester Counties): Provide needed sewer infrastructure by extending line from existing location at culde-sac of Citation Drive to Falcon Drive and along future cargo area.

2022: County has bonded \$3 Million for extension through remainder of Technology Park.

Smith Island Clean Water Project (Regional—Somerset, Wicomico, Worcester Counties): Estimated cost in 2023 is \$22 Million. Construction of a new Biological Nutrient Removal/Enhanced Nutrient Removal (BNR/ENR) wastewater treatment plant in Ewell and an upgrade to the wastewater collection and conveyance system. Includes decommissioning the existing Tylerton Wastewater Treatment Plant, an overhaul of three pumping stations and the construction of a new main to convey wastewater form Tylerton to the new plant.

- ⇒ June 2019: Board of Public Works funding approved.
- ⇒ Fall 2020: Timber Deck completed
- ⇒ January 2021: WWTP ready for bid advertisement.
- ⇒ Bidding of the subaqueous force main (SFM) is dependent upon the insurance of the Tidal Wetlands License.
- ⇒ Estimated completion subaqueous force main February 2022, pump stations June 2022, Ewell WWTP August 2023, post-construction last quarter 2023.
- ⇒ October 2021: Still on track.
- ⇒ August 2023: WWTP Bid awarded at 27% over pre-bid estimates; one year delay for vital parts, Rhodes Point bridge weight capacity insufficient; Funds for bridge repair being sought.
- ⇒ August 2022: Subaqueous force main (SFM) 3 yr. Tidal Wetlands License issued. Bids for construction rejected due to insufficient funding. Project on hold until funding is located.
- ⇒ Contract awarded for replacement pump stations in Ewell and Tylerton awarded with estimated completion date May 2023.
- ⇒ December 2022: MD BPW voted to commit approximately \$12.5 million from Bay Restoration Fund and Water Quality State Revolving Loan Fund to meet project shortfalls.
- ⇒ December 2022: Additional federal funds of \$2.25 Million identified in omnibus spending bill to finance subaqueous force main. Projected shortfall of \$300,000—delaying decommission of Tylerton plant.

Wicomico County Water and Sewer Master Plan (Wicomico County):

- ⇒ September 2021: Master plan received by engineering firm
- ⇒ FY23: Milestones and Priorities to be established
- ⇒ August 2022: Wicomico Water & Sewer Committee established; Committee will provide a White Paper to the next incoming Wicomico County Executive and the new Wicomico County Council. The Greater Salisbury Committee has organized this Committee.
- ⇒ December 2022: White Paper presented to County Executive and staff. Meeting between County Executive, Committee and municipal leaders to take place January 2023.

Extension of Pocomoke City Municipal Water Service in City - owned Parcel on US Route 13 (Worcester County): Objective is to make a property more marketable while also linking existing commercial properties experiencing failing septic systems.

- ⇒ 2019: Local government considered applying for RMPIF funds.
- Currently considering dividing project into two phases and staking funding sources.
- ⇒ Phase I would consist of engineering study.
- ⇒ Project on hold due to funding

Pocomoke City Water Tanks #1 and #2 Mixers (Worcester County): To alleviate chronic municipal water quality issues. With the assistance of GMB, Pocomoke City's chosen engineering firm, the city has proposed to install a mixer inside both City water tanks. This mixer will aerate the water which will reduce the amount of TTHM (Total trihalomethanes) bringing the levels to an acceptable, and compliant range. Project funded by Maryland Department of Environment (MDE).

- ⇒ March 2021: Begin design
- ⇒ December 2021: Design to Engineering and Capital Project Program
- ⇒ September 2022: Design phase complete
- ⇒ December 2022: Construction contractor to be selected through bidding process
- ⇒ December 2022—January 2023: Construction to begin.

Ensure the stable and growing infrastructure needed for economic diversification and growth, while adhering to guidelines that coincide with the goals of the region to help protect our environment, quantity of open spaces, and quality of life.



Specific Projects Supporting Goal 3: Water & Sewer—cont.

Pocomoke City Pump Station Replacement Project (Worcester County): Rehabilitating obsolete pump stations in Pocomoke City. Upgrades will consist of the rehabilitation of four of the existing seventeen pumping stations within the city sewer service into wet wells and installing submersible pumps, rails, valves, and controls. The existing four pumping stations to be replaced consist of dual pneumatic injectors located in underground vaults for the purpose of lifting sewer to that adjacent gravity system downstream. The proposed project will benefit the residents of Pocomoke City by ensuring continuous sanitary sewer system function. In addition, the upgrades would help to facilitate reasonable and planned economic growth in the area, while also helping to protect the Chesapeake Bay Watershed.

- ⇒ December 2021: Bids opened
- ⇒ 2022: Construction contractor selected
- ⇒ October 2022: Only three percent of project completed. Supply-chain challenges being experienced. Traffic redirection and road access challenges expected.
- ⇒ January 2023: Thirty-nine percent of project completed. The first lift station will be finished. There was some lag time on the first location (Dorchester Ave.) due to supply chain issues, but those have been resolved. The last 3 pump station replacements should run much smoother.
- ⇒ July 31, 2023: Entire Project completion date

Town of Snow Hill I & II (infiltration & inflow) Project (Worcester County): Replace or reline over 1,700 linear feed of underground sewer lines and associated manholes at the surface and running through wetlands adjacent to the Pocomoke River. Project will eliminate serious threat to the environment from sewage leakage and contribute to an increase in economic development capability by restoring lost treatment capacity in the Town's waste water treatment facility. The project is funded with a Community Development Block Grant and local funds.

- ⇒ Winter 2022: Engineering contract to be awarded
- ⇒ Spring 2022: Construction contract to be awarded
- ⇒ October 2022: Construction to be completed.
- ⇒ Project delayed during planning but currently in design phase (DBF). Design and permitted to be completed by December 2022.
- ⇒ January 2023: Advertisement for construction bids.
- ⇒ Late Spring/Summer 2023: Construction to begin and completion in Fall 2023 in prior to funding deadline.

Implement flexible and resilient development practices that ensure the protection of the natural environment while fostering diverse cultural and recreational opportunities to ensure residents and visitors alike enjoy vibrant communities throughout the region.



The Lower Eastern Shore boasts abundant natural beauty, strong historical assets and a vibrant cultural heritage. The unique geography encompasses vast open lands and a network of rivers nestled between the beautiful Chesapeake Bay and the Atlantic Ocean. Historical downtown areas and attractions provide a strong connection to the past that built this region.

Balancing the needs for growth to accommodate a strong and healthy economy with the conservation of natural resources is a key priority for the region. Preserving the coastline and protecting the health of the waterways on which generations have built their living is key to not only ensuring the environmental health and sustainability of the region but also for providing heritage and

3 Key Busines tock ado-

eco-tourism opportunities that allow residents and visitors to enjoy these natural assets. Similarly, development growth must be balanced with the need to safeguard productive farmland in support of one of the largest industries in the region.

"Quality-of-life" is a phrase often used to describe what residents love about the area although the exact definition is difficult to pinpoint. The close access to many metropolitan areas including Baltimore, Washington D.C., Annapolis, New York City, and Richmond without the experience of the day-to-day congestion is one of the competitive advantages the region has to offer to both businesses and individuals. Access to many music, art, and cultural amenities allows residents to enjoy experiences that speak to their interests.

Initiatives to improve air and water quality and innovate in ways that enhance sustainability while reducing environmental impacts will benefit not only the economy but the natural assets that contribute to the quality-of-life and attract future residents and visitors. It is incumbent upon all

stakeholders, including major industries, to augment bay restoration efforts by reducing their runoff. By the same token planners must think strategically regarding the impact of sprawl on the region's waterways.

The region has long been an active retirement destination for individuals over the age of 60 and this population continues to grow. Providing the amenities and infrastructure necessary to allow residents to age in place is an important consideration in providing this segment of the population with continued access to the vibrant communities that brought or kept them here in the first place.



Implement flexible and resilient development practices that ensure the protection of the natural environment while fostering diverse cultural and recreational opportunities to ensure residents and visitors alike enjoy vibrant communities throughout the region.



Strategies and action plans supporting Goal 4:

Strategy 1: Support planning efforts that balance the need for planned growth and the conservation of important natural resources in the region.

- ⇒ 1.1 Collaborate with partners and local jurisdiction to identify priority development areas and priority conservation areas.
 - * *Metric:* Priority Area Map

<u>Strategy 2</u>: Facilitate coordination of thoughtful and deliberate community planning and development efforts that cultivate a true sense of "community" for residents.

- ⇒ 2.1 Facilitate collaboration between all planning partners.
 - * **Metrics**: CEDS Annual Survey
- \Rightarrow 2.2 Encourage collaboration between transportation and land use planning
 - * Metrics: CEDS Annual Survey
- ⇒ 2.3 Provide technical assistance to areas desiring to revitalize.
 - * Metrics: CEDS Annual Survey

Strategy 3: Serve as a clearinghouse of community and cultural events in the region and encourage collaboration in programs and marketing.

- \Rightarrow 3.1 Collaborate with partners throughout the region to gather information on local offerings.
- * Metrics: CEDS Annual Survey
- \Rightarrow 3.2 Develop a tool to promote community and cultural events throughout the region.
- * **Metrics**: The tool itself
- ⇒ 3.3 Grow awareness of local events and of the new tool.
- * Metrics: Analytics for the tool.

Strategy 4: Implement a regional branding initiative to proved the Lower Eastern shore with a clear identify in regional marketing efforts

- ⇒ 4.1 Facilitate collaboration among partners throughout the region to determine benefits of and uses for regional branding efforts
 - * Metrics: CEDS Annual Survey
- ⇒ 4.2 Develop and implement a regional branding strategy

Strategy 5: Facilitate coordination of requests for flexibility in zoning

- ⇒ 5.1 facilitate collaboration with partners to determine the need for flexibility in zoning and appropriate flexible zoning techniques.
 - * **Metrics**: CEDS Annual Survey
- \Rightarrow 5.2 Encourage the development of processes for the consideration of flexible zoning requests.
 - Metrics: CEDS Annual Survey
- ⇒ 5.3 Provide technical assistance to partners

Implement flexible and resilient development practices that ensure the protection of the natural environment while fostering diverse cultural and recreational opportunities to ensure residents and visitors alike enjoy vibrant communities throughout the region.



Specific Projects Supporting Goal 4:

Westover to Crisfield Trail Mix Rail to Trail Project (Regional—Somerset, Wicomico, Worcester Counties): Funded with a combination of nearly \$5 million in two state/federal grants and runs along MD-413 on abandoned railway bed. Total distance is 12 miles and is paved. Project will increase public health/recreation/safety concerns, promote beautification, improve storm water management, provide blacktop access of adjacent properties to MD-413.

- ⇒ Phase I Crisfield: Marion Station 5 mile stretch RFP March 2019, construction began Spring 2019 and is currently in use with final punch list items complete in Sprint 2021.
- ⇒ Phase II Westover: Marion Station 7 mile stretch.
- ⇒ MD Department of Transportation and MD State Highway Administration absorbed the project in 2022 and funding to be supplied through those agencies at estimated cost of \$21 million.
- ⇒ Phase II: RFP and contract award Spring 2023.

Carvel Hall Brownfield Site former Briddel Knives Manufacturing Site: City of Crisfield (owner) plans to sell or lease property to private party. A portion of the Somerset Trail Mix Rail to Trail passes in front of the property. Trail and park projects calculated to render the property more attractive to potential purchaser or tenant.

- ⇒ January 2022: The blueprint completed for redevelopment of the properrty completed.
- ⇒ March 2022: Property purchased by private company Element MD for development as medical marijuana facility.
- 2023: Property to be developed in conjunction with Princess Anne facility owned by same company to facilitate growing, harvesting and processing.

Pirates Wharf Park Development (Regional—Somerset, Wicomico, Worcester Counties): Wicomico County to develop the property known as "Pirate Wharf", located on Whitehaven Rd in Quantico, into a regional park. Park will feature water access to the Wicomico River via a single lane boat ramp and soft launch area for small boats, kayaks and canoes. Park will include walking trails, pavilion, comfort station, observation decks, a fishing pier and opportunities for recreational leisure and environmental education programming. One walking trail will include a "history trail" featuring interpretive signage and displays that tells the story of the property.

- ⇒ September 2019: Master Report published
- ⇒ Total project budgeted at \$2.7 million in local, state, and federal funds.
- ⇒ Spring 2023: Portions of project have been bid out and construction to begin.

Connelly Mill Park Development (Regional—Somerset, Wicomico, Worcester Counties): Wicomico County to develop the "Connelly Mill Property" into a regional park. The 234 acre property sits adjacent to the county's existing main hub for recreation activities and tournaments—the henry Parker Athletic Complex, as well as the City of Salisbury's Naylor Mill Forest. Desirable natural features of the property include woods and elevations unusual for the area. Opportunities exist to provide new recreation amenities not otherwise available in the County and to connect existing trail systems at the Naylor Mill forest and Parker Athletic Complex, thus leveraging the enhancing these existing regional attractions.

- ⇒ Variety of grant funding will be pursued
- ⇒ FY25: Master planning process/public input tentatively scheduled
- ⇒ FY26 or later: Development to begin

Implement flexible and resilient development practices that ensure the protection of the natural environment while fostering diverse cultural and recreational opportunities to ensure residents and visitors alike enjoy vibrant communities throughout the region.



Specific Projects Supporting Goal 4:

Wicomico Civic Center Exterior Project (Regional—Somerset, Wicomico, Worcester Counties): Wicomico County will undergo an exterior renovation project of the facility which is designed to increase public safety and to enhance aesthetics and the overall attractiveness of the venue. The County received a \$5.5M federal grant through the EDA in May of 2022. Combined with State and local funds, the project is anticipated to cost approximately \$6.9M. The project will include: construction of an expanded box office and lobby area; installation of new site and accent lighting; creating of an expanded food court and entrance by the northwest corner of the venue; creation/expansion of outdoor prefunction spaces; re-orientation of the main parking lot, installation of bollards/planters/physical barriers along the north and west sides of the venue for increased safety, among other site improvements.

- ⇒ Pending possible EDA Tourism Infrastructure grant, project could include expansion of box office, main lobby additional entrance/food court in NW corner of venue
- ⇒ Phase I: Project to bid out Spring/Summer 2021. Date set back Spring/Summer 2022.
- ⇒ Construction to begin Fall 2021. Date set back to end of 2022.
- ⇒ October 2021: Project scope expanded—total project cost expanded to \$6.6M.
- ⇒ December 2021: Application submitted to EDA for \$5.52M Travel, Tourism and Outdoor Recreation Grant.
- ⇒ May 2022: EDA announced grant award of \$5.52M for the project.
- ⇒ October 2022: EDA will execute contract.
- ⇒ Summer 2023: The A/E and design contract for the project has been awarded and construction bids are anticipated.
- ⇒ February 2025: Construction to be completed.

North Prong Park (Wicomico County): Design and redevelopment of existing Salisbury commercial port/industrial area in North Prong of Wicomico River—create north-west gateway linking Salisbury's Downtown and west side neighborhoods. Work includes design, land acquisition and construction for history interpretation, environmental education and resiliency, trails, farmers market, community garden, recreation, retail, etc.

- ⇒ 2019: Concept presented in Envision Salisbury 20 year plan—refined in student competition.
- ⇒ July 2020: City purchased SALKAP Property, next to the Perdue Grain Facility on Lake Street.
- ⇒ 2022: Demolition of above-ground structure on Salkap property (317/325 Lake St.) to proceed Fall of 2022.
- ⇒ 2022 Phase I: Environmental Assessment of City Utility Department completed.
- ⇒ 2022 Phase II: Environmental Assessment of 400 W. Isabella St. is underway,
- ⇒ 2022: Soil Cap design is in process; final design second quarter 2023.
- ⇒ 2022: City applying for USEPA Brownfield Clean Up Grant.
- 2023: Pending success in pursuit of USEPA Brownfield Clean Up Grant, the City looks to proceed with remediation of 317/325 Lake Street.

Ocean City Downtown Recreation Complex (Worcester County): Cost of \$2,500,000 for the redevelopment of 3rd Street Downtown Recreation Complex, the Town's multiuse park in the downtown area. Master planning efforts have identified community needs and interests for the redevelopment of exercise stations, trails, open space, new playground, tennis courts, pickleball courts, skate park expansion.

- ⇒ FY22: Master plan is completed
- ⇒ FY22–25: Engineering/Design/Construction
- ⇒ October 2022: Re-bidding project; initial bids came in over budget due to inflation and construction material costs etc.

Implement flexible and resilient development practices that ensure the protection of the natural environment while fostering diverse cultural and recreational opportunities to ensure residents and visitors alike enjoy vibrant communities throughout the region.



Specific Projects Supporting Goal 4:

Ocean City Life Saving Museum Renovations (Worcester County): Cost of \$580,000 based on preliminary design—renovations and a small addition to the Ocean City Life Saving Museum located at the South end of the boardwalk. The projects will add an elevator and emergency exit stairs to bring the building into compliance with ADA and life safety codes and update an important tourism destination on the Boardwalk.

- ⇒ 2021: Real property donated by local business.
- ⇒ 2022: Currently working on the building
- ⇒ FY23 or later: Completion

Ocean City Sunset Park Pier (Worcester County): Cost of \$270,000—Sunset Park's construction was completed in 2006 on an existing 75' right-of-way located between Philadelphia Ave and the bay in Downtown Ocean City. The pedestrian oriented park includes scenic walkways, restroom facilities, stage area, and a boardwalk with bay outlook. The Phase 2 project includes construction of a pier for tall ships and other vessels along the water taxi terminal.

⇒ FY23 or later

Town of Snow Hill Pedestrian Friendly Project (Worcester County): A three-point initiative, in accordance with the 2010 Comprehensive and the 2025 Strategic Revitalization Plans, to increase walk and bike ability connecting key places of interest throughout Snow Hill and, more broadly, to similar regional projects. The fruition of these projects will reaffirm Snow Hill as an important way station for outdoor enthusiasts, especially bicyclists, as it leverages its premier location along the Pocomoke River and MD RT12, a MDOT State Highway Bike spine. Projects Include:

- 1. Walking and Biking Trail: Funded by the MDOT SHA Maryland Kim Lamphier Bikeways Program Grant.
 - The Bikeways Feasibility Study was completed and well-received by the Town's local government and citizens. Currently establishing priority areas for implementation, including searching for grant funding.
 - October 2022: MD DOL approved TCCLES application for the Rural Maryland Economic Development Fund. This project was included in the application.
- 2. Riverwalk: Funded by the Maryland Department of Housing & Community Development (DHDC) Operating Assistance Grant—Technical Assistance Grant and Strategic Demolition Fund Grant.
 - February 2022: Blueprints completed
 - Early Summer: Construction was completed early summer and is also being well-received by community
- 3. Downtown Traffic Flow:
 - February 2022: Completed study to present to Mayor and Council
 - October 2022: A decision has not been made regarding adopting changes in traffic patterns. The decision will largely depend on the final design for Bank Street.
 - Awaiting renderings from a volunteer landscape architect to submit to engineers at Davis, Brown, & Friedel for further cost estimates.



Appendix

(2021 - 2022) Crisfield Arts and Entertainment District (Somerset) - provides incentives for businesses opening within the district, which include property tax incentives, artist income tax subtraction modification and amusement & admissions tax exemption.

 Historic Corbin Library Building Studio/Gallery restoration completed Fall 2020.

(2021 - 2022) City of Salisbury Revitalization of Main Street (Wicomico) - To upgrade/replace water, sewer, and storm drains, increase pedestrian safety by adding street lights/new sidewalks, adding bio-retention areas to improve storm water runoff quality.

- First three blocks between Route 13 and Division Street completed late 2019.
- Division Street from Camden Street to Church Street construction completed June 2020.

(2021–2022) Worcester County Economic Development STEM Program - Increase partnerships and expand student participation by extending program to include career-ready instruction/activities.

- Partnership with University of Maryland Eastern Shore's Engineering and Aviation Building 2019.
- Meeting with Worcester Technical High School scheduled February 2020.
- Moved in January 2021.

(2022 - 2023) Worcester County Co-working Space - Shared co-working space involving Worcester County Economic Development, Small Business Development Center, and private businesses. Provide resources for entrepreneurs and satellite employees, access to high speed internet, proximity to other government agencies/departments and central location in the county. Long term goal is incubator.

Currently researching location in Snow Hill and looking for funding opportunities. No timeline.

(2022-2023) Ocean City Sports Complex (Worcester) - Indoor/Outdoor sports complex designed to host large amateur tournaments. A feasibility study conducted by the Maryland Stadium Authority concluded that a facility is economically viable. Integrate sports marketing program with Worcester County to promote destination tourism combined with family friendly sports venues. Utilize existing tourism economic resources (hotels, restaurants, recreation) in Ocean City to maximize investment in sports facilities.

- FY21 feasibility study completed.
- FY22 land acquisition/partnership/design
- FY23 Construction—will be rolled into Norther Worcester Athletic Complex as part of concerted County/City project.

(2022-2023) Worcester County Broadband Access Study (Worcester) - Increase access and reliability of internet service to unserved and underserved school age children, residents, and businesses in Worcester County.

- Feasibility Study complete by CTC Technology & Energy 2019
- Broadband service testing contract with CTC Technology & Energy 202
- Updated January 2021.
- October 2021—County currently coordinating with ISP's for expansion/ buildout. Fiber in process of being installed.

(2022-2023) Somerset County Broadband Access Study (Somerset) - Somerset County Broadband Study funded by MD DHCD Hurricane Sandy monies. Purpose is to assess the needs and access.

- Study completed in Summer of 2020 and submitted to County Commissioners December 2020.
- Recommendations to be evaluated 2021.
- October 2021 County currently coordinating with ISP's for expansion/ buildout.



Appendix

(2022-2023) City of Salisbury Gordy Road Water Main Extension Project (Wicomico) - to create loop in City's water system and provide redundancy in distribution system. Represents first connection of water main from north to east side of city.

- Construction commenced September 2020.
- Currently under construction estimated completion May 2021.
- Project completed May 2021.

(2022-2023) City of Salisbury Fitzwater Street Sewer Pumping Station and Pumping Station Equipment Relocation (Wicomico) - to move existing pumping station road bed to adjacent parcel, relocate pump station components (controls/generator) from Marina property, thereby protecting pumping station rom road traffic and allowing Marina development to move forward. Project to include replacing or rehabilitating sewer mains and manholes as necessary.

- Pumping station groundbreaking commenced December 2019.
- Currently under construction estimated completion March 2021.
- Project completed March 2021.

(2022-2023) HPAC Inclusive Playground Project (Regional - Wicomico, Worcester, Somerset) - Henry S. Parker Sports Complex is currently a regional draw for sports tournaments and events. The project will enhance the regional nature of the complex by allowing children on the Lower shore of all levels of ability the opportunity to play together.

- Funding secured with estimated time of completion April 2021.
- Project completed and facility opened April 2021.

(2022-2023) Extension of ISP Broadband Service (Somerset) - From existing Maryland Broadband Cooperative trunkline network on MD Route 413 (Crisfield Highway) to communities of Westover, Fairmount, Upper Fairmount, and Manokin. ISP in partnership with County received grant funding in 2020.

- Construction commenced in 2020 and to continue in 2021.
- October 2021 county currently coordinating with five ISP's in expansion effort.

(2022-2023) Extension of Broadband Trunkline (Wicomico) - Extension of MD Broadband Cooperative existing trunkline from US Route 50 to Quantico and Hebron and extending in stages through Tyaskin, Bivalve, Naticoke and Waterview, resulting in high capacity fiber optic lateral line spanning twenty-three miles (121,968 ft.).

- Funds provided by MD DHCD through MD Office of Statewide Broadband.
- Notice to Proceed for Quantico portion issued late October with completion expected February 2021. Completed
- Notice to Proceed for Hebron portion issued late October. Awaiting County permits and pole attachment approval from Choptank Electric. Underground work commencing. Project completion expected June 2021. Completed.
- Project to be further extended to communities of Tyaskin and Bivalve along MD Route 349 through 67,421 feet of fiber - completion delated Spring 2022.
- Project to be further extended to Nanticoke and Waterview along MD Route 349 through 25,600 feet of fiber-completion ate Spring 2022.

(2022-2023) Extension of ISP Broadband Service to SBY Airport Technology Park (Regional—Wicomico, Worcester, Somerset) - from MD Broadband Coop POP on Hobbs Road to Mount Hermon Road, Airport Terminal Road to Citation Drive.

- Funds to be budgeted by County in FY22 with completion expected 4-6 months later in late calendar year 2021-2022.
- Contract awarded august 2021.
- Service for airport, technology park and its businesses switched to fiber project completed late 2021.
- Consider moving project to appendix.

(2022-2023) Burgess Rural Living Center (Regional - Worcester, Wicomico, Somerset) - Located in an existing rest stop/tourist center on US Route 13 in Princess Anne. Extensive self-guided displays will highlight rural living in Somerset County from the 1880's to 1930's.

- Project is populated with artifacts from the collection of Mr. Lawrence Burgess.
- Funding secured through Transportation Alternative Program (TAP) Federal 80% and Maryland Bikeways Program (State) 20%. (For Bike trail).
- Completion in November 2021.
- Suggest moving to appendix.



Appendix

(2023-2024) Deal Island Road Water Main Loop Project (Somerset): Construction of 850 feet of 10" watermain and appurtenances by dictional boring, 470 feet of 8" watermain and appurtenances by open-cut method, water services, hydrant assemblies, and all site restoration.

- Bid awarded 2021
- Equipment on site October 2021.
- December 2021: Substantial completion.
- Winter 2022: Finish work to be completed.

(2023-2024) City of Salisbury Well No. 3 (Wicomico): To increase drinking water capacity at Paleo Water Plant (currently 75% of City's drinking water) from two wells to three.

- Construction contract awarded January 13, 2020.
- Currently under construction—estimated completion June 2021.
- Project completion date extended January 2022.

(2023-2024) Northern Worcester Athletic Complex Worcester County/Ocean City Sports Complex (Regional — Somerset, Wicomico, Worcester Counties): Cost Unknown. To diversify and capture the growing sports tourism industry a physical facility is needed. Increase tourism year-round; new employment and community involvement opportunities; additional educational opportunities; develop a park in conjunction with sports complex. Indoor/Outdoor sports complex designed to host large amateur tournaments. A feasibility study conducted by the Maryland Stadium Authority concluded that a facility is economically viable. Worcester County has property under contract for the facility and the Maryland Stadium Authority is now preparing conceptual designs and cost estimates for the project. The goal of the project is to integrate a sports marketing program with Worcester County to promote destination tourism combined with family friendly sports venues. Utilize existing tourism economy resources (hotels, restaurants, recreation) in Ocean City to maximize investment in sports facility.

- ⇒ 2022: Determine site location
- ⇒ FY21: Engineering/Design
- ⇒ January 2023: The project is on hold due to the Worcester County Commissioners voted to not be involved.

(2023-2024) Salisbury Port Feasibility Study (Regional—Somerset, Wicomico, Worcester Counties): To explore feasibility of locating the commercial port to the southwest of the marina to allow for expansion and flow of traffic.

- ⇒ June 2019: EDA Grant awarded.
- ⇒ October 2020: Bid awarded to CPCS Transcom.
- ⇒ January 2021: First meeting of Steering Committee.
- ⇒ February—July 2021: Three Working Papers developed.
- September—October 2021: Draft Final Report presented to City of Salisbury.

(2023-2024) Salisbury-Ocean City-Wicomico Regional Airport Water Municipal Main Extension (Regional—Somerset, Wicomico, Worcester Counties): Provides needed water infrastructure to support portable water, fire suppression and future development on the airport campus by running approximately six miles of pressurized water main from the municipal water tower at Wor-Wic Community College to Fooks Rd.

- ⇒ October 2019: Grant of 1.5 million secured from MD Department of Environment through State Board of Public Works.
- ⇒ 2019: Low Interest loan of approximately \$3 million secured from MD Department of Environment through Water Quality Loan Fund
- ⇒ Design completed in 2019 with Notice of Proceed January 2020. Estimated completion date November 2021.
- ⇒ October 2022: Project completed.

(2023-2024) Salisbury-Ocean City-Wicomico Regional Airport Water Extension to Technology Park (Regional—Somerset, Wicomico, Worcester Counties): Provide needed water infrastructure by extending pressurized water line from Fooks Road to Falcon Drive and Technology Park and future cargo area.

⇒ County ARPA funds in place

First Responder Training Project (Regional - Somerset, Wicomico, and Worcester Counties): Cost N/A. Purpose is to facilitate collaboration and joint training between police, fire/rescue agencies and local, state, and federal partner agencies. Embrace police reform & cultural sensitivity through extensive training and state partnerships.

- ⇒ The complex will consist of physical training facilities, non-lethal training areas, and an outdoor firing range with bullet trap system.
- ⇒ Trainees will learn many aspects of law enforcement such as criminal law, constitutional law, patrol tactics, first aid, defensive tactics, emergency vehicle operations, less-lethal weapons, and firearms.
- ⇒ Work on Real World Scenarios.
- ⇒ SERT Team, Motor Unit, K-9, EMT/Paramedic, Fire, & Ambulance to Emergency Room training.
- ⇒ Driving, defensive hand to hand tactics, verbal confrontations, deescalation, shooter response, use of force policy review, officer safety updates, emergency vehicle driving tactics, defensive driving recertification, legal updates, wellness classes, physical fitness assessment, and a timed obstacle course.

Comprehensive Plan Town of Ocean City

Strengths, Weaknesses, Opportunities, Threats (SWOT) Rankings

The following Strengths, Weaknesses, Opportunities and Threats (SWOT's) were identified by the Town of Ocean City Planning Commission during the course of preparation of this Comprehensive Plan. Many of these SWOT's and their rankings were used to frame Plan goals and objectives as well as policies and recommendations contained in previous sections of this plan document.

Strengths

- 6 Boardwalk
- 6 Beach/waterfront/ocean
- 5 Downtown mixed-use character
- 5 Strong tax base/financial health
- 4.5 Quality of services
 - Bus/street cleaning/EMS/police
 - Recreation programs
- 3 Residential neighborhoods
- 2 Convention Center (as focal point)
- 1 Boating
- 1 Weather/barrier island
- 1 Family resort image
- .5 Amusements/Trimpers, Jolly Roger
 - Miniature golf
 - Water sports
 - Ice skating
- 0 Coastal cottage feel/setting
- 0 Northside Park
- 0 Linear corridor form
- 0 Best sunsets
- 0 Back bay/alternate transportation
- 0 Swimming
- 0 Fishing
- 0 Crabbing
- 0 Sunbathing
- O Sense of community attitude
- O School system
- 0 Fabulous restaurants
- O Assateague Island

Appendix B: SWOT Analysis Rankings

Weaknesses

- 8 Competing use for transportation corridor
 - cars/buses/walkers
- 7 Pyramidal zoning
 - conflicts/residential in middle of commercial
 - doesn't assure maintenance of commercial uses
- 5 Lack of seasonal worker housing
- 3 Moving people/transportation system
- 3 Undersized airport
 - 5000 foot runway needed
- 1 Deliveries any time of day impair transportation system
- 1 Demand and need for in-town parking affects quality of streetscape
- 0 No indoor public pool
- Over-ambitious parking standards
- 0 Not enough Park and Rides
 - Off Rt. 90 corridor
 - Northern end from Delaware

Opportunities

- 6 Parking garage in key locations
- 5 Downtown as pedestrian environment
- 4.5 Foster mixed use development
- 4 Diversify cultural offerings
 - Performing Arts
 - IMAX theater
 - Environmental awareness
 - aquarium
- 3 Reduce parking requirement/commercial
- 3 Use waterways/bay for travel/water taxis
- 3 Express bus service (40th to 100th Street with parking centers at each end)
- 2 Move people in entertaining ways
- 1 Re-development can improve:
 - Health
 - Safety
 - Character
- 0 Make parking free in west Ocean City
- 0 Build "dedicated" worker/resident parking downtown as opposed to public parking
- 0 Beach access/boardwalk promenades to Third Street
 - Convention Center to Princess Bayside
- 0 Worker dormitories/community in west Ocean City
- 0 West Ocean City for parks

Appendix B: SWOT Analysis Rankings

- Public boat landing on Isle of Wight 0
- Enhance canals 0
- Work with County on efficient connected transit 0

Threats

- 10
- Character/quality of development West Ocean City and Sussex County (growth impacts) 8
- Day and night trippers and traffic 6
- Residential neighborhoods not priority for enhancement

 "Little Salisbury" 5
- Threat to our access and services 4
- Canals not maintained 1
- Poorer design 1

Appendix C

List of Current and Historical Rare, Threatened and Endangered Species – Worcester County (2021)

List of Rare, Threatened, and Endangered Species of Worcester County

November 2021



Larry Hogan, Governor Boyd Rutherford, Lt. Governor Jeannie Haddaway-Riccio, Secretary



Wildlife & Heritage Service

Natural Heritage Program
Tawes State Office Building, E-1
580 Taylor Avenue
Annapolis, MD 21401
410-260-8540
Fax 410-260-8596
dnr.maryland.gov/wildlife

Additional Telephone Contact Information:
Toll free in Maryland: 877-620-8DNR ext. 8540 OR
Individual unit/program toll-free number
Out of state call: 410-260-8540
Text Telephone (TTY) users call via the Maryland Relay

The facilities and services of the Maryland Department of Natural Resources are available to all without regard to race, color, religion, sex, sexual orientation, age, national origin or physical or mental disability. This document is available in alternative format upon request.

ACKNOWLEDGMENTS

The Maryland Department of Natural Resources would like to express sincere appreciation to the many scientists and naturalists who willingly share information and provide their expertise to further our mission of conserving Maryland's natural heritage.

Publication of this list is made possible by taxpayer donations to Maryland's Chesapeake Bay and Endangered Species Fund.

IMPORTANT NOTES

This list is a subset of the main reports:

Maryland Natural Heritage Program. 2021. List of Rare, Threatened, and Endangered Plants of Maryland DNR 03-030321-271 and

Maryland Natural Heritage Program. 2021. Rare, Threatened, and Endangered Plants of Maryland DNR 03-030321-270 and

Maryland Natural Heritage Program. 2021. List of Rare, Threatened, and Endangered Animals of Maryland DNR 03- 111921-291

Please refer to these for important information including grank, history, purpose, governing laws and regulations, understanding state and federal conservation status ranks and legal statuses, and for additional resources.

This list is derived from an extensive data collection effort and numerous field surveys to determine distribution and abundance of plants and animals native to Maryland. Although based on a large volume of information, this list should not be viewed as complete or definitive. While much is known about some species, very little is known about others. The Maryland Natural Heritage Program welcomes additional information or recommendations regarding any of the taxa listed herein.

HOW YOU CAN HELP

You can take an active part in conserving Maryland's rare species by contacting the Wildlife and Heritage Service with the following types of information:

- 1. Location details should be included (exact mapped location using GPS is preferred, but not required). Online applications such as Google Earth are invaluable but precise, written directions including driving and walking are acceptable.
- 2. Documentation that includes a photograph, description of the species, identification source, and habitat description should accompany the report.
- 3. Information on the ecology and or biology of the species including observed and/or identified pollinators should accompany the report.
- **Additional information, including a downloadable PDF of our rare plant reporting form can be found at: dnr.maryland.gov/wildlife/Pages/plants_wildlife/rte_reportinginst.aspx

Definitions of qualifiers used in the county distribution of species.

| Distributional Qualifier | Definition |
|--------------------------|--|
| {species}? | Record for the county is reported but unverified or may indicate that the record occurs outside of the known range or in atypical habitat. |
| {species} ^h | Record for the county is based upon a historical collection but no extant population is known. |
| {species} ^I | Record for the county is the result of an introduction. |

| SCIENTIFIC NAME | COMMON NAME | STATE RANK | STATE STATUS | FEDERAL STATUS |
|------------------------------------|-------------------------------------|---------------|-----------------|-------------------|
| Animals | | | | |
| Acantharchus pomotis | Mud Sunfish | S3 | | |
| Ambystoma tigrinum | Eastern Tiger Salamander | S1 | Е | |
| Atlides halesus | Great Purple Hairstreak | S2S3 | | |
| Callophrys hesseli | Hessel's Hairstreak | SH | Χ | |
| Callophrys irus | Frosted Elfin | S1 | Е | |
| Caretta caretta | Loggerhead Sea Turtle | S1B,S1S2N | T | LT |
| Celithemis martha | Martha's Pennant | S1 | | |
| Charadrius melodus | Piping Plover | S1B | Е | LT |
| Charadrius wilsonia | Wilson's Plover | S1B | Е | |
| Cicindela abdominalis | Eastern Pinebarrens Tiger Beetle | S1 | E | |
| Circus hudsonius | Northern Harrier | S2B | 1 | |
| Cistothorus platensis | Sedge Wren | S1B | Е | |
| Dermochelys coriacea | Leatherback Sea Turtle | S1N | Е | LE |
| Dryobates borealis | Red-cockaded Woodpecker | SHB | Χ | LE |
| Egretta caerulea | Little Blue Heron | S3B | | |
| Ellipsoptera lepida | Ghost Tiger Beetle | S1 | Е | |
| Enallagma dubium | Burgundy Bluet | S1 | | |
| Enallagma weewa | Blackwater Bluet | S2 | | |
| Enneacanthus obesus | Banded Sunfish | S3S4 | | |
| Etheostoma fusiforme | Swamp Darter | S3 | | |
| Etheostoma vitreum | Glassy Darter | S2 | Т | |
| Eurycea cirrigera | Southern Two-lined Salamander | SU | | |
| Fundulus luciae | Spotfin Killifish | SU | | |
| Gastrophryne carolinensis | Eastern Narrow-mouthed Toad | S2S3 | Е | |
| Gelochelidon nilotica | Gull-billed Tern | S1B | Е | |
| Habroscelimorpha dorsalis media | White Tiger Beetle | S1 | E | |
| Haliaeetus leucocephalus | Bald Eagle | S3S4 | | |
| Helops cisteloides | A Tenebrionid Beetle | S1 | Е | |
| Hoperius planatus | A Dytiscid Beetle | S2 | | |
| Ixobrychus exilis | Least Bittern | S2S3B | 1 | |
| Lampsilis radiata | Eastern Lampmussel | SU | | |
| Laterallus jamaicensis | Black Rail | S1 | Е | LT |
| Ligumia nasuta | Eastern Pondmussel | S1S2 | | |
| Limnothlypis swainsonii | Swainson's Warbler | S1B | Е | |
| Lithobates virgatipes | Carpenter Frog | S3 | | |
| Nerodia erythrogaster | Plain-bellied Watersnake | S2S3 | | |
| Notropis chalybaeus | Ironcolor Shiner | S1 | E | |
| Nyctanassa violacea | Yellow-crowned Night-Heron | S3B | | |
| Photuris bethaniensis | Bethany Beach Firefly | S1 | | |
| Pituophis melanoleucus | Northern Pinesnake | SH | | |

| SCIENTIFIC NAME | COMMON NAME | STATE RANK | STATE STATUS | FEDERAL STATUS |
|---------------------------------|---------------------------------|---------------|-----------------|-------------------|
| Podilymbus podiceps | Pied-billed Grebe | S2S3B | | |
| Pseudotriton montanus | Mud Salamander | S2? | | |
| Pterourus palamedes | Palamedes Swallowtail | S1 | Е | |
| Rallus elegans | King Rail | S2B | | |
| Rynchops niger | Black Skimmer | S1B | Е | |
| Satyrium kingi | King's Hairstreak | S1 | Е | |
| Schoenicus puberulus | A Tenebrionid Beetle | S1 | Е | |
| Somatochlora filosa | Fine-lined Emerald | S2 | | |
| Sterna dougallii | Roseate Tern | SXB | X | LE |
| Sternula antillarum | Least Tern | S2B | Т | |
| Stygobromus indentatus | Tidewater Amphipod | S1 | | |
| Thalasseus maximus | Royal Tern | S1B | Е | |
| Thalasseus sandvicensis | Sandwich Tern | S1B | | |
| Plants | | | | |
| Agalinis setacea | Thread-leaved Gerardia | S2 | Е | |
| Alnus maritima | Seaside Alder | S3.1 | _ | |
| Amaranthus pumilus | Seabeach Amaranth | S1 | Е | LT |
| Ammannia latifolia | Koehne Ammannia | S2 | _ | |
| Amphicarpum amphicarpon | Blue Maidencane | S3 | | |
| Antennaria solitaria | Single-head Pussytoes | S2 | Т | |
| Aristida lanosa | Woolly Three-awn | S1 | E | |
| Aristida tuberculosa | Seabeach Needlegrass | S3 | _ | |
| Aristida virgata | Wand-like Three-awn Grass | S1S2 | Е | |
| Aronia x prunifolia | Purple Chokeberry | S3 | _ | |
| Arundinaria tecta ^h | Switch Cane | S2 | | |
| Asclepias lanceolata | Smooth Orange Milkweed | S1 | | |
| Asclepias rubra | Red Milkweed | S1 | Е | |
| Asclepias verticillata h | Whorled Milkweed | S3 | _ | |
| Atriplex mucronata | Seabeach Orach | S1S2 | | |
| Axonopus furcatus | Big Carpetgrass | S2? | | |
| Bartonia paniculata | Twining Screwstem | S3 | | |
| Bidens mitis | Small-fruit Beggarsticks | S1 | Е | |
| Boltonia asteroides var. | Citali frait Deggarsticks | 01 | _ | |
| glastifolia | Aster-like Boltonia | S1 | Е | |
| Borrichia frutescens h | Sea Oxeye | SH | X | |
| Buchnera americana ^h | Bluehearts | SH | X | |
| Calopogon tuberosus | Tuberous Grass-pink | S1 | E | |
| Cardamine longii | Long's Bittercress | S2 | E | |
| Carex barrattii | Barratt's Sedge | S3 | | |
| Carex bullata | Button Sedge | S3 | | |
| Carex digitalis var. macropoda | Southern Slender Woodland Sedge | S1? | | |
| Carex gigantea | Giant Sedge | S3 | | |
| Carex glaucescens | Southern Waxy Sedge | S1 | E | |
| | 2 | | | |

| SCIENTIFIC NAME | COMMON NAME | STATE RANK | STATE STATUS | FEDERAL STATUS |
|---|---|---------------|-----------------|-------------------|
| Carex hyalinolepis | Shoreline Sedge | S2S3 | | |
| Carex joorii | Joor's Sedge | S 3 | | |
| Carex louisianica | Louisiana Sedge | S 3 | | |
| Carex lupuliformis | False Hop Sedge | S2 | | |
| Carex mitchelliana | Mitchell's Sedge | S2 | | |
| Carex silicea | Seabeach Sedge | S1 | E | |
| Carex striatula | Lined Sedge | S 3 | | |
| Carex venusta | Dark Green Sedge | S3S4 | | |
| Centella erecta | Erect Coinleaf | S3 | | |
| Centrosema virginianum | Coastal Butterfly Pea | S2 | | |
| Chamaecyparis thyoides | Atlantic White Cedar | S3 | | |
| Chimaphila umbellata | Common Wintergreen | S3 | | |
| Cirsium horridulum | Yellow Thistle | S 3 | | |
| Clematis viorna ^h | Vase-vine Leatherflower | S3 | | |
| Coelorachis rugosa | Wrinkled Jointgrass | S1 | E | |
| Commelina erecta | Erect Dayflower | S 3 | | |
| Cyperus diandrus | Umbrella Flatsedge | SU | | |
| Cyperus haspan | Sheathed Flatsedge | S1? | | |
| Cyperus hystricinus | Flatsedge | S2 | | |
| Cyperus plukenetii ! | Plukenet's Flatsedge | S1 | X (PE) | |
| Cyperus refractus | Reflexed Flatsedge | S2? | | |
| Cyperus retrofractus | Rough Flatsedge | S2 | | |
| Desmodium laevigatum | Smooth Tick-trefoil | S 3 | | |
| Desmodium lineatum h | Sand Tick-trefoil, Lined Tick-trefoil | SH | Χ | |
| Desmodium nuttallii | Nuttall's Tick-trefoil | S1? | | |
| Desmodium obtusum | Stiff Tick-trefoil | S1 | Е | |
| Desmodium ochroleucum ^h | Cream Tick-trefoil | S1 | Е | |
| Desmodium strictum | Pineland Tick-trefoil | S1 | Е | |
| Dichanthelium aciculare | Needle Witchgrass | S2? | | |
| Dichanthelium bicknellii Dichanthelium oligosanthes var. | Bicknell's Witchgrass | SU | Χ | |
| oligosanthes | Few-flowered Witchgrass | S2S3 | _ | |
| Dichanthelium scabriusculum | Woolly Witchgrass | S1 | E | |
| Digitaria villosa | Shaggy Crabgrass | S1? | Χ | |
| Diphasiastrum tristachyum | Deep-root Clubmoss | S3 | _ | |
| Drosera capillaris | Pink Sundew | S1 | Е | |
| Drosera rotundifolia | Roundleaf Sundew | S3 | | |
| Dryopteris celsa | Log Fern | S3 | | |
| Elatine americana | American Waterwort | SU | | |
| Eleocharis albida | White Spikerush | S2S3 | | |
| Eleocharis equisetoides | Horsetail Spikerush | S1 | E | |
| Eleocharis halophila | Saltmarsh Spikerush | S1 | E _ | |
| Eleocharis melanocarpa Eleocharis rostellata | Black-fruit Spikerush Beaked Spikerush | S1 S2? | E | |

| SCIENTIFIC NAME | COMMON NAME | STATE RANK | STATE STATUS | FEDERAL STATUS |
|----------------------------------|-------------------------------|---------------|-----------------|-------------------|
| Eleocharis tortilis | Twisted Spikerush | S3 | | |
| Epilobium ciliatum | Hairy Willowherb | S3S4 | Е | |
| Eragrostis refracta | Meadow Lovegrass | S3S4 | | |
| Eriocaulon decangulare | Ten-angle Pipewort | S1 | | |
| Eriocaulon parkeri | Parker's Pipewort | S2 | Т | |
| Eupatorium leucolepis | White-bracted Thoroughwort | S2S3 | Т | |
| Fimbristylis caroliniana | Carolina Fimbry | S1S2 | | |
| Fraxinus caroliniana | Carolina Ash | S2 | | |
| Fuirena pumila | Dwarf Umbrella-sedge | S2S3 | | |
| Galactia volubilis | Downy Milkpea | S3 | | |
| Galium hispidulum | Coast Bedstraw | S1 | Е | |
| Gaylussacia dumosa | Dwarf Huckleberry | S1 | Е | |
| Gymnopogon brevifolius | Broad-leaved Beardgrass | S1 | Е | |
| Hemianthus micranthemoides h | Nuttall's Micranthemum | SX | X | |
| Honckenya peploides | Seabeach Sandwort | S1 | Е | |
| Hypericum denticulatum | Coppery St. John's-wort | S2 | Т | |
| Hypericum gymnanthum | Clasping-leaf St. John's-wort | S3 | | |
| Iris prismatica | Slender Blueflag | S2 | Е | |
| Iris verna | Dwarf Iris | S1 | Е | |
| Isoëtes engelmannii ^h | Engelmann's Quillwort | S3 | | |
| Isoëtes riparia | Riverbank Quillwort | SU | | |
| Juncus articulatus | Jointed Rush | S1 | | |
| Juncus Iongii | Long's Rush | S1 | Е | |
| Juncus megacephalus | Big-head Rush | S1? | _ | |
| Kalmia angustifolia | Sheep Laurel | S3S4 | | |
| Lechea maritima | Virginian Beach Pinweed | S3 | | |
| Leersia hexandra | Club-head Cutgrass | S1 | Е | |
| Leersia lenticularis | Catchfly Cutgrass | S1 | E | |
| Lespedeza stuevei | Silky Lespedeza | S3 | | |
| Linum intercursum | Sandplain Flax | S2 | Т | |
| Liparis liliifolia | Large Twayblade | S3 | • | |
| Liparis loeselii | Loesel's Twayblade | S1S2 | | |
| Lobelia canbyi | Canby's Lobelia | S2 | Е | |
| Lobelia elongata | Elongated Lobelia | S3 | _ | |
| Ludwigia hirtella | Hairy Ludwigia | S1 | Е | |
| Lupinus perennis | Sundial Lupine | S2 | _ T | |
| Lycopus amplectens h | Sessile-leaf Bugleweed | S1 | E | |
| Lygodium palmatum | Climbing Fern | S2 | T | |
| Lysimachia hybrida | Lowland Loosestrife | S2 | T | |
| Malaxis unifolia | Green Adder's-mouth Orchid | S2 | • | |
| Malus angustifolia | Southern Crabapple | S3 | | |
| Matelea carolinensis | Carolina Anglepod | S2S3 | Т | |
| Mecardonia acuminata | Purple Mecardonia | S2S3 S2 | E | |
| Morella caroliniensis ? | Evergreen Bayberry | S1 | E | |
| พอเอเล อสเอแแษกรเร | Evergreen bayberry | 01 | L | |

| SCIENTIFIC NAME | COMMON NAME | STATE RANK | STATE STATUS | FEDERAL STATUS |
|---|--------------------------|---------------|-----------------|-------------------|
| Myriophyllum heterophyllum | Broadleaf Water-milfoil | S1 | | |
| Myriophyllum verticillatum ^h | Whorled Water-milfoil | S1 | | |
| Nabalus autumnalis | Slender Rattlesnake-root | S1 | E | |
| Nymphoides cordata | Little Floatingheart | S1 | E | |
| Oldenlandia uniflora | Clustered Bluets | S3 | | |
| Oxydendrum arboreum ^h | Sourwood | S1 | E | |
| Panicum hemitomon | Maidencane | S3 | | |
| Paspalum dissectum | Walter's Paspalum | S2 | Т | |
| Persea palustris | Red Bay | S1 | E | |
| Persicaria setacea | Swamp Smartweed | SU | | |
| Platanthera blephariglottis var. blephariglottis | White Fringed Orchid | S2 | Т | |
| Platanthera ciliaris ^h | Yellow Fringed Orchid | S2 | Т | |
| Platanthera cristata | Crested Yellow Orchid | S3 | | |
| Platanthera flava | Pale Green Orchid | S2S3 | | |
| Pleopeltis polypodioides | Resurrection Fern | S3 | | |
| Pluchea camphorata | Marsh Fleabane | S2 | E (PT) | |
| Pogonia ophioglossoides | Rose Pogonia | S3 | | |
| Polygala cruciata | Crossleaf Milkwort | S2 | T | |
| Polygala incarnata | Pink Milkwort | S2S3 | | |
| Polygonum glaucum | Seabeach Knotweed | S1 | E | |
| Potamogeton pusillus ^h | Slender Pondweed | S2S4 | | |
| Prunus maritima | Beach Plum | S1 | E | |
| Ranunculus flabellaris ^h | Yellow Water Crowfoot | S1 | E | |
| Ranunculus laxicaulis | Mississippi Buttercup | S1 | | |
| Rhynchosia tomentosa | Hairy Snoutbean | S2 | T | |
| Rhynchospora alba | White Beakrush | S3 | | |
| Rhynchospora cephalantha | Capitate Beakrush | S1 | E | |
| Rhynchospora globularis | Globe Beakrush | S1 | E | |
| Rhynchospora glomerata | Clustered Beakrush | S3 | | |
| Rhynchospora harperi | Harper Beakrush | S1 | E | |
| Rhynchospora microcephala | Small-headed Beakrush | S2 | | |
| Rhynchospora recognita | Cymose Beakrush | S2 | | |
| Rhynchospora torreyana | Torrey's Beakrush | S2 | T | |
| Sabatia campanulata | Slender Marsh Pink | S1 | E | |
| Sabatia difformis | Two-formed Pink | S1 | E | |
| Sabatia dodecandra | Large Marsh Pink | S3 | | |
| Saccharum baldwinii | Slender Plume Grass | S1 | E | |
| Saccharum contortum | Bent-awn Plume Grass | S3S4 | | |
| Sacciolepis striata | Gibbous Panic-grass | S1 | E | |
| Sagittaria engelmanniana | Engelmann's Arrowhead | S2 | T | |
| Sagittaria graminea | Grassleaf Arrowhead | SU | | |
| Sagittaria rigida | Sessile-fruit Arrowhead | S1 | Е | |
| Sagittaria subulata | Strap-leaf Arrowhead | SU | | |

| SCIENTIFIC NAME | COMMON NAME | STATE RANK | STATE STATUS | FEDERAL STATUS |
|------------------------------------|------------------------------|---------------|-----------------|-------------------|
| Sarracenia purpurea | Northern Pitcherplant | S2 | T | |
| Sceptridium oneidense | Blunt-lobe Grapefern | S1 | Е | |
| Schoenoplectus novae-angliae | Salt-marsh Bulrush | S2 | | |
| Schwalbea americana ^h | Chaffseed | SX | X | LE |
| Scleria minor | Slender Nutrush | S1 | Е | |
| Scleria reticularis | Reticulated Nutrush | S2S3 | | |
| Scleria triglomerata | Whip Nutrush | S3 | | |
| Scleria verticillata | Low Nutrush | S1 | Е | |
| Sclerolepis uniflora | One-flower Sclerolepis | S2 | Т | |
| Sesuvium maritimum | Puerto Rico Sea-Purslane | S1 | Е | |
| Sisyrinchium arenicola? | Sandyland Blue-eyed Grass | S1 | Е | |
| Smilax bona-nox | Saw Greenbrier | S3 | | |
| Smilax pseudochina | Long-stalk Greenbrier | S2 | Т | |
| Solidago latissimifolia | Elliott's Goldenrod | S3 | | |
| Solidago tarda | Coastal Goldenrod | S1 | | |
| Sorghastrum elliottii | Long-bristle Indian Grass | S1 | E | |
| Sphenopholis pensylvanica | Swamp Wedgescale | S2 | T | |
| Spiranthes odorata h | Sweetscent Ladies'-tresses | SH | X | |
| Spiranthes praecox h | Grass-leaved Ladies'-tresses | SH | | |
| Spiranthes tuberosa | Little Ladies'-tresses | S1? | | |
| Sporobolus clandestinus | Rough Dropseed | S2 | | |
| Suaeda linearis | Narrowleaf Seepweed | S3 | | |
| Symphyotrichum concolor h | Eastern Silvery Aster | S1 | E | |
| Symplocos tinctoria | Horsesugar | S3 | | |
| Tephrosia spicata | Spiked Hoary-pea | S1S2 | Е | |
| Thelypteris simulata | Bog Fern | S2 | Т | |
| Thyrsanthella difformis | Climbing Dogbane | S1 | Е | |
| Torreyochloa pallida var. pallida | Pale Mannagrass | S3 | | |
| Trichostema setaceum | Narrowleaf Bluecurls | S1 | | |
| Triglochin striata | Three-ribbed Arrow Grass | S1 | Е | |
| Trillium pusillum var. virginianum | Virginia Least Trillium | S2 | Т | |
| Utricularia inflata | Swollen Bladderwort | S2 | | |
| Utricularia resupinata | Northeastern Bladderwort | S1 | Е | |
| Utricularia striata | Fibrous Bladderwort | S1 | E | |
| Utricularia subulata | Zigzag Bladderwort | S3 | | |
| Vaccinium macrocarpon | Large Cranberry | S3 | | |
| Veratrum virginicum | Virginia Bunchflower | S3 | | |
| Viola esculenta | Salad Violet | S2 | | |
| Xyris smalliana ^h | Small's Yellow-eyed-grass | S1 | Е | |
| Zephyranthes atamasca | Atamasco Lily | S1 | Е | |
| Zizaniopsis miliacea | Southern Wild Rice | S1 | E | |

November 2023



Maryland Wildlife and Heritage Service Natural Heritage Program





Wes Moore, Governor Aruna Miller, Lt. Governor Josh Kurtz, Secretary David Goshorn, Deputy Secretary



Wildlife & Heritage Service

Natural Heritage Program
Tawes State Office Building, E-1
580 Taylor Avenue
Annapolis, MD 21401
410-260-8540
Fax 410-260-8596
dnr.maryland.gov/wildlife

Additional Telephone Contact Information:
Toll free in Maryland: 877-620-8DNR ext. 8540 OR
Individual unit/program toll-free number
Out of state call: 410-260-8540
Text Telephone (TTY) users call via the Maryland Relay

The facilities and services of the Maryland Department of Natural Resources are available to all without regard to race, color, religion, sex, sexual orientation, age, national origin or physical or mental disability. This document is available in alternative format upon request.

Cover photo: Baltimore Checkerspot (*Euphydryas phaeton*), a rare wetland butterfly in Maryland. (Photo credit, Kevin Stohlgren)

ACKNOWLEDGMENTS

The Maryland Department of Natural Resources would like to express sincere appreciation to the many scientists and naturalists who willingly share information and provide their expertise to further our mission of conserving Maryland's natural heritage.

Publication of this list is made possible by taxpayer donations to Maryland's Chesapeake Bay and Endangered Species Fund.

Suggested citation: Maryland Natural Heritage Program. 2023. List of Rare, Threatened, and Endangered Animals of Maryland. Maryland Department of Natural Resources, 580 Taylor Avenue, Annapolis, MD 21401.

INTRODUCTION

The following list comprises 526 native Maryland animals that are among the least understood, the rarest, and the most in need of conservation efforts. It includes species occurring in Maryland that are on the federal list of Endangered and Threatened Wildlife and Plants under the Endangered Species Act (ESA), species currently on the State's Threatened and Endangered Species list, and additional species that are considered rare or under assessment by the Wildlife and Heritage Service. The purpose of this list is to inform the public of rare species, to provide an indication of their degree of rarity, to solicit additional information on the status and distribution of these species, and to promote an interest in their conservation. For more information about Maryland's wildlife, habitats, and their conservation, see the 2015 Maryland State Wildlife Action Plan, available at: dnr.maryland.gov/wildlife/Pages/plants_wildlife/SWAP_home.aspx

Compiled by Wildlife and Heritage Service staff and conservation partners, this list of rare species is a result of more than 40 years of effort to gather, research, and analyze data from numerous sources, such as museums, scientific literature, unpublished documents, reports from zoologists and amateur naturalists, and extensive field work conducted by scientists from the Department of Natural Resources (DNR). Our knowledge of Maryland's fauna has grown steadily. Field surveys and studies conducted by Wildlife and Heritage Service biologists and cooperators have led to the rediscovery of species previously thought to be extirpated from the state, as well as the discovery of species previously unrecorded in Maryland, including some species new to science. Similarly, some species are now known to be either rarer or more common than were previously believed. Collectively, these efforts have contributed to a better understanding of the status, distribution, abundance, ecology, and conservation needs of the state's fauna. Thus, this list and the conservation rank and legal status of each species are periodically revised to keep pace with new information. The list was first published in 1984, and its last revision was in 2021.

The primary Maryland law (enacted in 1975) that governs the legal listing of threatened and endangered species is the Nongame and Endangered Species Conservation Act (Annotated Code of Maryland 10-2A-01). The Act is supported by regulations (Code of Maryland Regulations, COMAR 08.03.08) that define listing criteria for endangered, threatened, in need of conservation, and endangered extirpated species; lists the species included in each category; establishes the purpose and intent of research and collection permits; and lists prohibited activities. Maryland regulations may be found online at: dsd.state.md.us/COMAR/ComarHome.html

The Wildlife and Heritage Service (the Service) within DNR is the lead state agency responsible for the identification, ranking, protection, and management of rare and endangered species and natural communities in Maryland. The Service seeks to identify and sustain populations of rare plants and animals through the maintenance of healthy natural ecosystems. The Service maintains a database of natural areas and occurrences of rare, threatened, and endangered plant and animal species. This database is aligned with the NatureServe network, an international association of over 80 programs that tracks and monitors species and plant communities using identical methodologies across all 50 states, Canada, and Latin America. Wildlife and Heritage Service biologists are concerned with many more species than those included on Maryland's Threatened and Endangered Species list. Some of these species are potential candidates for listing and usually require further investigation into their conservation status. Others are thought to be secure at present but are worthy of attention because of limited distributions, declining populations, or other ecological vulnerabilities.

The Maryland Department of Natural Resources Fisheries Service maintains an official list of game and commercial fish species that are legally designated as endangered, threatened, or in need of conservation in Maryland. The list of Endangered and Threatened Fish Species (COMAR 08.02.12) can be obtained by contacting the Fisheries Service, Department of Natural Resources, Tawes State Office Building, Annapolis, MD 21401 or by visiting their website at: dnr.maryland.gov/fisheries/Pages/endangered.aspx.

GUIDE TO THE LIST

This list of rare, threatened, and endangered animal species is arranged phylogenetically, with invertebrate groups listed before vertebrate groups. Within each group, species are listed alphabetically by scientific name. Space limitations preclude inclusion of the scientific authors' names for the taxa in this list. Some invertebrate groups are not fully represented or are entirely absent from this list. Available information has been compiled for only certain species or groups of invertebrates. Many invertebrate species are not well known and have not been sufficiently researched or surveved in Maryland.

Birds and other migratory species are primarily of conservation concern to the Service on the basis of their breeding status. For example, Dark-eyed Juncos breed in only a few remote areas in western Maryland during the summer, but are abundant backyard birds during the winter. To be included on the official State Threatened and Endangered

Species List, migrants that are rare Maryland breeders must also be rare during the non-breeding season. Thus, the Dark-eyed Junco cannot be legally listed as Endangered, Threatened, or In Need of Conservation under current listing criteria. However, some birds, such as the Red Knot, and other migratory species, such as whales and sea turtles, have been included because of their federal legal status even though they typically do not breed in Maryland.

Each page of the following list includes six columns, titled (from left to right) Scientific Name, Common Name, Global Rank (G rank), State Rank (S rank), State Status (if any), and Federal Status (if any). Because taxonomists periodically update scientific names, the most relevant synonyms are embedded within the list inside brackets. Common names, global ranks, and state ranks may also be found at the NatureServe Explorer website at: explorer.natureserve.org/. At the end of the list are two appendices:

Appendix I details the changes to species' state ranks and statuses since the last publication of the list in November 2021.

Appendix II contains a list of species with unusual, non-standard ranks and has been provided to clarify their current conservation status in Maryland.

UNDERSTANDING CONSERVATION STATUS RANK AND LEGAL STATUS

Conservation status ranks are intended to indicate risk of elimination or extinction in the foreseeable future and are arranged along a simple numerical scale (1-5) with the lower numbers reflecting increasing rarity and risk. Conservation status ranks also present geographic information about rarity and risk. Subnational or state ranks (S ranks) represent the vulnerability of the species in the state; whereas global ranks (G ranks) represent the imperilment of the species throughout its range (although most species are far from being globally distributed). The status rank of a species is determined through analyses of a number of factors within the pertinent jurisdiction, primarily population number, size, viability, threats, and both short-term and long-term trends. The final metric, a combination of the numeric index (1-5) and the geographic identifier (G or S), distills this large amount of information into a single value. Thus, for a particular species that has a global rank of G1 and a state rank of S1, the species is not only rare and at risk of elimination from within Maryland but also rare throughout its entire range and at risk of extinction. Similarly, an animal with ranks of G5 and S5 indicate that the species is demonstrably secure in Maryland and throughout the species' global range as well.

Most species have single-valued conservation ranks; however, some variations are possible. Range ranks, e.g., G1G2 or S1S3, indicate the (usually narrow) range of uncertainty in the rank. For example, a species may have more populations than is typical of the lower rank, but few are protected; this may affect the viability of the population(s). A taxon (T) rank follows the global (G) rank of the full species as a qualifier to indicate the conservation status of the subspecies, e.g., G5T3. The latter indicates that the subspecies is much rarer or at risk than the full species. A global rank may also be followed by a 'Q'-qualifier to indicate that there are prevailing taxonomic questions for that species (e.g., G4Q). A '?'-qualifier may be used to indicate that there is a level of uncertainty in the global or state rank (e.g., G4? or S2?). Finally, the "!" symbol to the right of a species name indicates that the conservation status of that species is currently under review. For migratory species, state (S) ranks may include a qualifier indicating the numeric value is relevant to its breeding (B) status, non-breeding (N) status, or migrant (M) status within Maryland. Definitions of conservation status ranks and rank qualifiers are presented in Table 1. State ranks for many species are modified as needed to reflect current information. All member programs of the NatureServe Network of Natural Heritage Programs and Conservation Data Centers across the Western Hemisphere use the same ranking system and format. Global ranks are maintained by NatureServe, while the various member programs maintain the subnational or state ranks. This allows direct conservation status comparisons across the political and geographic landscape, and it is one of the most powerful aspects of the Network.

Table 1. Definitions of Global (G) and State (S) Conservation Status Ranks and Rank Qualifiers.

| Rank | Definitions of Global / State Ranks |
|----------|--|
| GX or SX | Presumed Extirpated — Species believed to be extirpated from the jurisdiction (i.e. global, or state/province). Not located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered. |
| GH or SH | Historical (Possibly Extirpated) — Known only from historical records and some hope of rediscovery remains. There is some evidence that the species may no longer be present, but not enough to know this with certainty. |

| G1 or S1 | Critically Imperiled / Highly State Rare — At very high risk of extinction or extirpation due to |
|-----------------------|---|
| | very restricted range, very few populations or occurrences, very steep declines, very severe threats, or other factors. Typically occurring in five or fewer populations. |
| G2 or S2 | Imperiled / State Rare — At high risk of extinction or extirpation due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors. Typically occurring in 6-20 populations. |
| G3 or S3 | Vulnerable / Watchlist — At moderate risk of extinction or extirpation due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors. Typically occurring in 21-80 populations. |
| G4 or S4 | Apparently Secure — At fairly low risk of extinction or extirpation due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors. |
| G5 or S5 | Demonstrably Secure — At very low risk of extinction or extirpation due to a very extensive range, abundant populations or occurrences, and little to no concern from declines or threats. |
| S3.1 | Vulnerable and Globally Rare — Species is actively tracked by the Service because of the global significance of Maryland occurrences. Although not currently threatened or endangered, Maryland occurrences may be critical to the long-term security of the species. |
| SU | Status Uncertain — A numerical rank cannot be established with confidence for reasons including lack of historical records, low survey effort, cryptic nature of the species, or concerns that the species may not be native to the state. Uncertainty spans a range of more than three |
| | ranks as defined above. |
| GNR or SNR | ranks as defined above. Not Ranked — Species has not yet been ranked. |
| | Not Ranked — Species has not yet been ranked. |
| GNR or SNR Qualifier | |
| | Not Ranked — Species has not yet been ranked. |
| Qualifier | Not Ranked — Species has not yet been ranked. Definitions of Rank Qualifiers Breeding Rank — Indicates the species is a migrant and the rank applies to the status of the |
| Qualifier B | Not Ranked — Species has not yet been ranked. Definitions of Rank Qualifiers Breeding Rank — Indicates the species is a migrant and the rank applies to the status of the breeding population in Maryland. Migrant Rank — Indicates the species is a migrant and the rank applies to the status of the |
| Qualifier B M | Not Ranked — Species has not yet been ranked. Definitions of Rank Qualifiers Breeding Rank — Indicates the species is a migrant and the rank applies to the status of the breeding population in Maryland. Migrant Rank — Indicates the species is a migrant and the rank applies to the status of the transitional population in Maryland. Non-breeding Rank — Indicates the species is a migrant and the rank applies to the status of the non-breeding population in Maryland. This may include individuals outside the typical |
| Qualifier B M | Not Ranked — Species has not yet been ranked. Definitions of Rank Qualifiers Breeding Rank — Indicates the species is a migrant and the rank applies to the status of the breeding population in Maryland. Migrant Rank — Indicates the species is a migrant and the rank applies to the status of the transitional population in Maryland. Non-breeding Rank — Indicates the species is a migrant and the rank applies to the status of the non-breeding population in Maryland. This may include individuals outside the typical breeding season, wintering individuals, or summering non-breeding individuals. Questionable Taxonomy — Indicates that the taxon has questionable, controversial, or uncertain taxonomic standing, e.g., treated by some authors as a species, whereas others treat |
| Qualifier B M N | Not Ranked — Species has not yet been ranked. Definitions of Rank Qualifiers Breeding Rank — Indicates the species is a migrant and the rank applies to the status of the breeding population in Maryland. Migrant Rank — Indicates the species is a migrant and the rank applies to the status of the transitional population in Maryland. Non-breeding Rank — Indicates the species is a migrant and the rank applies to the status of the non-breeding population in Maryland. This may include individuals outside the typical breeding season, wintering individuals, or summering non-breeding individuals. Questionable Taxonomy — Indicates that the taxon has questionable, controversial, or uncertain taxonomic standing, e.g., treated by some authors as a species, whereas others treat it as a subspecies or not at all. Taxon Rank — Indicates that the infraspecific taxon (subspecies) is ranked independently from |

Legal status presents a simple hierarchy of endangerment in four categories: Endangered (E), Threatened (T), In Need of Conservation (I), and Endangered Extirpated (X). Definitions of legal statuses are presented in Table 2. Legal protection statuses of species are typically reviewed and updated, if needed, every two to three years. All species listed as threatened or endangered at the federal level also have a legal status within Maryland.

Table 2. Definitions of State and Federal Legal Protection Status.

| State Status | Definitions |
|-----------------------------|--|
| Endangered (E) | A species whose continued existence as a viable component of Maryland's fauna is determined to be in jeopardy. |
| Threatened (T) | A species that appears likely, within the foreseeable future, to become endangered in Maryland. |
| In Need of Conservation (I) | An animal species whose population is limited or declining in Maryland such that it may become threatened in the foreseeable future if current trends or conditions persist. |
| Endangered Extirpated (X) | A species that was once a viable component of the fauna of Maryland, but for which no naturally occurring populations are known to exist. |
| (State Status)* | A qualifier denoting the species is listed in a limited geographical area only. |
| Federal Status | Definitions |
| Endangered (LE) | Taxa listed as Endangered under the federal ESA; in danger of extinction throughout all or a significant portion of its range. |
| Threatened (LT) | Taxa listed as Threatened under the federal ESA; likely to become endangered within the foreseeable future throughout all or a significant portion of its range. |

ADDITIONAL RESOURCES AND IMPORTANT LINKS

National

The U.S. Department of Interior, Fish and Wildlife Service's (USFWS) Office of Endangered Species publishes a list of federally designated Threatened and Endangered species. Copies of USFWS publications, including *Endangered and Threatened Wildlife and Plants; Review of Plant and Animal Taxa That are Candidates for Listing as Endangered or Threatened Species* may be obtained from the Publication Unit, U.S. Fish and Wildlife Service, Washington DC 20240 or viewed at: fws.gov/endangered/ or the Office of Federal Register website: federalregister.gov/agencies/fish-and-wildlife-service

Additional protections for most of Maryland's bird species are provided by the Migratory Bird Treaty Act, as enforced by USFWS. Their website can be viewed at: fws.gov/birds/policies-and-regulations/laws-legislations/migratory-bird-treaty-act.php

The Encyclopedia of Life includes information on such topics as life history, distribution, and taxonomic relationships of all taxa occurring throughout the world at the following link: <u>eol.org</u>.

NatureServe compiles data from all member programs in the Network of Natural Heritage Programs and Conservation Data Centers and provides a synthesis in the form of species summaries on their Explorer website: explorer.natureserve.org. The state ranks for Maryland shown in NatureServe's online database may be different than in this list due to the timing of data synchronization between the two databases.

Maryland

The Department of Natural Resources (DNR) conserves more than just rare, threatened, and endangered animals in Maryland. The state's reptiles and amphibians are also protected through regulations that limit the numbers and types of species that can be possessed without permits and that list the conditions under which permits from the DNR

would be required. These protections are provided in Code of Maryland Regulations (COMAR) 08.03.11. Furthermore, certain additional nongame mammals are provided protections through regulating activities that require permits under COMAR 08.03.08.15. For more information, regulations can be viewed on the state Division of State Documents website: dsd.state.md.us/COMAR/ComarHome.html

The Natural History Society of Maryland maintains collections of Maryland specimens at: marylandnature.org.

The Maryland Amphibian and Reptile Atlas provides information on the distribution of turtles, lizards, snakes, salamanders, frogs and toads in Maryland at: webapps02.dnr.state.md.us/mara/default.aspx?strSelection=SystemStats

The Maryland Biodiversity Project provides information on all species of animals known to occur in Maryland at: marylandbiodiversity.com/

For more information about Maryland's wildlife, habitats, and their conservation, see the 2015 Maryland State Wildlife Action Plan, available at: dnr.maryland.gov/wildlife/Pages/plants wildlife/SWAP home.aspx

To obtain additional copies of this report; to receive a copy of "List of Rare, Threatened, and Endangered Plants of Maryland"; or to receive other information on Maryland's rare species and natural areas; please contact the Maryland Wildlife and Heritage Service at Tawes State Office Building, E-1, 580 Taylor Avenue, Annapolis, MD 21401 or visit the website at: https://dnr.maryland.gov/wildlife/Pages/plants wildlife/rte/espaa.aspx

The conservation of Maryland's natural communities is vital in sustaining our natural diversity and rare species. These recurring assemblages of plants and animals are uniquely tied to a particular suite of environmental conditions and species adapted to those conditions. More information on Maryland's natural communities can be found at: dnr.maryland.gov/wildlife/Pages/plants_wildlife/nhpnatcomm.aspx

The Maryland Geological Survey (<u>mgs.md.gov/</u>) provides detailed physiographic maps with accompanying explanatory text, available at: <u>mgs.md.gov/geology/physiographic_map.html</u>.

HOW YOU CAN HELP

You can take an active part in conserving Maryland's rare species by contacting the Wildlife and Heritage Service with the following types of information:

I. Submitting information on rare, threatened or endangered species

- 1. Location details should be included (exact mapped location using GPS is preferred, but not required). Online applications such as Google Earth are invaluable but precise, written directions including driving and walking are acceptable.
- 2. Documentation that includes a photograph, description of the species, identification source, and habitat description should accompany the report.
- 3. Information on the ecology or biology of the species including observed and/or identified pollinators should accompany the report.
- **Additional information, including a downloadable PDF of our rare species reporting form can be found at: dnr.maryland.gov/wildlife/Pages/plants_wildlife/rte_reportinginst.aspx

II. Assisting the Service with conservation status rank assessments

- 1. Submit data indicating that a species should be assigned a different rank and status, with supporting documentation.
- 2. Submit nominations of additional species to be included on the list or of species that should be deleted from the list, with supporting documentation.
- 3. Submit information on historical collections or documentation in the scientific literature.

| SCIENTIFIC NAME | COMMON NAME | GLOBAL RANK | STATE RANK | STATE FEDERAL STATUS STATUS |
|-----------------------------|-----------------------------|----------------|---------------|--------------------------------|
| <u>PLANARIANS</u> | | | | |
| Paraplanaria dactyligera | A Planarian | GNR | S2 | |
| Phagocata virilis | A Planarian | GNR | S1 | |
| Procotyla typhlops | A Planarian | G1G2 | S1 | Е |
| Sphalloplana buchanani | A Cave Obligate Planarian | G1G2 | SNR | |
| Sphalloplana hoffmasteri | Hoffmaster's Cave Planarian | G3G4 | S1 | Е |
| Sphalloplana pricei | Refton Cave Planarian | G2G3 | SNR | |
| Sphalloplana sp. 1 | A Planarian | GNR | S1S2 | |
| MOLLUSKS | | | | |
| Alasmidonta heterodon | Dwarf Wedgemussel | G1G2 | S1 | E LE |
| Alasmidonta undulata | Triangle Floater | G4 | S1S2 | Т |
| Alasmidonta varicosa | Brook Floater | G3 | S1 | Е |
| Catinella hubrichti | Snowhill Ambersnail | G3 | SNR | |
| Discus catskillensis | Angular Disc Snail | G5 | S1 | |
| Elliptio fisheriana | Northern Lance | G4 | S3S4 | |
| Elliptio lanceolata | Yellow Lance | G2 | S1 | T LT |
| Elliptio producta | Atlantic Spike | G3 | S2S3 | 1 |
| Fontigens bottimeri | Appalachian Springsnail | G2G3 | S2 | 1 |
| Fontigens orolibas | Blue Ridge Spring Snail | G3 | S1 | Е |
| Glyphyalinia picea | Rust Glyph | G3 | SU | |
| Glyphyalinia raderi | Maryland Glyph | G2 | SH | Χ |
| Hendersonia occulta | Cherrystone Drop | G4 | S2 | 1 |
| Lampsilis cariosa | Yellow Lampmussel | G3G4 | SU | |
| Lampsilis radiata | Eastern Lampmussel | G5 | SU | |
| Lasmigona subviridis | Green Floater | G3 | S1 | Е |
| Leptodea ochracea | Tidewater Mucket | G3G4 | S1S2 | |
| Ligumia nasuta | Eastern Pondmussel | G4 | S1S2 | |
| Oxyloma effusum | Coastal-plain Ambersnail | G3 | SNR | |
| Oxyloma subeffusum | Chesapeake Ambersnail | G3 | SNR | |
| Paravitrea pontis | Natural Bridge Supercoil | G3 | SNR | |
| Stenotrema simile | Bear Creek Slitmouth | G2G3 | SU | |
| Strophitus undulatus | Creeper | G5 | S2S3 | 1 |
| Triodopsis picea | Spruce Knob Threetooth | G3 | S1 | |
| Utterbackia imbecillis | Paper Pondshell | G5 | S3 | |
| Utterbackiana implicata | Alewife Floater | G5 | S3 | |
| Vertigo ventricosa | Five-tooth Vertigo | G5 | SU | |
| Webbhelix multilineata | Striped Whitelip | G5 | S1 | |
| CRUSTACEANS | | | | |
| Acanthocyclops columbiensis | A Cyclopoid Copepod | G1 | SNR | |
| Ankylocythere tridentata | An Entocytherid Ostracod | G1 | SH | |
| Attheyella spinipes | A Cyclopoid Copepod | GNR | SU | |
| Caecidotea alleghenyensis | Allegheny Spring Isopod | G1G2 | S1 | Е |
| Caecidotea franzi | Franz's Cave Isopod | G2G4 | S1 | Е |

| SCIENTIFIC NAME | COMMON NAME | GLOBAL RANK | STATE RANK | STATE FEDERAL STATUS STATUS |
|-----------------------------------|--------------------------------------|----------------|---------------|--------------------------------|
| Caecidotea holsingeri | Holsinger's Cave Isopod | G5 | S1 | Е |
| Caecidotea mausi | Maus' Cave Isopod | G2 | S1 | Е |
| Caecidotea nordeni | Norden's Groundwater Isopod | GH | SH | Χ |
| Caecidotea pricei | Price's Cave Isopod | G5 | S3 | |
| Caecidotea sp. 1 | An Isopod | G1 | S1 | |
| Caecidotea vandeli | Vandel's Cave Isopod | G3G4 | S1 | Е |
| Cambarus acuminatus | Acuminate Crayfish | G4Q | S2 | 1 |
| Crangonyx dearolfi | Pennsylvania Cave Crangonyctid | G2 | S1 | E |
| Crangonyx stagnicolous | An Amphipod | G2 | SNR | |
| Dactylocythere scotos | An Entocytherid Ostracod | GNR | S1 | |
| Diacyclops palustris | A Cyclopoid Copepod | GNR | SU | |
| Donnaldsoncythere donnaldsonensis | Donaldson's Cave Ostracod | G3 | SNR | |
| Faxonius obscurus | Allegheny Crayfish | G5 | S3 | |
| Stygobromus allegheniensis | Allegheny Cave Amphipod | G5 | S2S3 | 1 |
| Stygobromus amicus | Friendly Cave Amphipod | G1 | S1 | E |
| Stygobromus biggersi | Biggers' Cave Amphipod | G2G4 | S1 | E |
| Stygobromus caecilius | Cecil Groundwater Amphipod | G1 | S1 | E |
| Stygobromus emarginatus | Greenbrier Cave Amphipod | G3 | S1 | E |
| Stygobromus felleri | Feller's Groundwater Amphipod | G1 | S1 | Е |
| Stygobromus foliatus | Rappahannock Spring Amphipod | G2 | S1 | Е |
| Stygobromus franzi | Franz's Cave Amphipod | G3G4 | S2S3 | I |
| Stygobromus gracilipes | Shenandoah Valley Cave Amphipod | G3G4 | S1 | Е |
| Stygobromus indentatus | Tidewater Amphipod | G3 | S1 | |
| Stygobromus kenki | Rock Creek Groundwater Amphipod | G2 | S1 | Е |
| Stygobromus paxillus | Prettyboy Groundwater Amphipod | G1 | S1 | Е |
| Stygobromus pizzinii | Pizzini's Cave Amphipod | G3G4 | S1 | |
| Stygobromus sextarius | Capital Area Groundwater Amphipod | G1 | S1 | E |
| Stygobromus sp. 14 | Roundtop Amphipod | GNR | S1 | |
| Stygobromus sp. 5 | Barrelville Amphipod | GNR | S1 | |
| Stygobromus sp. 6 | Devil's Hole Cave Amphipod | GNR | S1 | |
| Stygobromus tenuis potomacus | Potomac Amphipod | G4T4 | S3 | |
| Stygobromus tenuis tenuis | Slender Amphipod | G4T4 | SU | |
| <u>SPIDERS</u> | | | | |
| Oreonetides sp. 1 | Snively's Cave Spider | GNR | SU | |
| Porrhomma cavernicola | Appalachian Cave Spider | G5 | S2 | |
| <u>INSECTS</u> | | | | |
| Coleoptera | | | | |
| Apterodela unipunctata | One-spotted Tiger Beetle | G4 | S3 | |
| Cicindela abdominalis | Eastern Pinebarrens Tiger Beetle | G3 | S1 | E |
| Cicindela ancocisconensis | Appalachian Tiger Beetle | G3 | S1 | Е |
| Cicindela formosa | Big Sand Tiger Beetle | G5 | SU | |
| Cicindela patruela | Northern Barrens Tiger Beetle | G3 | S1 | Е |

| SCIENTIFIC NAME | COMMON NAME | GLOBAL RANK | STATE RANK | STAT | E FEDERAL US STATUS |
|------------------------------------|---|----------------|---------------|------|------------------------|
| Cicindela purpurea | Cow Path Tiger Beetle | G5 | S 3 | | |
| Cicindela scutellaris | Festive Tiger Beetle | G5 | S 3 | | |
| Cicindela splendida | Splendid Tiger Beetle | G5 | S1 | | |
| [Cylindera unipunctata] | see Apterodela unipunctata | | | | |
| Dryobius sexnotatus | Six-banded Longhorn Beetle | GNR | S1 | Ε | |
| Ellipsoptera lepida | Ghost Tiger Beetle | G3 | S1 | Ε | |
| Ellipsoptera puritana | Puritan Tiger Beetle | G1G2 | S1S2 | Ε | LT |
| Habroscelimorpha dorsalis dorsalis | Eastern Beach Tiger Beetle | G3T2 | S1 | Ε | LT |
| Habroscelimorpha dorsalis media | White Tiger Beetle | G3T3 | S1 | Ε | |
| Helops cisteloides | A Tenebrionid Beetle | GNR | S1 | Ε | |
| Hoperius planatus | A Dytiscid Beetle | GNR | S2 | | |
| Hydrochara occultus | A Hydrophilid Beetle | GNR | SU | | |
| Hydrochus spangleri | Seth Forest Water Scavenger Beetle | G1 | S1 | Е | |
| Hydrocolus deflatus | A Predaceous Diving Beetle | GNR | S3 | | |
| Laccophilus schwarzi | Schwarz' Diving Beetle | GNR | SX | | |
| Lucanus elaphus | Giant Stag Beetle | G3G5 | SU | | |
| Nephus gordoni | A Coccinellid Beetle | GNR | SU | | |
| Nicrophorus americanus | American Burying Beetle | G3 | SX | Χ | LE |
| Photuris bethaniensis | Bethany Beach Firefly | G1 | S1 | | |
| Photuris mysticalampas | Mysterious Lantern Firefly | G1G2 | S1 | | |
| Pseudanophthalmus sp. 15 | Maryland Cave Beetle | G1 | S1 | | |
| Schoenicus puberulus | A Tenebrionid Beetle | GNR | S1 | Ε | |
| Sperchopsis tessellatus | A Hydrophilid Beetle | GNR | S2 | | |
| Collembola | | | | | |
| Arrhopalites sp. 1 | Crabtree Cave Springtail | GNR | SU | | |
| Diptera | | | | | |
| Microdon abstrusus | Hidden Ant Fly | G1G3 | S1S3 | | |
| Wyeomyia smithii | Pitcher-plant Mosquito | G5 | S2 | | |
| Ephemeroptera | | | | | |
| Anthopotamus verticis | Walker's Tusked Sprawler | G5 | SU | | |
| Siphloplecton costalense | Speith's Great Speckled Olive Mayfly | G2G4 | SNR | | |
| Hemiptera | | | | | |
| Chlorotettix sp. 1 | A Cicadellid Leafhopper | GNR | SU | | |
| Limotettix minuendus | Eastern Sedge Barrens Leafhopper | G1 | S1 | Е | |
| Hymenoptera | | | | | |
| Andrena braccata | A Mining Bee | GNR | SU | | |
| Andrena fulvipennis | A Mining Bee | GNR | SU | | |
| Bombus affinis | Rusty-patched Bumble Bee | G2 | S1 | Е | LE |
| Bombus auricomus | Black-and-Gold Bumble Bee | G5 | SU | | |
| Bombus bohemicus | Gypsy Cuckoo Bumble Bee | G3G5 | SH | | |
| Bombus citrinus | Lemon Cuckoo Bumble Bee | G4 | SU | | |

| SCIENTIFIC NAME | COMMON NAME | GLOBAL RANK | STATE RANK | STATE FEDERAL STATUS STATUS |
|-----------------------------|---|----------------|---------------|--------------------------------|
| Bombus fraternus | Southern Plains Bumble Bee | G3G4 | SH | |
| Bombus pensylvanicus | American Bumble Bee | G3G4 | S2S3 | |
| Bombus sandersoni | Sanderson's Bumble Bee | G5 | S3 | |
| Bombus terricola | Yellow-banded Bumble Bee | G3G4 | S1 | |
| Bombus vagans | Half-black Bumble Bee | G4 | S3 | |
| Bombus variabilis | Variable Cuckoo Bumble Bee | G1G2 | SH | |
| Colletes aestivalis | A Cellophane Bee | GNR | SH | |
| Dieunomia heteropoda | Sunflower Sweat Bee | G5 | S1S3 | |
| Dieunomia nevadensis | A Dieunomia Bee | G5 | SU | |
| Epeoloides pilosula | Macropis Cuckoo Bee | GU | SH | |
| Lasioglossum arantium | A Sweat Bee | GNR | S2S3 | |
| Lasioglossum georgeickworti | George Eickwort's Sweat Bee | GNR | SU | |
| Lasioglossum marinum | Marine Metallic-Sweat Bee | GNR | SU | |
| Lasioglossum nymphale | A Sweat Bee | GNR | S2S3 | |
| Lasioglossum raleighense | A Sweat Bee | GNR | SU | |
| Macropis ciliata | Fringed Loosestrife Oil-collecting Bee | GNR | S1 | |
| Macropis patellata | Patellar Oil-collecting Bee | GNR | SH | |
| Nomada rubicunda | A Cuckoo Bee | GNR | S1S3 | |
| Nomada seneciophila | A Cuckoo Bee | GNR | S1 | |
| Nomia maneei | Pearly-banded Bee | G3? | S1S3 | |
| Osmia chalybea | A Mason Bee | G4G5 | S1S3 | |
| Protandrena abdominalis | A Mining Bee | GNR | SU | |
| Lepidoptera - Butterflies | | | | |
| Amblyscirtes hegon | Pepper and Salt Skipper | G5 | S2 | I |
| Anatrytone logan | Delaware Skipper | G5 | S3 | |
| Atlides halesus | Great Purple Hairstreak | G5 | S2S3 | |
| Boloria myrina | Myrina Fritillary | G5? | S3 | |
| [Boloria selene] | see Boloria myrina | | | |
| Calephelis borealis | Northern Metalmark | G3 | S2 | T |
| Callophrys hesseli | Hessel's Hairstreak | G3 | SH | Χ |
| Callophrys irus | Frosted Elfin | G2G3 | S1 | E |
| Callophrys polios | Hoary Elfin | G5 | S1 | E |
| Celastrina neglectamajor | Appalachian Blue | G3? | S3S4 | |
| Celastrina nigra | Dusky Azure | GU | SH | Χ |
| Chlosyne harrisii | Harris's Checkerspot | G4? | S2 | Т |
| Coenonympha california | Common Ringlet | G5 | SU | |
| Colias interior | Pink-edged Sulphur | G5 | SH | |
| Erora laeta | Early Hairstreak | G2G3 | S1 | E |
| Erynnis martialis | Mottled Duskywing | G3 | S1 | Е |
| Euchloe olympia | Olympia Marble | G5 | S2 | 1 |
| Euphydryas phaeton | Baltimore Checkerspot | G4 | S2 | |
| Euphyes bimacula | Two-spotted Skipper | G4 | S1 | Е |
| Euphyes dion | Dion Skipper | G5 | S3 | |
| Glaucopsyche lygdamus | Silvery Blue | G5 | S2 | 1 |
| | | | | |

| SCIENTIFIC NAME | COMMON NAME | GLOBAL RANK | STATE RANK | STATE FEDERAL STATUS STATUS |
|----------------------------|--------------------------------------|----------------|---------------|--------------------------------|
| Hermeuptychia sosybius | Carolina Satyr | G5 | S1S3 | |
| Hesperia leonardus | Leonard's Skipper | G4 | S2 | |
| Hesperia metea | Cobweb Skipper | G4 | S3 | |
| Hesperia sassacus | Indian Skipper | G5 | S3 | |
| [Limochores mystic] | see Polites mystic | | | |
| Lycaena epixanthe | Bog Copper | G4G5 | S1 | Е |
| Nymphalis I-album | Compton Tortoiseshell | G5 | SU | |
| [Nymphalis vaualbum] | see Nymphalis I-album | | | |
| Papilio cresphontes | Giant Swallowtail | G5 | S2 | I |
| Phyciodes batesii | Tawny Crescent | G3G4 | SH | Χ |
| Phyciodes cocyta | Northern Crescent | G5 | SU | |
| Pieris virginiensis | West Virginia White | G4 | S1S2 | |
| Poanes massasoit chermocki | Chermock's Mulberry Wing | G4T1 | S1 | Е |
| Polites mystic | Long Dash | G5 | S3 | |
| Polygonia progne | Gray Comma | G5 | S3 | |
| Problema bulenta | Rare Skipper | G3 | S1 | Т |
| Pterourus palamedes | Palamedes Swallowtail | G5 | S1 | Е |
| Pyrgus wyandot | Appalachian Grizzled Skipper | G5T1T2 | S1 | Е |
| Satyrium caryaevorus | Hickory Hairstreak | G4 | S1 | Е |
| Satyrium edwardsii | Edwards' Hairstreak | G4 | S1 | Е |
| Satyrium favonius ontario | Northern Oak Hairstreak | G5T4 | S1S2 | Е |
| Satyrium kingi | King's Hairstreak | G3G4 | S1 | Е |
| Speyeria atlantis | Atlantis Fritillary | G5 | S1 | Т |
| Speyeria idalia | Regal Fritillary | G3? | SH | Χ |
| Telegonus cellus | Golden-banded Skipper | G5 | SH | Χ |
| Lepidoptera - Moths | | | | |
| Agnorisma bollii | A Noctuid Moth | G4? | SU | |
| Apamea apamiformis | Rice Worm Moth | G4 | S2S3 | |
| Apamea plutonia | Dusky Apamea Moth | G5 | SU | |
| Apodrepanulatrix liberaria | New Jersey Tea Inchworm | G3 | SU | |
| Capis curvata | Curved Halter Moth | G5 | S1S2 | |
| Catocala marmorata | Marbled Underwing | G3? | SH | |
| Catocala pretiosa pretiosa | Precious Underwing | G4T2 | SH | |
| [Ectoedemia castaneae] | see Zimmermannia bosquella | | | |
| Ectoedemia phleophaga | Phleophagan Chestnut Nepticulid Moth | GH | SH | |
| Elaphria georgei | George's Midget Moth | G4 | SU | |
| Erastria coloraria | Broad-lined Erastria | G3G4 | SH | |
| Euchlaena milnei | Milne's Looper Moth | G2G4 | SNR | |
| Hadena ectypa | The Starry Campion Moth | G3G4 | SU | |
| Hemaris gracilis | Slender Clearwing | G3G4 | SNR | |
| Hemipachnobia subporphyrea | Venus Flytrap Cutworm | G1 | SU | |
| Isoparce cupressi | Cypress Sphinx Moth | G4 | S1S2 | |
| Lithophane lemmeri | Lemmer's Noctuid Moth | G3G4 | SNR | |
| Lytrosis sinuosa | Sinuous Lytrosis Moth | G4 | S1S3 | |

| SCIENTIFIC NAME | COMMON NAME | GLOBAL RANK | STATE RANK | STATE FEDERAL STATUS STATUS |
|--------------------------------|-----------------------------------|----------------|---------------|--------------------------------|
| Melanapamea mixta | Coastal Plain Apamea Moth | GU | S1 | |
| Meropleon ambifusca | Newman's Brocade | G4G5 | SU | |
| Meropleon cosmion | An Owlet Moth | G4 | SNR | |
| Meropleon titan | An Owlet Moth | G2G4 | S2S4 | |
| Papaipema araliae | Aralia Shoot Borer Moth | G3G4 | SNR | |
| Papaipema duovata | Seaside Goldenrod Stem Borer | G2G3 | SU | |
| Papaipema polymniae | Polymnia Borer Moth | G4? | SH | |
| Psectraglaea carnosa | Pink Sallow | G3 | SNR | |
| Ptichodis bistrigata | Southern Ptichodis | G3 | SNR | |
| Pyrrhia aurantiago | Aureolaria Seed Borer | G3G4 | SNR | |
| Schizura apicalis | Plain Schizura | G3G4 | SNR | |
| Sphinx franckii | Franck's Sphinx | G4G5 | S1S2 | |
| Zale lunifera | Bold-based Zale Moth | G3G4 | SNR | |
| Zale submediana | Gray Spring Zale | G4 | S1S3 | |
| Zimmermannia bosquella | American Chestnut Nepticulid Moth | GNR | SH | |
| Odonata | | | | |
| Aeshna canadensis | Canada Darner | G5 | S2 | |
| Aeshna constricta | Lance-tipped Darner | G5 | SH | |
| Aeshna tuberculifera | Black-tipped Darner | G5 | S2 | |
| Aeshna verticalis | Green-striped Darner | G5 | S2 | |
| Amphiagrion saucium | Eastern Red Damsel | G5 | S3S4 | |
| Anax longipes | Comet Darner | G5 | S3 | |
| Archilestes grandis | Great Spreadwing | G5 | S3 | |
| Argia bipunctulata | Seepage Dancer | G4 | S3 | |
| Argia sedula | Blue-ringed Dancer | G5 | S3 | |
| Boyeria grafiana | Ocellated Darner | G5 | S1 | |
| Brachymesia gravida | Four-spotted Pennant | G5 | S3S4 | |
| Calopteryx amata | Superb Jewelwing | G5 | S1S2 | Т |
| Calopteryx angustipennis | Appalachian Jewelwing | G4 | S1S2 | |
| Calopteryx dimidiata | Sparkling Jewelwing | G5 | S2 | |
| Celithemis bertha | Red-veined Pennant | G5 | S1 | |
| Celithemis fasciata | Banded Pennant | G5 | S3 | |
| Celithemis martha | Martha's Pennant | G4 | S1 | |
| Celithemis ornata | Faded Pennant | G5 | SH | |
| Celithemis verna | Double-ringed Pennant | G5 | S2 | |
| Chromagrion conditum | Aurora Damsel | G5 | S3S4 | |
| Cordulegaster bilineata | Brown Spiketail | G5 | S3 | |
| Cordulegaster diastatops | Delta-spotted Spiketail | G5 | S3S4 | |
| Cordulegaster erronea | Tiger Spiketail | G4 | S3 | |
| Cordulegaster obliqua | Arrowhead Spiketail | G4 | S2 | |
| Cordulegaster obliqua fasciata | Banded Spiketail | G4T3Q | S1 | |
| Cordulia shurtleffii | American Emerald | G5 | S3 | |
| Dorocordulia lepida | Petite Emerald | G5 | SH | |
| Enallagma annexum | Northern Bluet | G5 | S1 | |

| SCIENTIFIC NAME | COMMON NAME | GLOBAL RANK | STATE RANK | STATE FEDERAL STATUS STATUS |
|--------------------------|--------------------------|----------------|---------------|--------------------------------|
| Enallagma antennatum | Rainbow Bluet | G5 | S1 | |
| Enallagma carunculatum | Tule Bluet | G5 | S1 | |
| Enallagma daeckii | Attenuated Bluet | G4 | S3 | |
| Enallagma divagans | Turquoise Bluet | G5 | S3S4 | |
| Enallagma doubledayi | Atlantic Bluet | G5 | S1 | |
| Enallagma dubium | Burgundy Bluet | G5 | S1 | |
| Enallagma durum | Big Bluet | G5 | S3 | |
| Enallagma ebrium | Marsh Bluet | G5 | SH | |
| Enallagma pallidum | Pale Bluet | G4 | S1 | |
| Enallagma traviatum | Slender Bluet | G5 | S3 | |
| Enallagma vesperum | Vesper Bluet | G5 | S3 | |
| Enallagma weewa | Blackwater Bluet | G5 | S2 | |
| Epitheca canis | Beaverpond Baskettail | G5 | S3 | |
| Epitheca costalis | Slender Baskettail | G5 | S1 | |
| Epitheca semiaquea | Mantled Baskettail | G5 | SH | |
| Epitheca spinosa | Robust Baskettail | G4 | S1S2 | |
| Erpetogomphus designatus | Eastern Ringtail | G5 | S2 | |
| Erythrodiplax minuscula | Little Blue Dragonlet | G5 | S1 | |
| Gomphaeschna antilope | Taper-tailed Darner | G4 | S2 | |
| Gomphaeschna furcillata | Harlequin Darner | G5 | S3S4 | |
| Gomphurus fraternus | Midland Clubtail | G5 | S2 | |
| Gomphurus lineatifrons | Splendid Clubtail | G4 | S1 | |
| Gomphurus ventricosus | Skillet Clubtail | G3 | SH | X |
| Helocordulia selysii | Selys' Sundragon | G4 | S2 | Т |
| Helocordulia uhleri | Uhler's Sundragon | G5 | S3 | |
| Hetaerina titia | Smoky Rubyspot | G5 | SH | |
| Hylogomphus abbreviatus | Spine-crowned Clubtail | G4 | S1 | |
| Hylogomphus adelphus | Mustached Clubtail | G5 | S1 | |
| Hylogomphus parvidens | Piedmont Clubtail | G4 | SH | Χ |
| Hylogomphus viridifrons | Green-faced Clubtail | G3G4 | S1 | |
| Ischnura kellicotti | Lilypad Forktail | G5 | S3S4 | |
| Ischnura prognata | Furtive Forktail | G4 | S1 | |
| Ladona exusta | White Corporal | G5 | S1 | Е |
| Ladona julia | Chalk-fronted Skimmer | G5 | S3 | |
| Lanthus parvulus | Northern Pygmy Clubtail | G4G5 | S2 | |
| Lanthus vernalis | Southern Pygmy Clubtail | G4 | S2 | |
| Lestes congener | Spotted Spreadwing | G5 | S3 | |
| Lestes dryas | Emerald Spreadwing | G5 | SH | |
| Lestes eurinus | Amber-winged Spreadwing | G5 | S3 | |
| Lestes forcipatus | Sweetflag Spreadwing | G5 | S3 | |
| Lestes unguiculatus | Lyre-tipped Spreadwing | G5 | SH | |
| Leucorrhinia frigida | Frosted Whiteface | G5 | S1 | |
| Leucorrhinia glacialis | Crimson-ringed Whiteface | G5 | S1 | |
| Leucorrhinia hudsonica | Hudsonian Whiteface | G5 | S1 | |
| Leucorrhinia intacta | Dot-tailed Whiteface | G5 | S3 | |

| SCIENTIFIC NAME | COMMON NAME | GLOBAL RANK | STATE RANK | STATE FEDERAL STATUS STATUS |
|------------------------------------|-------------------------|----------------|---------------|--------------------------------|
| Libellula auripennis | Golden-winged Skimmer | G5 | S3 | |
| Libellula axilena | Bar-winged Skimmer | G5 | S3 | |
| Libellula flavida | Yellow-sided Skimmer | G5 | S2S3 | |
| Macromia alleghaniensis | Allegheny River Cruiser | G4 | S2 | |
| Macromia illinoiensis georgina | Georgia River Cruiser | G5T5 | S3S4 | |
| Macromia taeniolata | Royal River Cruiser | G5 | S3 | |
| Nannothemis bella | Elfin Skimmer | G4G5 | S1 | Е |
| Nasiaeschna pentacantha | Cyrano Darner | G5 | S3S4 | |
| Nehalennia gracilis | Sphagnum Sprite | G5 | S2 | |
| Nehalennia integricollis | Southern Sprite | G5 | S1S2 | |
| Nehalennia irene | Sedge Sprite | G5 | S3 | |
| Neurocordulia obsoleta | Umber Shadowdragon | G5 | S3 | |
| Neurocordulia yamaskanensis | Stygian Shadowdragon | G5 | S3 | |
| Ophiogomphus howei | Pygmy Snaketail | G3 | S1 | |
| Ophiogomphus incurvatus incurvatus | Appalachian Snaketail | G3T2T3 | S1 | Е |
| Ophiogomphus mainensis fastigiatus | Maine Snaketail | G4G5TU | S1 | |
| Ophiogomphus rupinsulensis | Rusty Snaketail | G5 | S2 | |
| Ophiogomphus sp. 1 | Chesapeake Snaketail | G1 | S1 | |
| Phanogomphus descriptus | Harpoon Clubtail | G4G5 | S1S2 | |
| Phanogomphus quadricolor | Rapids Clubtail | G3G4 | S2 | 1 |
| Progomphus obscurus | Common Sanddragon | G5 | S3 | |
| Rhionaeschna mutata | Spatterdock Darner | G4 | S1 | Е |
| Somatochlora elongata | Ski-tailed Emerald | G5 | S2 | |
| Somatochlora filosa | Fine-lined Emerald | G5 | S2 | |
| Somatochlora georgiana | Coppery Emerald | G3G4 | S1 | |
| Somatochlora linearis | Mocha Emerald | G5 | S3S4 | |
| Somatochlora provocans | Treetop Emerald | G4 | S1 | Е |
| Somatochlora walshii | Brush-tipped Emerald | G5 | S1 | |
| Stenogomphurus rogersi | Sable Clubtail | G4 | S2 | 1 |
| Stylurus amnicola | Riverine Clubtail | G4 | SH | Χ |
| Stylurus laurae | Laura's Clubtail | G4 | S2S3 | |
| Stylurus plagiatus | Russet-tipped Clubtail | G5 | S3 | |
| Stylurus scudderi | Zebra Clubtail | G5 | S1 | |
| Stylurus spiniceps | Arrow Clubtail | G5 | S3 | |
| Sympetrum ambiguum | Blue-faced Meadowhawk | G5 | S3S4 | |
| Sympetrum obtrusum | White-faced Meadowhawk | G5 | S3 | |
| Sympetrum semicinctum | Band-winged Meadowhawk | G5 | S3 | |
| Tachopteryx thoreyi | Gray Petaltail | G4 | S3 | |
| Telebasis byersi | Duckweed Firetail | G5 | S1 | |
| Plecoptera | | | | |
| Alloperla aracoma | Aracoma Sallfly | G3 | SNR | |
| Alloperla biserrata | Dusky Sallfly | G3 | SNR | |
| Megaleuctra flinti | Shenandoah Needlefly | G2G3 | S1 | |
| Sweltsa palearata | Shenandoah Sallfly | G2G3 | S2 | |

| SCIENTIFIC NAME | COMMON NAME | GLOBAL RANK | STATE RANK | STATE STATU | FEDERAL S STATUS |
|---------------------------|---------------------------------|----------------|---------------|----------------|---------------------|
| Sweltsa pocahontas | Pocahontas Sallfly | G2G3 | S2 | | |
| Utaperla gaspesiana | Gaspe Sallfly | G3 | SNR | | |
| Trichoptera | | | | | |
| Ceraclea spongillovorax | A Longhorned Caddisfly | G3G4 | SNR | | |
| Ceraclea uvalo | Spatulate Long-horned Caddisfly | G2G4 | SNR | | |
| Cernotina pallida | Pale Trumpet-net Caddisfly | G3G4 | SNR | | |
| Cheumatopsyche parentum | A Hydropschid Caddisfly | G3 | SNR | | |
| Culoptila plummerensis | A Saddlecase Caddisfly | G1G2 | SNR | | |
| Hydropsyche brunneipennis | A Net-spinning Caddisfly | G3G4 | S3 | | |
| Hydropsyche hoffmani | A Net-spinning Caddisfly | G3G4 | SNR | | |
| Protoptila georgiana | A Caddisfly | G3G4 | SNR | | |
| <u>FISHES</u> | | | | | |
| Acantharchus pomotis | Mud Sunfish | G4G5 | S3 | | |
| Acipenser brevirostrum | Shortnose Sturgeon | G3 | S1 | Е | LE |
| Acipenser oxyrinchus | Atlantic Sturgeon | G3 | S1 | Е | LE |
| Catostomus catostomus | Longnose Sucker | G5 | SX | Χ | |
| Centrarchus macropterus | Flier | G5 | S2S3 | I | |
| Clinostomus elongatus | Redside Dace | G3G4 | SX | | |
| Cottus sp. 7 | Checkered Sculpin | G4Q | S2 | | |
| Enneacanthus chaetodon | Blackbanded Sunfish | G3G4 | S1 | Е | |
| Enneacanthus obesus | Banded Sunfish | G5 | S3S4 | | |
| Etheostoma fusiforme | Swamp Darter | G5 | S3 | | |
| Etheostoma nigrum | Johnny Darter | G5 | S3 | | |
| Etheostoma sellare | Maryland Darter | GH | SH | Е | LE |
| Etheostoma vitreum | Glassy Darter | G4G5 | S2 | Т | |
| Fundulus luciae | Spotfin Killifish | G4 | SU | | |
| Lepomis gulosus | Warmouth | G5 | S3S4 | | |
| Lethenteron appendix | American Brook Lamprey | G4 | S2 | Т | |
| Luxilus chrysocephalus | Striped Shiner | G5 | S1S2 | I | |
| Margariscus margarita | Allegheny Pearl Dace | G5 | S2S3 | I | |
| Notropis amoenus | Comely Shiner | G5 | S3 | | |
| Notropis bifrenatus | Bridle Shiner | G3 | SH | Χ | |
| Notropis chalybaeus | Ironcolor Shiner | G4 | S1 | Е | |
| Noturus flavus | Stonecat | G5 | S1 | Е | |
| Pararhinichthys bowersi | Cheat Minnow | GNA | SX | Χ | |
| Percina bimaculata | Chesapeake Logperch | G1G2 | S1S2 | Т | |
| Percina notogramma | Stripeback Darter | G4 | S1 | Е | |
| Percina peltata | Shield Darter | G5 | S3S4 | | |
| Percopsis omiscomaycus | Trout-perch | G5 | SX | X | |
| Salvelinus fontinalis | Brook Trout | G5 | S3S4 | | |
| <u>AMPHIBIANS</u> | | | | | |
| Ambystoma jeffersonianum | Jefferson Salamander | G4 | S3 | | |
| Ambystoma tigrinum | Eastern Tiger Salamander | G5 | S1 | Е | |

| SCIENTIFIC NAME | COMMON NAME | GLOBAL RANK | STATE RANK | STATE STATU | FEDERAL S STATUS |
|------------------------------|-------------------------------|----------------|---------------|----------------|---------------------|
| Aneides aeneus | Green Salamander | G3G4 | S1 | E | |
| Cryptobranchus alleganiensis | Eastern Hellbender | G3 | S1 | Е | |
| Dryophytes gratiosus | Barking Treefrog | G5 | S1 | Е | |
| Eurycea cirrigera | Southern Two-lined Salamander | G5 | SU | | |
| Gastrophryne carolinensis | Eastern Narrow-mouthed Toad | G5 | S2S3 | Е | |
| Lithobates kauffeldi | Atlantic Coast Leopard Frog | G3G4 | SU | | |
| Lithobates virgatipes | Carpenter Frog | G4 | S3 | | |
| Necturus maculosus | Common Mudpuppy | G5 | SX | Χ | |
| Plethodon wehrlei | Wehrle's Salamander | G4 | S2 | I | |
| Pseudacris brachyphona | Mountain Chorus Frog | GNR | SH | Е | |
| Pseudotriton montanus | Mud Salamander | G5 | S2? | | |
| REPTILES | | | | | |
| Apalone spinifera | Eastern Spiny Softshell | G5 | S1 | I | |
| Aspidoscelis sexlineata | Six-lined Racerunner | G5 | S3 | | |
| Caretta caretta | Loggerhead Sea Turtle | G3 | S1B,S1S2N | Т | LT |
| Cemophora coccinea | Scarletsnake | G5 | S1 | | |
| Chelonia mydas | Green Sea Turtle | G3 | S1N | Т | LT |
| Clemmys guttata | Spotted Turtle | G5 | S3S4 | | |
| Crotalus horridus | Timber Rattlesnake | G4 | S3 | | |
| Dermochelys coriacea | Leatherback Sea Turtle | G2 | S1N | Ε | LE |
| Eretmochelys imbricata | Atlantic Hawksbill Sea Turtle | G3 | SNA | Е | LE |
| Farancia erytrogramma | Rainbow Snake | G4 | S1 | Е | |
| Glyptemys insculpta | Wood Turtle | G3 | S2S3 | | |
| Glyptemys muhlenbergii | Bog Turtle | G2G3 | S2 | Т | LT |
| Graptemys geographica | Northern Map Turtle | G5 | S1 | E* | |
| Kinosternon baurii | Striped Mud Turtle | G4G5 | SU | | |
| Lampropeltis rhombomaculata | Northern Mole Kingsnake | G5 | S1 | | |
| Lepidochelys kempii | Kemp's Ridley Sea Turtle | G1 | S1N | Е | LE |
| Nerodia erythrogaster | Plain-bellied Watersnake | G5 | S2S3 | | |
| Pantherophis guttatus | Red Cornsnake | G5 | S2 | | |
| Pituophis melanoleucus | Northern Pinesnake | G4 | SH | | |
| Plestiodon anthracinus | Northern Coal Skink | G5 | S1 | Е | |
| Pseudemys concinna | River Cooter | G5 | S3 | _ | |
| Virginia valeriae pulchra | Mountain Earthsnake | G5T3T4 | S1S2 | Е | |
| <u>BIRDS</u> | | | | | |
| Accipiter atricapillus | American Goshawk | G5 | S1B | E* | |
| [Accipiter gentilis] | see Accipiter atricapillus | _ | | | |
| Accipiter striatus | Sharp-shinned Hawk | G5 | S2S3B | | |
| Actitis macularius | Spotted Sandpiper | G5 | S3S4B | | |
| Aegolius acadicus | Northern Saw-whet Owl | G5 | S1B | | |
| Ammospiza caudacuta | Saltmarsh Sparrow | G2 | S2B,S1N | I | |
| Antrostomus vociferus | Eastern Whip-poor-will | G5 | S3S4B | | |
| Ardea alba | Great Egret | G5 | S3S4B | | |

| SCIENTIFIC NAME | COMMON NAME | GLOBAL RANK | STATE RANK | STATE STATUS | FEDERAL S STATUS |
|--------------------------------|-----------------------------|----------------|---------------|-----------------|---------------------|
| Asio flammeus | Short-eared Owl | G5 | S1B | E | |
| Asio otus | Long-eared Owl | G5 | S1B | | |
| Bartramia longicauda | Upland Sandpiper | G5 | S1B | Е | |
| Botaurus lentiginosus | American Bittern | G5 | S1B | Т | |
| Calidris canutus rufa | Red Knot | G4T2 | S1M | Т | LT |
| Campephilus principalis | Ivory-billed Woodpecker | GX | SX | X | LE |
| Cardellina canadensis | Canada Warbler | G5 | S3B | | |
| Catharus ustulatus | Swainson's Thrush | G5 | SHB | X | |
| Centronyx henslowii | Henslow's Sparrow | G4 | S2B | 1 | |
| Certhia americana | Brown Creeper | G5 | S3B | | |
| Charadrius melodus | Piping Plover | G3 | S1B | Е | LT |
| Charadrius wilsonia | Wilson's Plover | G5 | S1B | Е | |
| Chondestes grammacus | Lark Sparrow | G5 | SXB | Χ | |
| Chordeiles minor | Common Nighthawk | G5 | S2S3B | | |
| Circus hudsonius | Northern Harrier | G5 | S2B | 1 | |
| Cistothorus platensis | Sedge Wren | G5 | S1B | Е | |
| Contopus cooperi | Olive-sided Flycatcher | G4 | SHB | X | |
| Corvus corax | Common Raven | G5 | S3S4 | | |
| Dolichonyx oryzivorus | Bobolink | G5 | S3S4B | | |
| Dryobates borealis | Red-cockaded Woodpecker | G3 | SHB | X | LE |
| Egretta caerulea | Little Blue Heron | G5 | S3B | | |
| Egretta thula | Snowy Egret | G5 | S3B | | |
| Egretta tricolor | Tricolored Heron | G5 | S3B | | |
| Empidonax alnorum | Alder Flycatcher | G5 | S2B | I | |
| Empidonax minimus | Least Flycatcher | G5 | S3S4B | | |
| Falco peregrinus anatum | American Peregrine Falcon | G4T4 | S2B | I | |
| Fulica americana | American Coot | G5 | S1B | | |
| Gallinula galeata | Common Gallinule | G5 | S2S3B | I | |
| Gelochelidon nilotica | Gull-billed Tern | G5 | S1B | E | |
| Geothlypis philadelphia | Mourning Warbler | G5 | S1B | E | |
| Haematopus palliatus | American Oystercatcher | G5 | S3B | | |
| Haemorhous purpureus | Purple Finch | G5 | S3B,S3N | | |
| Haliaeetus leucocephalus | Bald Eagle | G5 | S3S4 | | |
| Himantopus mexicanus | Black-necked Stilt | G5 | S1B | | |
| Ixobrychus exilis | Least Bittern | G4G5 | S2S3B | I | |
| Junco hyemalis | Dark-eyed Junco | G5 | S3B | _ | |
| Lanius Iudovicianus | Loggerhead Shrike | G4 | S1B | E | |
| Laterallus jamaicensis | Black Rail | G3 | S1 | | LT |
| Leiothlypis ruficapilla | Nashville Warbler | G5 | S1B | T | |
| Leucophaeus atricilla | Laughing Gull | G5 | S1B | _ | |
| Limnothlypis swainsonii | Swainson's Warbler | G4 | S1B | Е | |
| Lophodytes cucullatus | Hooded Merganser | G5 | S3B | | |
| Mareca strepera | Gadwall | G5 G5T3 | S2B | | |
| Melospiza georgiana nigrescens | Coastal Plain Swamp Sparrow | G5T3 | S2S3B | 1 | |
| Mergus merganser | Common Merganser | G5 | S2B | | |

| SCIENTIFIC NAME | COMMON NAME | GLOBAL RANK | STATE RANK | STATE | FEDERAL S STATUS |
|------------------------------|--------------------------------------|----------------|---------------|-------|---------------------|
| Numenius borealis | Eskimo Curlew | GH | SXM | Χ | LE |
| Nyctanassa violacea | Yellow-crowned Night-Heron | G5 | S3B | | |
| Nycticorax nycticorax | Black-crowned Night-Heron | G5 | S3B,S2N | | |
| Parkesia noveboracensis | Northern Waterthrush | G5 | S2B | I | |
| Pelecanus occidentalis | Brown Pelican | G4 | S1B | | |
| Peucaea aestivalis | Bachman's Sparrow | G3 | SHB | X | |
| Plegadis falcinellus | Glossy Ibis | G5 | S3B | | |
| Podilymbus podiceps | Pied-billed Grebe | G5 | S2S3B | | |
| Porzana carolina | Sora | G5 | S2B | | |
| Rallus elegans | King Rail | G4 | S2B | | |
| Regulus satrapa | Golden-crowned Kinglet | G5 | S3B | | |
| Riparia riparia | Bank Swallow | G5 | S3B | | |
| Rynchops niger | Black Skimmer | G5 | S1B | Е | |
| Setophaga caerulescens | Black-throated Blue Warbler | G5 | S3S4B | | |
| Setophaga cerulea | Cerulean Warbler | G4 | S3B | | |
| Setophaga coronata | Yellow-rumped Warbler | G5 | S2B | | |
| Setophaga fusca | Blackburnian Warbler | G5 | S3B | | |
| Setophaga magnolia | Magnolia Warbler | G5 | S3S4B | | |
| Setophaga virens waynei | Wayne's Black-throated Green Warbler | G5T1 | SUB | | |
| Sitta canadensis | Red-breasted Nuthatch | G5 | S3B | | |
| Spatula discors | Blue-winged Teal | G5 | S1B | | |
| Sphyrapicus varius | Yellow-bellied Sapsucker | G5 | S1B | | |
| Spinus pinus | Pine Siskin | G5 | S2B | | |
| Spiza americana | Dickcissel | G5 | S3B | | |
| Sterna dougallii | Roseate Tern | G4 | SXB | X | LE |
| Sterna forsteri | Forster's Tern | G5 | S2B | I | |
| Sterna hirundo | Common Tern | G5 | S1B | Е | |
| Sternula antillarum | Least Tern | G4 | S2B | Т | |
| Thalasseus maximus | Royal Tern | G5 | S1B | E | |
| Thalasseus sandvicensis | Sandwich Tern | G5 | S1B | | |
| [Thryomanes bewickii altus] | see Thryomanes bewickii bewickii | | | | |
| Thryomanes bewickii bewickii | Bewick's Wren | G5T1T3 | SXB | X | |
| Troglodytes hiemalis | Winter Wren | G5 | S2B | | |
| Tympanuchus cupido | Greater Prairie Chicken | G4 | SX | X | |
| Tyto alba | Barn Owl | G5 | S2B | I | |
| Vermivora chrysoptera | Golden-winged Warbler | G4 | S2B | I | |
| MAMMALS | | | | | |
| Balaenoptera borealis | Sei Whale | G5? | S1 | Е | LE |
| Balaenoptera musculus | Blue Whale | G3G4 | S1 | Ε | LE |
| Balaenoptera physalus | Fin Whale | G3G4 | S1S2 | Е | LE |
| Bos bison | American Bison | G4 | SX | | |
| Canis lupus | Gray Wolf | G5 | SX | Χ | PS |
| Cervus elaphus | Elk | G5 | SX | Χ | |
| | | | | | |

| SCIENTIFIC NAME | COMMON NAME | GLOBAL RANK | STATE RANK | STAT STAT | E FEDERAL US STATUS |
|-------------------------------------|------------------------------|----------------|---------------|--------------|------------------------|
| Condylura cristata parva | Southeastern Star-nosed Mole | G5T4 | SU | | |
| Corynorhinus townsendii virginianus | Virginia Big-eared Bat | G4T4 | SNR | | |
| Erethizon dorsatum | North American Porcupine | G5 | S3S4 | | |
| Eubalaena glacialis | North Atlantic Right Whale | G1 | S1 | Е | LE |
| Lasionycteris noctivagans | Silver-haired Bat | G3G4 | SU | | |
| Lasiurus borealis | Eastern Red Bat | G3G4 | S3S4 | | |
| Lasiurus cinereus | Hoary Bat | G3G4 | S3S4 | | |
| Lepus americanus | Snowshoe Hare | G5 | SH | X | |
| Lynx rufus | Bobcat | G5 | S3 | I | |
| Martes americana | American Marten | G5 | SX | X | |
| Megaptera novaeangliae | Humpback Whale | G4 | S1S2 | Е | LE |
| Mesoplodon europaeus | Gervais' Beaked Whale | G3 | SNR | | |
| Microtus chrotorrhinus carolinensis | Southern Rock Vole | G5T3 | S1 | Е | |
| Mustela nivalis | Least Weasel | G5 | S2S3 | I | |
| Myotis leibii | Eastern Small-footed Myotis | G4 | S1 | E | |
| Myotis lucifugus | Little Brown Bat | G3G4 | S1 | | |
| Myotis septentrionalis | Northern Long-eared Bat | G2G3 | S1 | E | LE |
| Myotis sodalis | Indiana Bat | G2 | S1 | Е | LE |
| Neotoma magister | Allegheny Woodrat | G3G4 | S1 | Е | |
| Perimyotis subflavus | Tricolored Bat | G3G4 | S1 | | |
| Physeter catodon | Sperm Whale | G3G4 | S1 | Е | LE |
| Puma concolor couguar | Eastern Cougar | G5TXQ | SH | X | LE |
| Reithrodontomys humulis | Eastern Harvest Mouse | G5 | SH | X | |
| Sciurus niger cinereus | Delmarva Fox Squirrel | G5T3 | S1 | I | |
| Sorex dispar | Long-tailed Shrew | G4 | S2 | I | |
| Sorex fumeus | Smoky Shrew | G5 | S2S3 | I | |
| Sorex hoyi winnemana | Southern Pygmy Shrew | G5T4 | S2 | | |
| Sorex longirostris | Southeastern Shrew | G5 | S3S4 | | |
| Sorex palustris punctulatus | Southern Water Shrew | G5T3 | S1 | Е | |
| Spilogale putorius | Eastern Spotted Skunk | G4 | S1 | | |
| Sylvilagus obscurus | Appalachian Cottontail | G4 | S1 | I | |
| Synaptomys cooperi | Southern Bog Lemming | G5 | S3 | | |
| Ursus americanus | American Black Bear | G5 | S3S4 | | |

APPENDIX I

CHANGES TO STATE RANKS AND STATUSES SINCE THE LAST PUBLISHED LIST (November 2021)

| SCIENTIFIC NAME | COMMON NAME | CURRENT RANK | FORMER RANK | STATE STATUS | FORMER STATUS |
|----------------------------|--------------------------|-----------------|----------------|-----------------|------------------|
| <u>INSECTS</u> | | | | | |
| Hymenoptera | | | | | |
| Bombus affinis | Rusty-patched Bumble Bee | S1 | SH | Е | E |
| Lepidoptera – Butterflies | | | | | |
| Colias interior | Pink-edged Sulphur | SH | S1 | | |
| Lepidoptera – Moths | | | | | |
| Hemipachnobia subporphyrea | Venus Flytrap Cutworm | SU | SNR | | |
| Plecoptera | | | | | |
| Megaleuctra flinti | Shenandoah Needlefly | S1 | SNR | | |
| Sweltsa palearata | Shenandoah Sallfly | S2 | SNR | | |
| Sweltsa pocahontas | Pocahontas Sallfly | S2 | SNR | | |
| REPTILES | | | | | |
| KEI HELS | | | | | |
| Caretta caretta | Loggerhead Sea Turtle | S1B,S1S2N | S1B | Т | Т |
| MAMMALS | | | | | |
| | | | | | |
| Myotis septentrionalis | Northern Long-eared Bat | S1 | S1 | Е | Т |

APPENDIX II

ANIMAL SPECIES REPORTED, FALSELY REPORTED, OR POTENTIALLY OCCURRING IN MARYLAND

The following species do not regularly occur in Maryland based on currently available information. Although not exhaustive, the list is included to provide clarification for those species whose rank in Maryland may be unclear due to conflicting reports or vague published accounts. For those species with a rank of SR, only unverified reports exist. Species with a rank of SRF have been falsely reported, and the error may persist in the literature. The list is also provided to bring attention to those species that potentially occur in Maryland (SP) and, if documented, their presence could have significant conservation value.

| SCIENTIFIC NAME | COMMON NAME | STATE RANK |
|---------------------------|-----------------------------|---------------|
| MOLLUSKS | | |
| Alasmidonta marginata | Elktoe | SRF |
| Amnicola limosus | Mud Amnicola | SP |
| Campeloma decisum | Pointed Campeloma | SP |
| Elimia virginica | Piedmont Elimia | SP |
| Ferrissia fragilis | Fragile Ancylid | SP |
| Fontigens nickliniana | Watercress Snail | SP |
| Gillia altilis | Buffalo Pebblesnail | SP |
| Gyraulus deflectus | Flexed Gyro | SP |
| Leptoxis carinata | Crested Mudalia | SP |
| Lioplax subcarinata | Ridged Lioplax | SP |
| Lyogyrus granum | Squat Duskysnail | SP |
| Micromenetus dilatatus | Bugle Sprite | SP |
| Physella heterostropha | Pewter Physa | SP |
| Planorbella trivolvis | Marsh Rams-horn | SP |
| Planorbula armigera | Thicklip Rams-horn | SP |
| Pseudosuccinea columella | Mimic Lymnaea | SP |
| Valvata tricarinata | Threeridge Valvata | SP |
| <u>INSECTS</u> | | |
| Coleoptera | | |
| Cicindela marginipennis | Cobblestone Tiger Beetle | SP |
| Lordithon niger | Black Lordithon Rove Beetle | SP |
| Lepidoptera – Butterflies | | |
| Calephelis virginiensis | Little Metalmark | SR |
| Cyllopsis gemma | Gemmed Satyr | SR |
| Neonympha mitchellii | Mitchell's Satyr | SR |
| Lepidoptera – Moths | | |
| Synanthedon castaneae | Chestnut Clearwing Moth | SRF |
| Odonata | | |
| Aeshna eremita | Lake Darner | SR |
| Arigomphus furcifer | Lilypad Clubtail | SP |
| Calopteryx aequabilis | River Jewelwing | SR |
| Enallagma sulcatum | Golden Bluet | SRF |
| Epitheca spinigera | Spiny Baskettail | SP |
| Gomphus borealis | Beaverpond Clubtail | SP |
| Gomphus spicatus | Dusky Clubtail | SR |

APPENDIX II

ANIMAL SPECIES REPORTED, FALSELY REPORTED, OR POTENTIALLY OCCURRING IN MARYLAND

The following species do not regularly occur in Maryland based on currently available information. Although not exhaustive, the list is included to provide clarification for those species whose rank in Maryland may be unclear due to conflicting reports or vague published accounts. For those species with a rank of SR, only unverified reports exist. Species with a rank of SRF have been falsely reported, and the error may persist in the literature. The list is also provided to bring attention to those species that potentially occur in Maryland (SP) and, if documented, their presence could have significant conservation value.

| SCIENTIFIC NAME | COMMON NAME | STATE RANK |
|-----------------------------|-----------------------------------|---------------|
| Neurocordulia virginiensis | Cinnamon Shadowdragon | SRF |
| Ophiogomphus alleghaniensis | Allegheny Snaketail | SR |
| Ophiogomphus carolus | Riffle Snaketail | SP |
| Somatochlora forcipata | Forcipate Emerald | SP |
| Stylurus notatus | Elusive Clubtail | SR |
| Sympetrum internum | Cherry-faced Meadowhawk | SR |
| <u>FISHES</u> | | |
| Cottus cognatus | Slimy Sculpin | SRF |
| Percina caprodes | Logperch | SRF |
| <u>AMPHIBIANS</u> | | |
| Hyla femoralis | Pine Woods Treefrog | SP |
| Siren lacertina | Greater Siren | SRF |
| MAMMALS | | |
| Corynorhinus rafinesquii | Rafinesque's Big-eared Bat | SP |
| Glaucomys sabrinus | Northern Flying Squirrel | SP |
| Glaucomys sabrinus fuscus | Virginia Northern Flying Squirrel | SP |
| Lasiurus seminolus | Seminole Bat | SR |
| Mustela richardsonii | Ermine | SR |
| Myotis austroriparius | Southeastern Myotis | SR |
| Pseudorca crassidens | False Killer Whale | SR |

Appendix D

Ocean City Strategic Plan (2024), Tourism Strategic Plan (2019)



VISION

Ocean City is a safe, clean and green family resort featuring a world class beach, Boardwalk, and active community for residents and guests.

MISSION

The Town of Ocean City strives to be an engaged community for residents and a first class vacation destination for guests, providing excellent customer service, revitalized neighborhoods and a fiscally sound government where any FAMILY can live, work and play!

ORGANIZATIONAL VALUES

 ${f F}$ iscally Sound Government

Amazing City Services

Magnificent Beach, Bays & Parks

nnovative & Environmentally Responsible

Livable Neighborhoods for Residents

Year-round Vacation Destination

EST. 2018

STRATEGIC PLAN

Town of Ocean City, Maryland

CRITICAL SUCCESS FACTORS



Ocean City is a premier family vacation destination, offering an award-winning beach, historic Boardwalk and world class amenities for both residents and visitors.



Ocean City residents enjoy safe, clean neighborhoods with extraordinary municipal services, a community minded government and housing options for all families.



GOOD VALUE FOR HIGH QUALITY SERVICES

Ocean City residents, property owners and businesses receive high quality services through exceptional amenities and excellent customer care at a reasonable cost.



EXPAND TOURISM OPTIONS

Ocean City is a leading vacation destination, offering a convenient location for visitors seeking a vibrant coastal resort with spectacular events and yearround recreational amenities.



RESILIENT INFRASTRUCTURE

Ocean City is a fiscally sound town Government with a funded Capital Plan and a continued commitment to invest, grow and maintain its infrastructure.



HOUSING OPTIONS

Ocean City is a dynamic community, with a wide range of housing options and a local government that is committed to maintaining high property standards and emerging property development.

STRATEGIC PLAN

TOWN OF OCEAN CITY

POLICY AGENDA

TOP PRIORITY

TAX DIFFERENTIAL
SUPPORT WINDFARMS WITH NO VISIBLE IMPACT
CONVENTION CENTER PHASE III DESIGN
2ND STREET PUBLIC WORKS FACILITY
CITY-WIDE SECURITY IMPROVEMENTS
WHITESIDE FACILITY RE-USE
BOARDWALK ACCESS RESTRICTIONS
ANNUAL STREET PAVING
BALTIMORE AVENUE STREET IMPROVEMENTS
CAINE WOODS STREET IMPROVEMENTS
BOARDWALK DECKING
SPORTS COMPLEX FEASIBILITY STUDY

HIGH PRIORITY

PLAYGROUND REPLACEMENT
CANAL DREDGING
CHICAGO AVENUE BULKHEAD

PRIORITY

TRANSIT LANE
SUNSET PIER
SKATEPARK
3RD STREET RECREATION COMPLEX

FUTURE PROJECTS

UNDERGROUNDING UTILITIES
MID-TOWN FIRE STATION
LIFE-SAVING MUSEUM ANNEX & RENOVATION
RELOCATION OF THE PUBLIC WORKS YARD
SPORTS COMPLEX
4TH STREET PARKING LOT
EXPAND OCDC BOUNDARIES (33RD ST. NORTH)

MANAGEMENT AGENDA

STRATEGIC PRIORITIES

- EXPLORE REVENUE OPTIONS: INCLUDING PARKING & ROOM TAX
- EVALUATE TAX DIFFERENTIAL
- FOCUS ON SPORTS MARKETING AND SPORTS COMPLEX
- MANAGE MOTOR EVENTS TO REFLECT TOWN BRAND
- ATTRACT YOUNG FAMILIES
- CHAMPION BENEFITS OF LIVING IN OCEAN CITY
- EXPAND BIKE PATH
- ENCOURAGE IMPROVEMENTS FOR SAFE, CLEAN WORKFORCE HOUSING
- INCREASE CODE ENFORCEMENT
- ELIMINATE BARRIERS TO ENCOURAGE NEW CONSTRUCTION

MANAGEMENT INITIATIVES IN PROGRESS

- BOARDWALK ACCESS CONTROLS
- PUBLIC WORKS TRANSIT FACILITY UPGRADES
- BIKEPATH MASTERPLAN
- PARKING CONTROL SYSTEM
- BOARDWALK CAMERA INSTALLATIONS
- CONVENTION CENTER PHASE III DESIGN
- LIVABLE COMMUNITY VIDEO
- SPRING/FALL NEWSLETTER
- 911 SYSTEM UPGRADES
- RECORD RETENTION POLICY
- BOAT RAMP COMFORT STATION
- RENTAL PROPERTY LICENSING ENFORCEMENT
- SAFE WORKFORCE HOUSING INITIATIVE
- PROJECT MANAGEMENT TRAINING COURSES
- CODE ENFORCEMENT ON THE BOARDWALK
- MOTOR EVENT MANAGEMENT
- WASTEWATER PUMPING STATION UPGRADES
- GORMAN AVENUE PARK REHABILITATION
- DOWNTOWN RECREATION COMPLEX REDESIGN

Appendix E

Future Visioning Workshop (2025)

Comprehensive Plan Update Public Comment Summary (2025)

Town of Ocean City, Maryland Future Visioning Workshop: 2025 Audience Response Report



March 14, 2025

Rachel Druckenmiller

<u>racheldruckenmiller.com</u>

rachel@racheldruckenmiller.com

DRUCKENMILLER

IN-SESSION MENTIMETER RESPONSES

How did it make you feel to be on the receiving end of that "above and beyond" customer service experience?:





♣ Turn to a neighbor and share: What's something OCMD does really well? What's working? What do you love about living, working, or playing here?:

Here are the top 10 themes from their responses:

- 1. **Cleanliness & Well-Maintained Environment** Clean beaches, well-kept landscaping, a clean town, and easy navigation.
- 2. **The People & Community Spirit** Friendly, welcoming locals, strong community support, and people who care about both residents and tourists.
- 3. **Diversity of Activities & Attractions** A wide range of entertainment, amusement parks, events, restaurants, and things to do for all ages.
- 4. **Family-Friendly Atmosphere** Nostalgic charm, kid-friendly activities, and a safe, family-oriented environment.
- 5. **The Beach & Natural Beauty** The ocean, bay views, fresh air, sunrises, and access to nature.
- 6. **Safety & Sense of Security** One of the safest communities, strong public services, and a welcoming atmosphere for residents and visitors.
- 7. **Vibrant Events & Live Music** Special events, concerts, music festivals, and a lively entertainment scene.
- 8. **Local Businesses & Strong Economy** Thriving small businesses, strong marketing and branding, and a motivated network of stakeholders.
- 9. **Relaxed & Carefree Lifestyle** A laid-back, enjoyable atmosphere where people come to have fun and unwind.
- 10. **Boardwalk as a Gathering Place** The Boardwalk serving as a town square, a hub for socializing, nostalgia, and connection.

Of all the ideas your group shared, what are the top 3 that energize or excite you the most, ideas you'd like to see us explore?

Here are the top 10 themes from their responses:

- 1. **Sports Complex Development** Strong enthusiasm for building a sports complex, mentioned frequently as a priority.
- 2. **Improved Transportation & Traffic Solutions** Calls for boat taxis, better bike lanes, improved sidewalks, synchronized traffic signals, mass transit to metro areas, and better transportation within OC.
- 3. **Boardwalk Safety & Enhancements** Interest in improving safety, cleanliness, and overall atmosphere, with ideas like policing of crosswalks, security improvements, and boardwalk extensions.
- 4. **Year-Round Attractions & Indoor Activities** Suggestions for more things to do beyond bars and restaurants, including Top Golf, a city-owned swimming pool, and expanded rainy-day activities.
- 5. **Expanded & Free Parking Solutions** More accessible parking, parking garages, free parking options, and local parking passes.
- 6. **Better Regional Connectivity** Interest in transportation links between OC and metro areas via buses, rail, or other options.
- 7. **More Walkability & Bikeability** Ideas for wider sidewalks, better pedestrian areas, dedicated bike lanes, and making the town more walkable.
- 8. **Quadrupling the OC Tourism Marketing Budget** A push to expand marketing efforts significantly to attract more visitors.
- 9. **Affordable Housing & Workforce Support** Addressing housing for employees and their families, as well as improving support for workers.
- 10. **West OC & Harbor Area Development** Interest in making West OC more cohesive, with gathering spaces, a public fish market, and waterfront entertainment.

Rachel

©Top 10 most important priorities the leaders of the Town of Ocean City should consider:

- 1. **Develop a Sports Complex** Overwhelming support for building a sports complex to boost year-round tourism, provide recreational opportunities, and enhance economic growth.
- 2. Improve Transportation & Traffic Flow Enhance public transit within Ocean City and expand regional connections to metro areas through buses, rail, or other solutions. Increase bikeability, improve traffic signal synchronization, and consider alternative transport like boat taxis, robotaxis, and golf cart lanes.
- 3. **Enhance Boardwalk Safety & Cleanliness** Strengthen security, improve boardwalk aesthetics, enforce quality standards for businesses, and extend the boardwalk further north to increase accessibility.
- 4. **Expand Year-Round Attractions & Indoor Activities** Develop more off-season entertainment options, such as an aquarium, Top Golf, an indoor swimming pool, and other recreational facilities.
- 5. **Increase Parking Availability & Accessibility** Provide more parking solutions, including garages, free/affordable parking options, and annual local parking passes to reduce congestion.
- 6. **Improve Walkability & Bikeability** Expand sidewalks, create safer pedestrian crossings, add bike lanes, and implement a cohesive vision for making Ocean City a more pedestrian-friendly town.
- 7. **Boost Tourism & Marketing Efforts** Significantly increase the marketing budget to promote Ocean City as a year-round destination and attract more visitors outside peak season.
- 8. Address Affordable Housing & Workforce Support Ensure affordable housing solutions for employees, support local workers, and foster a stronger sense of community among town departments.
- 9. **Enhance West Ocean City & Harbor Area Connectivity** Develop the harbor area with walkable gathering spaces, a public fish market, waterfront entertainment, and better integration with Ocean City.
- 10. **Upgrade Coastal Highway Infrastructure** Transform Coastal Highway into a pedestrian- and bike-friendly boulevard with underground utilities, green spaces, and improved traffic management.

ALL Mentimeter Responses

How did it make you feel to be on the receiving end of that "above and beyond" customer service experience?:

- Special Valued
- Grateful Relaxed Happy
- Beautiful
- Special Appreciated I_matter
- Heard Wanted Appreciated
- Appreciation
- Special
- Seen Thankful
- Justified
- special grateful heard
- Special
- special cared_about
- Understood Heard Appreciated
- Hopeful
- Grateful Happy Warm
- Great
- Warm Connected Positive
- Refreshing Relieved Appreciative
- Comforted Grateful Reminded
- Heard Understood
- Valued Appreciated Satisfied
- Appreciated Thankful Happy
- Satisfied Grateful Happy
- Valued Appreciated Wanted
- Awestruck Jealous Grateful
- Special Satisfied Loved
- Good Grateful
- Heard Comfortable
- Special Loyal Happy
- Special Heard Valued
- Valued Seen Appreciated
- Special Honored Happy
- Valued Cared_for Appreciated

Rachel

- Heard Cared_for Appreciated
- Wanted Appreciated Honored
- thankful
- Appreciated Happy Grateful
- Connected Community Seen
- Valued Trusted
- Relaxed Grateful Bonded
- Hopeful Valued Energetic
- Supported Experience Return
- Appreciated Warmed_my_heart Grateful
- Special Fuzzy Content
- Grateful Happy Community
- Recognized
- Grateful Appreciative Pleased

♣ Turn to a neighbor and share: What's something OCMD does really well? What's working? What do you love about living, working, or playing here?:

- The array of activities
- Beach is clean
- The people welcoming to new people (it's our livelihood)
- The People!
- Having everything for families
- OC Beach Patrol.
- The clean beach and the bay.
- Diversity of experiences
- I love coming over the rt 50 bridge and seeing the ocean and the sun rising and knowing this is my home!
- casual lifestyle
- Clean
- Working close to the bay and the ocean. It's nice to be able to walk outside and enjoy the fresh air
- Great Neighborhood
- Infrastructure foundation of the town and the people that make it happen.
- Carefree atmosphere it doesn't take itself too seriously and the weight of life feels lifted
- Family oriented, capturing nostalgia.



- So many things to do, places to go, restaurants and entertainment, parks and beaches, water views everywhere!
- "Clean beach
- Fun for all ages
- Great food
- Come together for a cause whether small or large
- Advertising marketing and branding
- Live music!!"
- Well kept landscaping. Every morning I come in to see beautiful flowers in our flower pots without ever seeing anyone do it. It's a wonderful start to the workday.
- Beach
- Special Events
- Community
- Love the people I work with—esp the ones who make me laugh!
- Best Amusement Park
- OC has a strong brand it knows who it is and what it does well
- The Boardwalk is like a town square, where people gather.
- Seeing the sunrise on the beach on my way to work
- "Hosting friends & family
- Church community
- Kid friendly
- Opportunity"
- Off season specials for the locals
- Short commute
- The people
- "Strongest CVB and marketing team on the Coastline.
- Strongest network of stakeholders who are motivated for the common good of the town."
- Clean town, easy to get around, carefree happy feeling
- One of the safest and nicest communities I've visited along the east coast, it's an honor to live and be a business owner in Ocean City!
- nostalgic atmosphere
- The people that care about the locals as well as the tourist experiences and how they differ matching the needs for each
- "Music festivals
- Local businesses
- Safety



- Repeat tourists"
- "Keeping a small town feel
- keeping beaches clean,
- fun activities for the family"
- Community support
- Beach
- French fries!!
- "Clean
- Boardwalk
- Walkability"
- "Something to do for all ages.
- Always live music somewhere.
- For work networking events are fantastic"
- Community
- Clean beaches, safe, fun activities, amazing concerts, Thrasher's FRIES!! Lot of ice cream options LOL
- Highlighting the nostalgic childhood memories
- Running into people you know wherever you go
- Car show air show additional converts bus service beach st pats day
- Clean beach
- Amazing food!
- Best waterpark around!
- Everyone in town is happy because they're here to relax and have fun.
- No fear of failure

Of all the ideas your group shared, what are the top 3 that energize or excite you the most, ideas you'd like to see us explore?

- Sports complex AK4:AK52
- Better transportation: boat taxis, bikeability, ??
- "1) year round attractions (Top Golf, high quality grocery) & local parking pass, 2) sports complex (privately managed), 3) transportation (bike lanes, airport expansion at SBY, golf cart lanes west O)"
- Sports complex!!!!!
- Locals lane
- Coastal hwy becomes coastal blvd with wide sidewalks, bike lanes and underground utilities.
- Improving safety and atmosphere of our boardwalk experience

- Collaboration amongst organizations, streamline business resources, and reduce duplication amongst some organizations.
- More/free parking /transportation
- "Easier walk ability throughout Town. Better and wider sidewalks.Better synchronization of traffic signals"
- Indoor activities / options besides bars and restaurants City owned Swimming
 Pool
- Boardwalk safety, cleanliness, safety and cleanliness!
- Sports complex
- Cohesive connection to West Ocean City especially the harbor area. Walkable areas gathering spaces, public fish, market, water experiences, and outdoor entertainment maybe like Annapolis
- Island medical services
- Parking garages/solutions
- Wider sidewalks and policing of crosswalks. More bicycle policing/rules.
- Better support for employees and employee families and getting to know other departments within the city
- Extend boardwalk to 62nd street
- Sports Complex, Free Parking, Improved Safety on Coastal Hwy (overhead crosswalks & monorail)
- Sports complex
- "1. Affordable Housing 2. Town's Perception 3. More indoor activities 4. Sports Complex"
- Improved regional transportation along the coast and from major markets. Rail and/or Bus.
- Transportation to and from OC to the metro areas including an affordable bus.
- Mass Transportation within OC & transit to OC from metros
- Traffic
- Quadruple the marketing budget for OC Tourism
- Quadruple the MARKETING BUDGET.
- More rainy day activities and year round attractions such as topgolf
- Experiences, activities, and businesses expanded to shoulder season will have real impact on the overall community.
- Robotaxis
- "Boardwalk safety, security and policy solutions cleaning up the image, Parking all around possible local parking permits, Better control traffic especially on the bridge- more paths/walkways"
- Boardwalk to the Delaware line

- Green space walking and bike paths
- Quadruple the marketing budget!
- Reducing congestion on Coastal Hwy
- Build a sports complex!, Have design standards to maintain our coastal charm, Build a bridge for only fishing, biking and running.
- Parking





CHARTING THE COURSE: CO-CREATING A SHARED

VISION FOR OCEAN CITY'S TOMORROW

CONVENTION CENTER | FREE | 10 AM - 2 PM

Every team member is a vital piece of this coastal community, and your unique perspective and ideas help shape our future, especially as we celebrate our 150th anniversary this year. Sign up here.

THANKS FOR ATTENDING RACHEL DRUCKENMILLER'S WORKSHOP

CHARTING THE COURSE: CO-CREATING A SHARED VI-SION FOR OCEAN CITY'S TOMORROW - MARCH 14TH



Thank you for attending the Charting the Course Workshop with Rachel Druckenmiller! We appreciate your participation and the valuable insights you shared. Click the button below to view the audience report. Your feedback and engagement help us shape a better Ocean City!

AUDIENCE REPORT

Town of Ocean City, MD 2025 Draft Comprehensive Plan Update

September 2025 Public Hearing Comments

| | Section | Comment | Action | Alternate/Revision |
|----------------------------------|---------|---------|--------|--------------------|
| State Agency Comments | | | | |
| | | | | |
| | | | | |
| | | | | |
| Department of Planning | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| Department of the Environment | | | | |
| | | | | |
| | | | | |
| | | | | |
| Department of Natural Resources | | | | |
| | | | | |
| | | | | |
| | | | | |
| Department of Transportation | | | | |
| Department of Transportation | | | | |
| | | | | |
| | | | | |
| Worcester County Comments | Section | Comment | Action | Alternate/Revision |
| | | | | |
| | | | | |
| 1) Planning | | | | |
| | | | | |
| | | | | |
| | | | + | |
| 2) Environmental | | | | |
| | | | | |
| General Comments | Section | Comment | Action | Alternate/Revision |
| 1) | | | | · |
| 2) | | | | |
| 3) | | | | |
| 4) | | | + | |
| 4) | | | | |

| 5) | | | | |
|---------------------------------|---------|---------|--------|--------------------|
| 6) | | | | |
| 7) | | | | |
| | | | | |
| Specific Requests for Amendment | Section | Comment | Action | Alternate/Revision |
| 1) | | | | |
| 2) | | | | |
| 3) | | | | |
| 4) | | | | |
| | | | | |
| Staff / Planning Commission | Section | Comment | Action | Alternate/Revision |
| 1) | | | | |
| 2) | · | | | |
| | _ | | | |