

# **TOWN OF OCEAN CITY COMPREHENSIVE PLAN**

## **MUNICIPAL GROWTH ELEMENT**

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.

### **Population**

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

During its early years, Ocean City was a small resort community experiencing slow year-round resident growth. Through four decades from the period 1930-1970 the Town’s resident population grew by only 547 new residents. The Town’s population declined in the 1950s only to recover in the 1960s when the northern section of the island was annexed. The modest population decline in the 1950s has been attributed to permanent residents moving to the mainland, either selling or renting their high-value island property. Since 1970 growth in the year-round population has increased dramatically. Over the past 34 years the year-round population has increased over 5 fold: from 1,493 residents in 1970 to an estimated 8,000 in 2009.

The growth in the 1970s and 1980s resulted from the increasing tourist economy enabling more households to be supported year-round by the summer trade, and the expansion of public facilities to serve an increasing population. In addition, there has been an influx of retirees who have found Ocean City to be a desirable place to live. Table 1 displays the Town’s historic and projected year-round population.

Chapter 1, Population Characteristics and Trends, of the Comprehensive Plan, contains a detailed analysis of the year-round population of Ocean City.

#### **Seasonal Visitor Population**

In a resort such as Ocean City, it is much more important to understand the demographics of the total population, including year-round residents and seasonal visitors, rather than only the permanent population. Planning for future development and for the provision of public facilities must be based on the total population to be accommodated and served. Ocean City’s infrastructure is sized to accommodate the larger seasonal population rather than only the year-round population. Much of the infrastructure and services are scaled back during the off-season and then operated at full capacity during the peak season.

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

Table 1-3 of Chapter 1 of the Comprehensive Plan (updated below) shows the peak Demoflush population for each year since 1977. This is the number of people in Ocean City on the peak day in each year. The table indicates that the peak day population of 162,900 in 1977 virtually doubled some 10 years later to 332,400 by 1987. Since that time the peak population has remained relatively stable within the range of 320,000 to about 345,000 in subsequent years.

The average weekend population by month is shown in Table 1-4 of the Comprehensive Plan. Since 1992 the year-round average weekend population has shown only a slight increase of just under two percent and typically ranges from 153,000 to 158,500 over the course of the year. The average weekend populations through the summer months have remained quite stable through the 1992-2005 period. Most noteworthy are trends reflecting more substantial increases in average weekend populations during the peak season shoulder months and winter months. Through the period shown in Table 1-4, the months of January, March, April, October, November and December each recorded substantial weekend population increases in excess of 23% or more.

Chapter 1, Population Characteristics and Trends, of the Comprehensive Plan contains a complete detailed analysis of the seasonal population of Ocean City.

### **Population Projections**

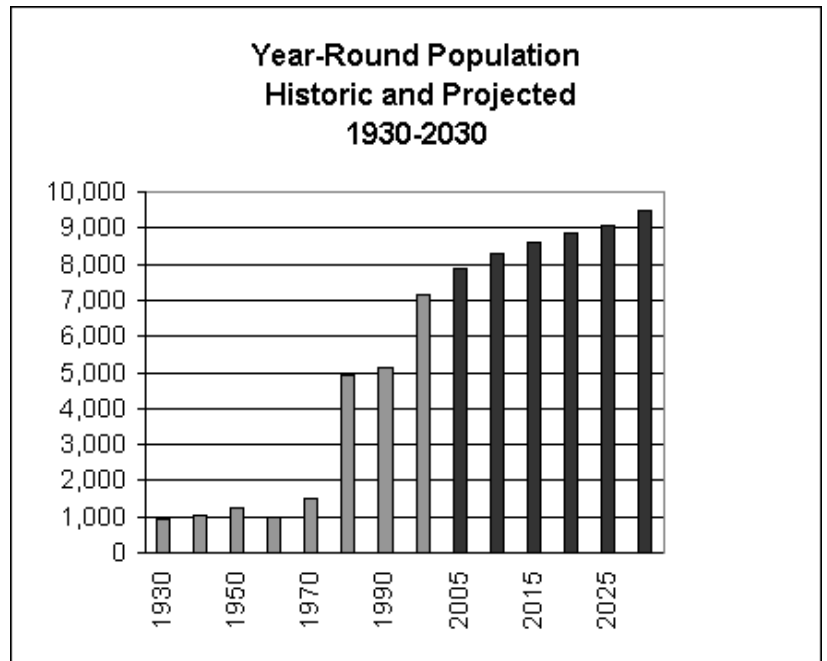
Population projections for Ocean City must be made for both year-round and seasonal projections. Projecting year-round resident and seasonal population in Ocean City is complicated by several factors. The uncertainty about the accuracy of the Census and the small size of the year-round population compared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

Seasonal population projections present their own set of problems. Vacationers and seasonal workers are not counted by the Census, so historical counts rely on symptomatic data, such as wastewater flows (Demoflush) that can only offer a surrogate measure as a basis for projection. Future growth depends on a variety of economic and demographic characteristics. Finally, Ocean City’s physical capacity (a geographically confined, largely built community with 95% of the land developed) and land use policies will have a major effect. It is likely that much of the change in the capacity of the City to absorb increases in the peak seasonal visitor population will be largely influenced by City redevelopment policies as much as new development over the next 20 years.

For planning purposes, the size of Ocean City’s **year-round population** is relatively unimportant. The number of people in the city at any time is much larger than the year-round population and is of much greater import in influencing demand for community facilities and services. The following table presents both the historic and projected year-round population. Given the unique characteristics of Ocean City as a resort community it is difficult to develop a single set of year round resident population forecasts that can be considered reliable. The projections are taken from Chapter 1 of the Comprehensive Plan, and project that Ocean City will retain its current proportionate share of the Worcester County population, yielding a year-round population in the year 2030 of 9,473.

Table 1

Year	Population
1930	946
1940	1,052
1950	1,234
1960	983
1970	1,493
1980	4,946
1990	5,146
2000	7,173
<b>2005</b>	<b>7,900</b>
<b>2010</b>	<b>8,308</b>
<b>2015</b>	<b>8,609</b>
<b>2020</b>	<b>8,863</b>
<b>2025</b>	<b>9,048</b>
<b>2030</b>	<b>9,473</b>



Source: U.S. Census of Population, 1930-2000.

Maryland Department of Planning

Ocean City Dept. of Planning and Community Development

**The projection of future total, or seasonal, population** is more important to planning efforts in Ocean City than the projection of year-round population. It is the total number of people in the city that impact the environment and demand for public services and facilities. Projecting the future total, or seasonal, population is as difficult and uncertain as estimating the current total year-round resident population. This element updates the

future total population projections found in Chapter 1 based on the actual Demoflush population figures from 1990 through 2008. In this period the peak seasonal visitor population has been relatively stable, growing at an average rate of .22% annually, and this plan projects that trend to continue in the foreseeable future.

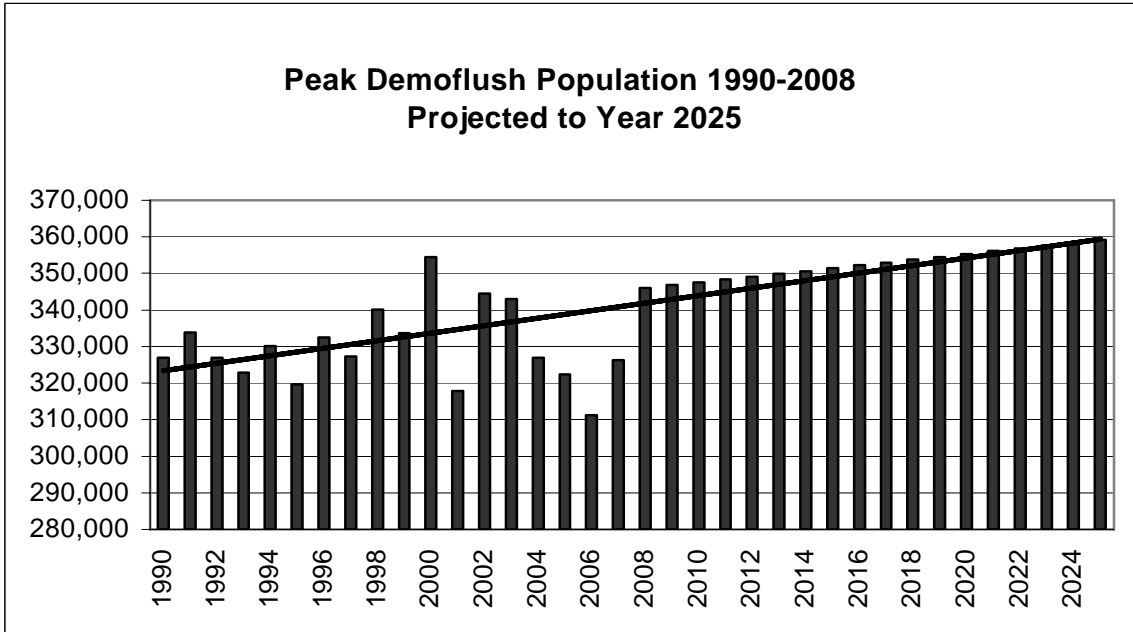
“Adjusted” population figures are presented which are 85 percent of the Demoflush population. Adjusted figures are presented because it appears that estimating the visitor population using the Demoflush methodology probably overestimates the population. To illustrate, comparing the 2000 average summer population (286,213), less about 10 percent day visitors, to the number of housing units (26,320 as reported by the 2000 Census plus about 9,500 hotel units) results in an average of 7.5 persons per unit. It seems more likely that, if the average unit contains 2 bedrooms, four to six people would occupy the average unit in the summer.

Thus, a population estimating methodology that incorporates persons per unit indicates that between 170,000 and 240,000 people are in Ocean City at any time during the peak season (excluding day visitors). Adding another 10 percent to account for day visitors who are not staying overnight yields a maximum of about 264,000 as a total average summer population (about 85 percent of the Demoflush figure). This is probably a more accurate population estimate for purposes of planning for parks, recreation, police, fire and emergency medical facilities and services as well as Town administrative facilities. *However, the higher Demoflush figures are used in water and wastewater planning to provide a safety factor to assure adequate water supplies and satisfy wastewater treatment capacity needs.*

Table 2 shows historic and projected peak-day Demoflush population, both adjusted and non-adjusted.

Table 2  
PEAK DEMOFLUSH POPULATION  
1990 - 2025

YEAR	PEAK POPULATION	85% ADJUSTED PEAK POPULATION
1990	326,859	277,830
1995	319,755	271,792
2000	354,400	301,240
2005	322,308	273,962
<b>2010</b>	<b>347,586</b>	295,448
<b>2015</b>	<b>351,426</b>	298,712
<b>2020</b>	<b>355,309</b>	302,013
<b>2025</b>	<b>359,235</b>	305,350



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

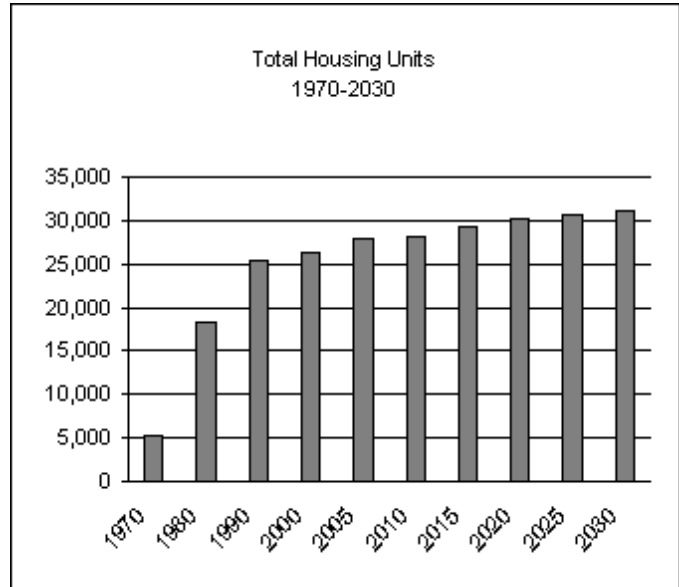
Growth in the unincorporated area proximate to Ocean City is discussed later in this element.

**Housing Stock and Households**

Similar to future population, the housing stock is projected to increase at a slower pace than in the past. This is a function of demand for additional seasonal units as well as the lack of vacant land. The majority of the growth of the housing stock will be in the form of redevelopment of older units. Table 3 presents historic data and projections of the housing stock.

Table 3  
**TOTAL HOUSING UNITS**  
 1970 - 2030

		Percent
Year	No. Units	Change
1970	5,193	
1980	18,221	250.9%
1990	25,494	39.9%
2000	26,317	3.2%
2005	27,937	6.2%
2010	28,110	0.6%
2015	29,304	4.2%
2020	30,082	2.7%
2025	30,691	2.0%
2030	31,014	1.1%

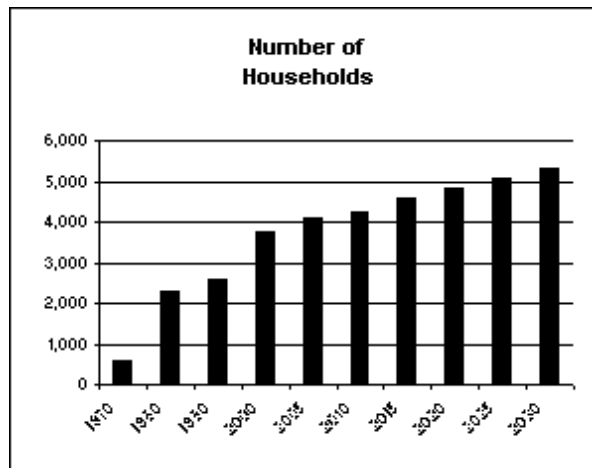


Source: U.S. Census 1970-2000  
 Projections by Md. Dept. Of Planning

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.

Table 4

Year	Households
1970	600
1980	2,281
1990	2,595
2000	3,750
2005	4,103
2010	4,262
2015	4,583
2020	4,849
2025	5,094
2030	5,296



As is the case with the increase in year-round population, the increase in year-round households has no appreciable impact on town services.

## **Land Use**

### **Existing Land Use**

Second only to growth policies, the most important factor affecting land use in Ocean City is the geographic limitation of the town. Surrounded on three sides by bodies of water and on the fourth side by the Maryland-Delaware state line, future growth is limited without annexation. The Mayor and City Council has not indicated any desire to consider annexation into Worcester County to accommodate future growth. However, this statement does not preclude such consideration in the future.

Chapter 3 of the Comprehensive Plan presents a detailed analysis of the past and projected land use patterns in Ocean City.

The present land use pattern contains a thorough mixing of residential types and substantial commercial strip and center development along Coastal Highway (see Comprehensive Plan Map 3-1). This unusual development pattern resulted from several factors, which are described in detail in Chapter 3 of the Comprehensive Plan.

Now established, this pattern will continue into the future. In recent years the ocean side's residential diversity has tended to decrease. Infilling and redevelopment has largely involved multifamily structures in condominium forms of ownership. Therefore, the character of the ocean block has become increasingly multifamily with a rise in the number and size of individual units within condominium projects developed in recent years. There is a great variation in the density of residential development. The oceanfront areas range from 20 units per acre to over 80 units per acre in completely developed blocks. In these areas most blocks average from 40 to 70 units per acre.

On the bay side, a few higher density projects dot the waterfront. However, the majority of land is developed at less than ten units to the acre. This is due to extensive use of land committed to commercial uses and the location of a number of single family neighborhoods. Areas developed with townhouse and manufactured homes approach a density of twenty units per acre.

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

Commercial development occurs predominantly along Coastal Highway. The greatest

concentration occurs on the bayside where land is less costly. Presently, neighborhood shopping centers of a variety of configurations are distributed about town. Five community shopping centers are concentrated north of the Route 90 Bridge. Two major amusement areas exist, one at the south end of the boardwalk and pier area, and the other at 30th Street on the bayside. All areas of the Town fall within the standard trade area of a convenience market or a major grocery store. This indicates that, for the most common needs of vacationers, existing commercial developments adequately serve the market.

The pyramidal structure of the Ocean City zoning regulations encourages mixed-use development, but also makes it difficult to identify certain districts as “residential” or “commercial”. Generally, however, the 2,500 acres of developable land are zoned as follows:

Residential	1,818 acres (73%)
Commercial	555 acres (22%)
Mixed Use	123 acres ( 5%)

In recent years there has been substantial pressure for condominium residential development that, because of pyramidal zoning, in many cases has displaced a number of commercial uses including restaurants, office uses and shops. Opportunities to maintain or encourage development of commercial uses and/or to promote mixed-use development are being explored to maintain such uses as an important component of the Town’s economic base. Sustaining the distribution of commercial restaurant, retail, and service uses throughout Ocean City and promotion of mixed-use development can reduce dependence on automobile use by residents and visitors, thereby reducing demand on transportation system infrastructure and services over time.

### **Future Land Use**

As discussed earlier, the year-round population of Ocean City is expected to continue growing at a moderate pace, but this growth is relatively unimportant in the context of infrastructure and service needs. The infrastructure is designed to service the seasonal population, which, based on trends over the recent past, is expected to grow at a modest pace for the foreseeable future.

The fact that only about 5% of land in Ocean City is vacant means that most future development will be in the form of redevelopment. Existing development patterns are well established, and opportunities for major changes are limited. Major changes are not recommended by the Comprehensive Plan, but some general guidelines are promoted:

- New residential development on the bayside should be of moderate to low density and building height.
- Higher density residential development should continue to be encouraged to locate on the oceanside.



- 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 opportunities outside of the town. Additional community scale shopping centers are not encouraged.
- Mixed-use development is strongly encouraged, especially in the Downtown.

### **Build-Out Projection and Analysis**

The typical method of conducting a build-out analysis does not readily apply to Ocean City. There are 26,320 dwelling units in the town to accommodate the population of 7,173 (2000 Census). Obviously, the vast majority of the units are used on a seasonal basis by nonresident owners or rented to vacationers. However, except for those that were built before modern building and housing codes, most of these units would be available to house future residents, so additional housing units would not necessarily be needed to meet the demands of future population growth. In fact, many owners of seasonal properties buy with the intent of living in them in the future.

Beyond housing needs, a build-out analysis can be a valuable tool to use when planning for future infrastructure and service expansions. Using the Maryland Department of Planning model as a basis, the following table summarizes the build-out analysis for Ocean City.

“Developable land” excludes all land east of the building limit line (the beach), all wetlands and public streets. It includes vacant land and improved properties that have 4 or fewer dwelling units that were built prior to 1970. These properties are considered to have the potential to be redeveloped in the planning period. Developable land also excludes fragmented parcels smaller than 1,500 square feet in size (the minimum lot area for a townhouse).

Ocean City’s zoning regulations allow parcels that are nonconforming as to density to redevelop and retain that nonconformity. In reality, most cannot regain the full nonconformity because other requirements must be met (parking, landscaping, stormwater management, etc.), so reducing the build out by 25% accounts for this fact.

The number of potential additional units identified in Table 5 is the maximum number possible, because it assumes that all redevelopable commercially zoned land is developed with residential units, reflecting the pyramidal structure of the zoning code. This would not be the case in reality, but this scenario is used to obtain a maximum build-out result.

As stated earlier, this projection is less meaningful in Ocean City than in other areas because of the existing housing supply. The potential addition of 7,760 units simply adds to the existing surplus of units.

The standard method of projecting an increase in population based on the possibility of an additional 7,760 units does not necessarily lead to an assumed increase in the year-round population because the majority of the new units would probably be used for seasonal occupation. If it is assumed that the additional units would be 100% occupied by an average of 4 persons per unit on one particular day, an additional 31,040 people would be in the Town. Because all units in Ocean City are never occupied at the same time, using this projected increase in population would result in a much higher maximum population than is realistic. Therefore, for planning purposes, the projected increase in the Demoflush population discussed earlier is used.

Table 5

Build Out Projection

Zoning District	Developable Land		Permitted DU per Acre	Maximum Units	Adjusted Units(75%)	Existing Units	Potential Additional Units
	# Parcels	Acres					
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	384	140.19	43.6	6,107	4,580	736	3,844
M	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	19	56.67	43.6	2,469	1,851	122	1,729
<b>Totals</b>	<b>2,270</b>	<b>523.52</b>		<b>19,236</b>	<b>14,427</b>	<b>6,667</b>	<b>7,760</b>

## **Impact of Growth on Public Services and Facilities**

Even though the build-out analysis indicates that 7,760 additional units could be built in Ocean City, the projected increase in the year-round population is not expected to have any effect on the provision of public services provided by the town. Ocean City's utilities are sized to accommodate the seasonal population, and the level of other services is routinely adjusted to meet the need at any particular time. Additionally, the peak seasonal population is not expected to increase substantially beyond the level of the past 15 years, thus substantial additions to capacities are not anticipated. These trends are monitored continuously, and if larger than anticipated population and housing growth appears to be a possibility, provisions for additional levels of service will be made.

### **Public Schools**

The Worcester County Board of Education's Facilities Master Plan follows the growth concept contained in the Worcester County Comprehensive Plan that promotes future growth in the vicinity of existing population areas. Attendance areas reflect the growth areas identified in the Comprehensive Plan. Students in Ocean City attend North County schools (Ocean City Elementary, Berlin Intermediate, Stephen Decatur Middle, and Stephen Decatur High School) along with students from Berlin, West Ocean City and Ocean Pines.

Historical enrollment figures for the North County schools are presented in Table 6. From 1991 to 2009 the North County enrollment for all schools increased by 63 students per year. Since Stephen Decatur Middle School did not exist in 1991 the total change in student population for the schools attended by Ocean City students cannot be computed.

Table 6  
Historical Enrollment – North County Schools

Area and Schools	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>North County Area**</b>																		
Buckingham Elementary School	549	600	572	579	592	623	515	500	471	446	422	415	415	406	435	461	446	449
Ocean City Elementary School	472	468	477	474	520	549	494	491	520	509	473	497	486	484	517	547	561	575
Showell Elementary School	626	644	695	752	747	751	649	649	570	590	578	555	490	472	467	506	529	506
Berlin Intermediate School	717	735	732	804	883	933	609	649	771	748	811	805	783	724	744	732	703	713
Stephen Decatur Middle School	0	0	0	0	0	0	604	634	642	632	659	676	662	666	649	631	663	645
Stephen Decatur High School	837	895	938	985	1,020	1,076	1,111	1,167	1,248	1,251	1,319	1,302	1,374	1,384	1,389	1,436	1,389	1,390
<b>Total North County Area</b>	<b>3,201</b>	<b>3,342</b>	<b>3,414</b>	<b>3,594</b>	<b>3,762</b>	<b>3,932</b>	<b>3,982</b>	<b>4,090</b>	<b>4,222</b>	<b>4,176</b>	<b>4,262</b>	<b>4,250</b>	<b>4,210</b>	<b>4,136</b>	<b>4,201</b>	<b>4,313</b>	<b>4,291</b>	<b>4,278</b>

Source: Worcester County Board of Education Facilities Master Plan 2009-2010.

The 2008 enrollment, projected enrollment, and state-rated capacities of the schools that students from Ocean City attend are presented in Table 7. Only Stephen Decatur Middle School projects to slightly exceed the State-rated capacity by 2018.

The ten-year enrollment projections for all County schools (K-12) is projected to decrease by 26 students by 2018. The school age population of Ocean City (2000 Census) is only about 8% of the town's total population compared to about 15.3% of the Worcester County population. Thus the year-round school-age population (present and projected) of Ocean City has a minimal impact on the public school system enrollment.

Table 7

North County School Enrollment Projections (K-12)  
2008 - 2018

Year	Ocean City Elementary	Berlin Intermediate	Stephen Decatur Middle	Stephen Decatur High	Total County Schools
2008	575	713	645	1,390	6,671
2009	574	702	627	1,392	6,673
2010	592	711	616	1,367	6,699
2011	575	734	639	1,352	6,647
2012	591	748	631	1,311	6,652
2013	588	747	643	1,315	6,729
2014	600	777	660	1,297	6,796
2015	595	765	674	1,334	6,856
2016	616	767	685	1,342	6,918
2017	623	742	700	1,369	6,966
2018	628	791	683	1,398	6,645
State-Rated Capacity	740	798	677	1,518	

Source: Worcester County Board of Education Facilities Master Plan 2009-2010

**Public Libraries**

Worcester County is responsible for the public library system. A new branch was recently constructed and opened in Ocean City. This facility will serve the projected municipal growth well into the future.

**Public Safety**

The Ocean City Police Department (OCPD) enforces the criminal and traffic portions of the Code of Ocean City. The OCPD’s jurisdiction includes the corporate limits of Ocean City to three miles off-shore. The bays and ocean are not regularly patrolled, but the department has jurisdiction to continue pursuit in these areas.

Staffing of the Department varies with the season. The full-time, year-round force includes 97 full-time sworn officers and 20 civilian personnel. During the visitor season, approximately 110 seasonal police officers and fifty non-sworn members of the department augment the core year-round staff. These figures include public safety aides, who are responsible for processing and transporting prisoners, enforcing parking laws, directing traffic and generally assisting visitors.

The size of the year-round population has little impact on the staffing of the OCPD. As with other public services in Ocean City, it is the visitor population that determines the manpower.

The same is true for the other public safety sectors of the municipal government, including the beach patrol, fire department, emergency medical services, and emergency management. All of these functions are driven by the seasonal population.

## **Water and Sewerage Facilities**

As with all community infrastructure and facilities, all services are sized to serve the total maximum population (visitor and year-round). All projections of future water and wastewater facility needs are based on the projections of peak visitor population found in the 2006 Comprehensive Plan.

### **Current Inventory of Water Supply System**

A complete analysis of the water system is found in the *Town of Ocean City Comprehensive Water Supply Study – 2005 Update*, and in the new *Water Resources Element*.

Generally, the existing raw water supply consists of 15 wells in the Ocean City Aquifer and 9 wells in the Manokin Aquifer. The location of the wells has been spread out to the extent possible to reduce the effects of seasonal draw down and to minimize the potential for increased salt water intrusion by upconing in specific areas. The current available raw water supply safely exceeds the treatment capacity of each associated treatment plant. Therefore, no additional wells are planned for the immediate future.

The current permitted allocation (8 MGD annual average / 17.6 MGD daily average in the month of maximum use) is more than adequate to meet the projected water demand to the year 2025.

### **Current Inventory of Water Treatment System**

The existing water treatment facilities are producing excellent quality potable water meeting all regulatory requirements. There are three treatment plants (15<sup>th</sup> Street, 44<sup>th</sup> Street, and Gorman Avenue) that treat raw water to remove iron, manganese, and chlorinate the water. Improvements to the plants completed over the past several years have improved operations and reliability, and extended the useful life of the facilities. The current design treatment capacity of 18 MGD is more than adequate to meet the projected 2025 maximum day demand of 16.8 MGD.

## **Current Inventory of Water Storage and Distribution Systems**

The town's water storage and distribution facilities have been expanded and upgraded over the years to meet maximum day water demands and fire flows. There are seven elevated and one ground level water storage facilities spaced along the near 10 mile length of the town. These tanks provide a total useable storage of 6.3 million gallons. Improvements to the distribution system are made according to a detailed improvement program.

### **Saltwater Intrusion**

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

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

The "Comprehensive Water Supply Study" recommends spacing future wells to distribute drawdown from the aquifers and relieve the salt intrusion in any particular area. The study also notes that any future water supply production wells should probably be located in the northern part of the Town where the hydrogeologic conditions are more favorable with respect to available drawdown and saltwater intrusion. The Study also states that future planning must recognize the possibility of saltwater intrusion, and flexibility in design of the water supply system must be provided so that the problem may be addressed if and when intrusion occurs.

An increasingly attractive solution to salt intrusion is the rapidly developing technology and operating methods of desalination of brackish water. Desalination could be accomplished as needed by converting existing water treatment plans. By employing desalination, the saltwater intrusion could be contained at the coastline indefinitely.

### **Wastewater Treatment**

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

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

The average daily flow treated during the maximum month between 2003 and 2008 was 10.87 MGD in July of 2006. The available or unused capacity has averaged 23.6% during this time. Year 2020 maximum wastewater treatment flows are projected to increase to approximately 12.4 MGD for the Town of Ocean City and West Ocean City combined. Recent engineering studies have concluded that the future wastewater treatment capacity required will be 16 MGD.

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 suffers from the island's lack of relief. Without the required fall, water can back up. Several streets on the bayside are simply sloped toward the bay. At the end of the street, a sediment basin removes pollutants and debris. Tides have a significant impact on the conveyance system. Submerged outfalls back water up until the tide recedes.

Private and public development is required to meet all State and local stormwater management regulations. As more development covers the land with concrete and black top, stormwater problems will increase. Several alternatives exist for controlling stormwater on site, including infiltration beds and trenches, pervious black top and open cored pavers. These items, as well as "low impact" development techniques, are being promoted to the extent possible to attenuate stormwater flows, reduce sedimentation and improve the overall quality of stormwater discharges.

The fact that development and redevelopment is and will be required to meet current, more stringent standards means the stormwater problems should be lessened in the future.

### **Recreation and Parks**

Ocean City offers a variety of recreational opportunities and services to its year-round residents and visitors. Programs offered include camps, classes, clinics, sports, events and tournaments. Lessons in exercise, fitness, dance, and gymnastics, creative arts, swimming, first aid and CPR, boating and seamanship to name a few, are given. Programs are structured to support the needs and interests of adults, seniors, and youth of



all ages. Special events and outings round out the spectrum of recreational program offerings.

The 15 town-owned and operated parks and recreational facilities occupy about 80 acres spread out through the town. Including the 319 acres of beach, which is open space accessible to the public and maintained by the town, the total park and open space is 399 acres, surpassing the State guidelines for the provision of park and open space lands of 30 acres per 1,000 residents (approximately 240 acres).

It is the Town's policy to meet the recreational needs of the seasonal and year-round population. Demand is monitored and, as facilities approach capacity, new ones are planned and constructed. It is important to note that given the high land costs in a oceanfront community, utilization of existing parkland more efficiently is often more cost effective than public acquisition of additional parkland to satisfy demand for recreation facilities. Nevertheless, land acquisition for parks remains a planning objective and existing parks should not be converted to non-recreational uses.

## **Financing Future Public Services and Infrastructure**

The Mayor and City Council have an adopted Capital Improvements Program (CIP) that identifies future infrastructure needs, priorities, and financing mechanisms.

The CIP anticipates funding from the issuance of general obligation bonds, with pay-as-you-go revenues that may include current year tax receipts, development fees, donations, and water and wastewater user fees. State and federal grants are primarily received for transit projects and recreational and park improvements that qualify for funds from the State of Maryland Program Open Space program. Under the taxing authority of Worcester County, the Town receives receipts from a tax on the sale of food and beverages sold in the Town. The receipts may only be used to fund the debt service for expansion of the Roland E. Powell Convention Center.

General obligation bonds are bonds that are secured by the full faith and credit of the issuer. Authorized by ordinance, they are secured by a pledge of the Town's property taxing power. Payment of future debt service of the bonds, however, may be from property taxes or by user fees such as debt repaid from the water and wastewater funds.

Outstanding debt represents 0.90% of the assessed valuation of property in the Town. The debt limit is 5.2% of assessments, leaving a legal debt margin of \$371 million dollars.

All potential capital funding resources are evaluated to ensure equity of funding for the CIP. Equity is achieved if the beneficiaries of a project or service pay for it. For example, general tax revenues and/or general obligation bonds appropriately pay for projects that benefit the general public as a whole. User fees, development fees, and/or contributions generally pay for projects that benefit specific users. Other factors considered when funding the capital plan are whether the financing method provides funding when needed and the other financial costs associated with the funding source.

Water and wastewater fees are comprehensively studied and rates are established over a five-year period to adequately fund operating and capital costs.

In 2005, the Mayor and City Council began assessing impact fees on new development. These fees help pay for infrastructure improvements necessitated by new development, and ensure that development pays a fair share of those improvements. The fees are specifically allocated toward future water, wastewater, and general infrastructure improvements. The fee structure is reviewed periodically and increased when appropriate to reflect rising costs.

## **Rural Buffers and Transition Areas**

The fact that Ocean City is surrounded on three sides by water and on the fourth by the State of Delaware makes the consideration of rural buffers and transition areas inappropriate. There are transition areas within the corporate boundaries (such as between zoning districts), but bodies of water and a state line provide the buffers and transitions to the unincorporated county.

## **Burdens on Municipally Provided Services and Infrastructure Beyond Municipal Growth Limit**

The Town of Ocean City provides fire protection, emergency medical service, and limited wastewater treatment services to the area of Worcester County generally known as West Ocean City. This unincorporated area is immediately across 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.

The population of the unincorporated area outside the municipal limits is indirectly served by the town in other ways. While there has been considerable retail and service growth in that area, many of those residents come to Ocean City for our beaches,

restaurants, shops, marinas, etc. These people 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. These visitors are accounted for when total (seasonal) population is estimated and projected.

## **Protection of Sensitive Areas**

The “Sensitive Areas and Environmental Protection” chapter of the Comprehensive Plan discusses these issues in detail. That chapter contains goals, objectives, principles, policies, and standards designed to protect sensitive areas from the adverse effects of development. Sensitive areas include the following: 1) streams and their buffers, 2) 100-year floodplains, 3) habitats of threatened and endangered species, 4) steep slopes, 5) coastal bays and buffers, 6) wetlands and tidal/nontidal buffers, 7) dunes, and 8) beaches.

Ocean City does not contain any streams. Steep slopes are generally defined as slopes greater than 25 percent, and development is usually prohibited or strictly regulated in these areas. There are no steep slopes in the Town. Virtually all of Ocean City’s land area is within the 100-year floodplain. As a growth area that is already 95 percent developed, development in the 100-year floodplain cannot be avoided. Ocean City’s flood protection and stormwater management regulations take into account the problems inherent in developing in the floodplain, and strict enforcement of these regulations continues.

An inventory of threatened and endangered species is provided in Appendix A of the Comprehensive Plan. Habitats of threatened and endangered species should be protected and state and federal guidelines for their protection should continue to be adhered to.

The sensitive areas most vulnerable to the effects of growth are the Coastal Bays. The town participates actively in the Maryland Coastal Bays Program and implements many activities identified in the Comprehensive Conservation and Management Plan (CCMP) developed by the Program. Stormwater management is the single most important protective measure the town can take in protecting and improving the water quality in the bays. State stormwater regulations are enforced, the physical stormwater system is continually upgraded, and as redevelopment takes place on-site stormwater management is improved, reducing pollutant loads entering the bays.

## **Vision of Ocean City’s Future Character**

The Town of Ocean City will continue to improve its standing as a premier seaside resort and a desirable place to live and work. Redevelopment will present a unique opportunity to improve the quality of development in terms of aesthetics, structural safety, and environmental sensitivity.

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 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.

# Appendix F

## Comprehensive Plan

### Town of Ocean City

#### State of Maryland Development Visions

- **Public participation:** Citizens are active partners in the planning and implementation of community initiatives and are sensitive to their responsibilities in achieving community goals;
- **Growth areas:** Growth is concentrated in existing population and business centers, growth areas adjacent to these centers, or strategically selected new centers;
- **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;
- **Community design:** Compact, 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 archeological resources;
- **Infrastructure:** Growth areas have the water resources and infrastructure to accommodate population and business expansion in an orderly, efficient, and environmentally sustainable manner;
- **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;
- **Resource conservation:** Waterways, forests, agricultural areas, open space, natural systems, and scenic areas are conserved;
- **Stewardship:** Government, business entities, and residents are responsible for the creation of sustainable communities by collaborating to balance efficient growth with resource protection; and
- **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.

First Reading October 5, 2009

Second Reading October 19, 2009

ORDINANCE 2009 – 23

**AN ORDINANCE TO ADOPT A MUNICIPAL GROWTH ELEMENT, WATER RESOURCES ELEMENT AND PLANNING VISIONS INTO THE COMPREHENSIVE PLAN FOR OCEAN CITY**

WHEREAS, pursuant to Article 66B of the Annotated Code of Maryland, and Sections C-414 (58) and Title VIII, Sections C-801 through C-806 of the Charter of the Town of Ocean City, the Mayor and City Council of Ocean City is authorized and empowered to establish and implement a comprehensive zoning plan and a land use plan setting forth a guide for future development and proposed appropriate and desirable patterns for the boundaries and land uses; and

WHEREAS, HB 1141 and SB 2 enacted in the 2006 session of the Maryland General Assembly, require the adoption of a Municipal Growth Element and a Water Resources Element into all municipal Comprehensive Plans; and

WHEREAS, HB 294 and SB 273 enacted in the 2009 session of the Maryland General Assembly require the inclusion of twelve new planning Visions in all local Comprehensive plans; and

WHEREAS, after conducting a public hearing thereon, the Planning and Zoning Commission of Ocean City has recommended to the Mayor and City Council the adoption of a Municipal Growth Element, Water Resources Element and the twelve new Visions into “The Comprehensive Plan – Town of Ocean City – 2006”;

WHEREAS, having given due consideration to the new elements;

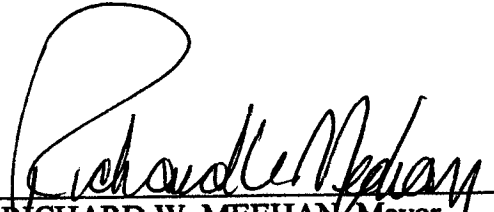
**NOW, THEREFORE, BE IT ENACTED AND ORDAINED BY THE MAYOR AND CITY COUNCIL OF OCEAN CITY THAT THE MUNICIPAL GROWTH ELEMENT, WATER RESOURCES ELEMENT AND GROWTH VISIONS BE ADOPTED INTO “THE COMPREHENSIVE PLAN – TOWN OF OCEAN CITY, MARYLAND, 2006”, EFFECTIVE UPON FINAL PASSAGE HEREOF.**

INTRODUCED at a meeting of the Mayor and City Council of Ocean City, Maryland held on October 5, 2009.


ADOPTED AND PASSED by the required vote of the elected membership of the City Council and approved by the Mayor at its meeting held on October 19, 2009.

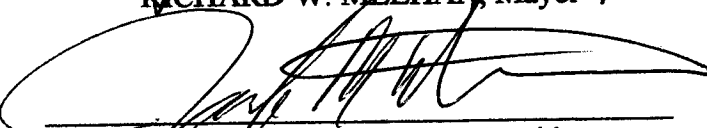
ATTEST:

  
CAROL JACOBS, Clerk

  
RICHARD W. MEEHAN, Mayor

Approved as to Form:

  
GUY R. AYRES III, City Solicitor

  
JOSEPH M. MITRECIC, President

  
LLOYD MARTIN, Secretary